



A n g i e P a j a k

# **metabolic IQ**

-Your Code to Health

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**Thanks!**

Thank you for purchasing my e-book.  
I hope you will find reading it helpful  
and inspiring. Have a great read !

A n g i e P a j a k

***One man's food is another  
man's poison.***

*Lucretius*

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that help you navigate through the book



Vegetarian



Sugar free



Raw



Vegan



Gluten free



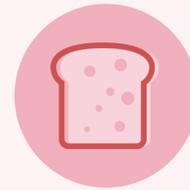
Gluten friendly



Wheat free



Lactose free



Carbs



GMO free



Ecological



Fats



TRANS fat free



Bio



Protein

## Metabolic types



carbohydrate



protein



mixed  
balanced



mixed  
carbohydrate



mixed  
protein

# Preface

***„You may not eat at all, but you cannot eat badly”.***

Salvador dali

***„ Eat to please thyself, but dress to please others.”***

Benjamin Franklin

I started publishing works on metabolic types in 2010, So I have been breaking down this topic into prime factors for over a decade now, so that it becomes understandable to the reader. But most of all, I would like to make people aware of how important this knowledge is for each of us, for both mental, physical and spiritual health.

True potential can be activated and used when you know yourself as best as possible. Determining your metabolic type is a big step in this direction. In many years of my work as a health coach and wellness expert maybe five times I had misidentified the type of metabolism only based on the observation of some person. After years of experience, solving tests in groups during workshops we have been running, watching people traveling, at work, on vacation, determining someone's Metabolic IQ „by eye” on the one hand, it becomes great fun, and on the other hand- an extremely useful tool that costs nothing but a slight effort of neurons ...

CHAPTER 1

# Metabolic Intelligence



# Instinct vs. Fashion

In highly developed countries, one's individuality is remarkably valued. Having been inundated with consumption monoculture, we would like everything to be tailored to our personality. Personalised computer, tablet and smartphone with unique applications, bespoke shoes, unique style—in general, anything that is unusual. The question is: do we select our diet with equal care? Just as character, spirit and personality, everyone's metabolism has its individual features; even though we might be able to feed everyone with pretty much the same things, we surely cannot NOURISH everyone with the same things—and that is an enormous difference.

Most of us know our blood group, and even if we don't—all it takes is to draw a blood sample and we can learn everything. But what about our metabolism? We often undergo multiple allergy, food allergy tests and tests diagnosing various intolerances—but when an organism is powered by inappropriate fuel, it starts to react violently to nearly every factor. And that's how one bite of food might result in a few diversified symptoms, because for us—that is for our wellbeing—it is what how much we have eaten that matters. Meanwhile, for our organism it is any, even trace amount of an "intruder", being any detrimental substance, in our blood. Though it might seem that something is healthy or trendy, our immune system, as long as it works properly, has its own set of rules: it does not count calories or take a glance at a watch to check whether it is already 6 pm.

Even if we cleanse our body of harmful substances, chemical agents and other toxins found in products will be pretty much the same to our internal defence system that a red rag is to a bull.

Unfortunately, globalisation does not consider the factors ruled by nature itself. For years, the inhabitants of our planet would be divided according to race, body type, place of residence, or weather conditions that they were exposed to. Due to migrations, multicultural societies etc., typical metabolic features of particular ethnic groups have also mixed. That's why foodstuffs recommended to a given individual based on their blood group are not always appropriate when we consider their metabolic type. As a result of parents' genes being mixed, the occurrence of various anomalies is possible, such as a person characterised by a protein metabolic type (the so-called Eskimo) who loves basking in the sun.

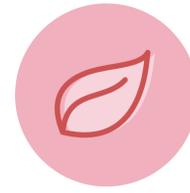
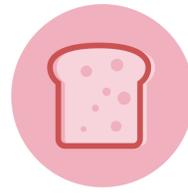
Widely repeated schemes and dietary recommendations do not take into account the differences in a specific individual's metabolism; it is also notoriously forgotten that products that used to be marketed as healthy, nowadays often have little to do with nature and food—sometimes it's only in the name. In many cases, the human body is not able to digest it, or they are simply dangerous to human health; examples include the glucose-fructose syrup or margarine. The research results proving that only humans are mad enough to eat processed trans fats were published a long time ago. If we fed swine with it, they would be dead within a few days. When it comes to

the abovementioned syrup, the United States are completely flooded by it, and it has even “spilt” over the boundary with Mexico—which was ranked 1st in the world when it comes to obesity in society. This problem concerns 32.8% of its residents (UN report)!

Let’s return, however, to metabolism. Looking at one’s own city, country, continent, and finally—the world, it is hard to imagine that there are some cultures where cancer, diabetes, arthritis, obesity and other lifestyle diseases remain unknown. What’s more, the traditional menu of representatives of such societies is far from well-known recommendations concerning a healthy diet—and yet they somehow enjoy strong immune system, full health and longevity. Let’s think about Eskimos, who do not have to fight cardiovascular diseases despite their diet—which is rich in animal fats and meat. An atypical diet and exceptional strength, both physical and mental, characterise the Maasai people, the inhabitants of the Amazon rainforest and Swiss highlanders. A common feature of these super-healthy cultures is that the moment of starting the “civilised person” diet marks among their representatives the occurrence of health problems commonly found in highly developed cultures. A fitting example here would be Native Americans who have left their reservations to live their American dream.

A trend on the other spectrum of a meat-based diet characterises the numerous residents of tropical and hot regions, as well as those inhabiting the Mediterranean Basin; they show an innate need to ingest food rich in carbohydrates, such as vegetables, fruits and grains. Their

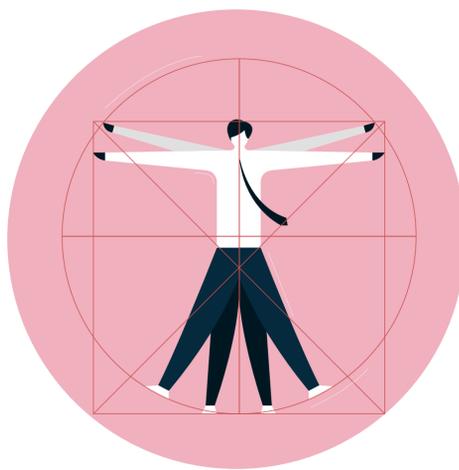
bodies do not feel the need to ingest significant amounts of fats and animal proteins. People from areas of, let's say, rather demanding living conditions, are not adjusted to a light, vegetarian diet. As we can see, despite globalisation and migration, nature cannot be changed. That's why there is no single, universal and proper nutrition. When choosing food, animals do not follow trends, ideologies or personal tastes. A human, however, selects food intuitively or according to knowledge—either their own or someone else's. If they follow their instinct and genetical predispositions (including the metabolic type), they have a chance to preserve health and maximally exploit their potential.



## Why there are no vegetarians among wildcats?

The sand cat mainly inhabits scarcely vegetated areas, as well as, as the name suggests, sandy areas—deserts. It is exceptionally resilient and resistant to extremely high and low temperatures. Between the pads, its feet are covered with thick fur which protects it from the heat. When the temperatures are running high, however, the animal snuggles into its cave and waits for more tolerable conditions. The sand cat is able to inhabit areas located far away from water sources, such as the Sahara. Even though it enjoys drinking water, such a cat can do without it for a long, long time, extracting the necessary hydration solely from food. Rodents, birds, bugs and reptiles constitute its main prey; it is also a keen hunter of snakes.

The sand cat resembles a human with the protein metabolic IQ. It enjoys the sunshine, but cannot stand it in excess. Does not necessarily like to drink, even though it knows that water is essential for its survival. Proteins and fats provide it with energy and capability to effectively function for a long time; plants constitute a minimal part of its diet. It stays lean and fit by eating intuitively.



## And what about humans?

Agriculture was developed around 10,000 B.C. Before that, food was acquired by means of hunting, fishing and gathering. The development of agriculture, gradually taking up increasingly larger areas, has pushed nomadic tribes mainly to the regions such as the Amazon rainforest, African savannah, islands located in Southwestern Asia and the Antarctic. It was determined, however, that hypertension, cardiovascular diseases or arteriosclerosis do not occur among the Hadza, the Inuit and the Tsimané people. How does this fact relate to the information regarding the harmful influence of animal fat on the human body—the exact question that has been haunting public knowledge for years?

Loren Cordain of Colorado State University, the author of *The Paleo Diet. Lose Weight and Get Healthy by Eating the Foods You Were Designed to Eat*, analysed the eating habits of modern hunter-gatherer cultures—and it turned out that for 73% of their representatives, meat constitutes more than half of the calorie intake. The Inuit, whose living conditions are far too extreme for nearly any vegetation, have survived through many generations by eating almost exclusively meat. In a moment

I will explain in which dimension meat constituted one of the turning points in the evolution of the human species. Scientific research shows that 2 million years ago it was precisely animal protein that contributed to the development of our ancestors' brains. Homo erectus ditched the low-calorie and plant-based diet typical for apes, and changed their eating habits, beginning to obtain energy from meat and bone marrow. This new diet provided surplus energy which fuelled the brain. This new form of sustenance did not require as much effort as the digestion of plant fibre had, so the leftover energy was distributed between the visceral nervous system and the brain. At rest, the human brain uses 20% of the overall energy produced by the human body—in comparison, an ape's brain exploits only 8%. Much later, ca. 12,000 years ago, human beings discovered agriculture, which has irreversibly changed the eating habits of our species. Enriching nutrition with cultivated grains made the human diet far more predictable: it was possible to plan both crops and stocks. More children were born in agricultural communities than in hunter-gatherer ones, which led to a demographic boom. Scientists, however, continue to question whether agriculture really was a leap forward in terms of human health—or maybe it only resulted in sudden population growth and increased the Earth's population. Analyses also show that while we might have gained food security thanks to cultivation and breeding, we have lost healthy nutrition and our strong bodies which we owed to our hunter lifestyle.

Clark Spencer Larsen—biologist and anthropologist from the Ohio State University—describes the origins of agriculture

as the beginning of health problems in humans. According to him, monodiet, that is eating the same products every day, has led to the development of tooth decay and gum disease, previously absent in hunter tribes. Bred animals provide milk and meat, but they have also become a source of infectious and parasitic diseases. Agricultural communities started to face iron deficiency, congenital malformations and children's short stature in following generations.

World population might have increased, but the quality of life and new eating habits were significantly worse than among hunters and gatherers. According to Larsen, larger numbers of offspring indicate the possibility of sick individuals having children.

The assumption that the paleolithic diet consisted solely of meat is false; meat comprised only 30% of the calorie intake. Only in the case of the Inuit it was seal, narwhal and fish meat that covered 99% of their calorie demand. During the time when game was short, hunting tribes supplemented deficiencies with substitutes: these usually included starchy plants, such as tubers or manihot, as well as bananas and nuts.

Returning to farmers, though: anthropologists have discovered that ever since the development of agriculture, human teeth, jaws and face have diminished, and the human DNA has changed. Lactose intolerance also became present at that time. Newborns would always digest mother's milk but older children never had a chance to use this process—up until the emergence of farm animals ca. 10,000 years ago.

Digesting milk turned out to be necessary along with the origins of cattle breeding; that's why milk sugar tolerance has developed among European, African and Middle Eastern shepherds. It did not develop in tribes where cattle breeding did not occur—such as the Thai, Chinese or the Pima. Obtaining energy from starchy foods as a result of chewing is not available to everybody—this depends on the number of particular genes inherited from ancestors. The Hadza have more genes responsible for that, thanks to which their saliva breaks the starch down even before the food reaches the stomach: this is the complete opposite of the same process in the Yakuts, who consume copious amounts of meat. Most of the research show that leaving primary eating habits and an active lifestyle behind has not ended well for subsequent generations over the course of the evolution. For example, modern Mayans were not aware of the existence of diabetes until the 1950s. An epidemic of this disease spread among them along with their conversion to Western eating habits, that is also with maximum doses of sugar in the diet. The Evenks and Yakuts—the reindeer hunters—based their diet exclusively on meat, yet somehow they did not have to fight cardiovascular diseases up to the collapse of the Soviet Union. This was when their numerous representatives moved into cities where they started eating products available at local stores. Currently, half of the Yakut population struggles with overweight, while every third person suffers from hypertension. This resembles the situation of Native Americans: those that “get groceries” in the forest, remain healthy; while members of tribes that eat in a similar way as the population of highly

developed countries are affected by the same diseases that we ourselves have to struggle with.

People have been eating red meat for 2 million years, but its quality, cattle breeding methods, as well as our sedentary jobs and lifestyles, are also significant factors. We should remember that our ancestors did not consume highly processed products, the environment was not polluted as badly as it is nowadays, and people did not spend most of the time sitting. They burned enormous amounts of energy—first when looking for food, then preparing it for consumption, and then when hitting the road again to hunt. The Paleo diet proposed today will never equal the primitive one in regard to product diversity; we will also never exceed our ancestors in terms of physical activity. Research shows that considerable amounts of L-carnitine originating from meat, in combination with scarce physical activity, lead to the clogging of arteries—at least in mice. Physical activity protected our ancestors from cardiac diseases and diabetes. Anthropologists also underline that there never was one, standard primitive man diet. As we can see, eating habits and the method of combining food have been shaped over the last 2 million years.

## „There is no ideal, universal diet”<sup>1</sup>

Humans are distinguished by their ability to adapt to various environments. Thus, populations of given areas are able to combine foods in such a way that their overall nutrition is healthy. The modern, Western model of nutrition stands in stark opposition to this primitive skill. According to scientists, within this field we are a victim of our own success. The moment of discovery of thermal food processing was also a turning point for humans. The process of digestion has therefore been postponed until the moment of food preparation. Thanks to that, we began to waste less energy on digestion, so there was more of it left for our brain; it's easy, as cooked food is easier to digest and provides more energy. But what has really happened? For the first time in history, our energy intake is far too high! We resort to sedentary lifestyle, with highly processed products providing us with too much low-quality calories. Instead of snacking on nuts, we eat nutty bars; we replace apples with processed juice from a carton—and that happens on literally every step on our way. Research conducted at Harvard University shows that the body weight of mice fed with cooked food increased by 15-40% in comparison with their peers that were given raw products.

The invention of cooking gave fuel to our brain, at the same time increasing the caloric value of eaten meals; combined with a new, more sedentary lifestyle, this mix leads to an increase in body weight.

<sup>1</sup> A. Gibbons, *Ewolucja diety [An Evolution of the Diet]*, "National Geographic Polska", Issue 9, September 2014.



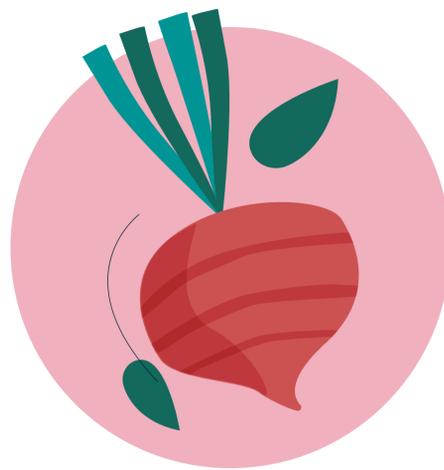
## **Who is really responsible for the destruction of our planet?**

A lot is being said about the fact that mass production of meat destroys the planet—but are we absolutely sure of that? Oftentimes we do not distinguish between ecological, niche production and the mass one, where animals are kept in concrete barns, are packed with hormones and antibiotics, subjected to unethical treatment and fed with genetically modified fodder. Yes, such production is surely bad for the planet—just as it is for us. Doesn't the same thing, however, happen to plants? We think that eating fruit and vegetables constitutes an absolute guarantee of health—but are we aware of the fact that over the last few decades the nutritional value of plants has dropped so drastically that nowadays, in order to provide our body with vitamin A included in one old-school peach, we would have to eat 86 of them!? Who is physically capable of eating a few buckets of fruit per day? And who can afford it?

Moreover, the monoculture of genetically modified plants flooding our planet is leading to massive disappearance of forests and the Amazon rainforest, as well as the extinction

of other plant species. Corn, soy or wheat do not serve only meat farms; they also significantly contribute to the production of various pasta, soy products (such as milk, tofu, soy sausages and steaks), corn flours, crackers, crisps and everything that urban vegetarians eat. We should also add trans oils, used by the majority of restaurants and producers of vegetarian food, to this list, as parts of our planet are also dedicated to that.

Reaching beyond the aspect of new territories occupied by a few global corporations, let us think for a while about the tons of pesticides, herbicides, fungicides and glyphosate that are retained in the soil, plants and air, destroying the environment for years to come. The scientists have confirmed that protein of plant origin will never provide as much energy as animal-derived protein. Moreover, in order to provide our body with a minimum amount of protein, we need several times more plants than animal-based products, which means that more area is required for the increasing crop cultivation that will satisfy the needs of a growing population of ideological vegetarians.



## **Real vegetarianism vs. vegetarian pop culture**

Real vegetarianism practised in India differs significantly from the one we can observe in highly developed countries, where it often becomes an ideology instead of a way of nourishing the cells.

First of all, the climate in India is different—it is a far warmer, subequatorial climate where people do not have to use energy in order to keep themselves warm. Moreover, its inhabitants have direct access to a diversified range of fruits and vegetables that grow on-site. The amount of fat in the diet is also properly balanced. Food consumption is often linked to a spiritual practice and meditations characteristic for a given region. For Indians, eating habits and lifestyle constitute the natural consequences of being born in such culture and are neither acquired, nor borrowed from various corners of the world located far away from India.

Research conducted by the British Humane Research Council show that 39% of vegetarians resorted to eating kebab having previously drunk beer or a few alcoholic drinks. Over 34% of respondents admitted to eating a beef burger, and 27% to eating

bacon after a drunken night out. One out of five vegetarians eats fried chicken, while 14% of respondents consume pork sausage. Obviously, such situations usually follow alcohol consumption. People say that alcohol does not change a person, it only shows their true colours... and in fact, it turns out that intoxication makes many of them ditch their noble ideas regarding moral and ideological departure from eating meat in order to devour a kebab or hamburger.

The same research shows that only 13% of vegetarians stopped eating meat due to its taste. The unconscious wish to eat meat can be revealed through a certain stimulus (for example, alcohol) that may unleash one's true nature. There is a reason why there are vegetarian sausages, milk and steaks available. Have you ever spared a thought on why vegetarian products are de facto only variations of meat products, the only difference being that they do not contain the actual meat? Why do we produce vegetarian pâté and bacon? Why does jackfruit meat delight us with its taste—which is nearly identical to the one of real meat? Isn't it hypocritical to eat carnivores' products, which simply do not contain meat?

These momentary lapses—although I would rather call them the calls of nature—happen to everybody. One thing is interesting, however: why do 69% of vegetarians hide the fact that they eat meat (even if it is just a random incident)—and people who know about it are asked to keep silent (data from the same research)?

How many Europeans or Americans who have been vegetarians since day one do you know? Vegetarians who have chosen this path themselves or those who were born with such a need and have been eating like this since their childhood—not due to the influence of their family, public opinion or religious beliefs?

vegetarian  
pop culture



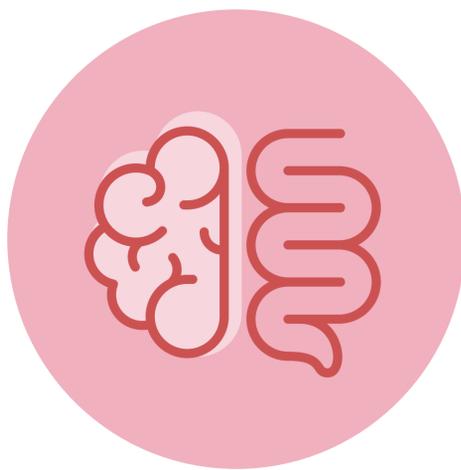


## **Plant monocultures vs. the body's needs**

Even if we would like to follow the vegetarian diet in highly developed countries, it will never be based on the same products as in the areas naturally predisposed for this type of nutrition. Fruits and vegetables available at the supermarkets, despite their diversity, are a far cry from healthy, vitamin-, minerals- and nutrient-packed natural products that they are in their natural environment—especially having travelled for so long, polluting our planet on the way. Appropriate individual ratios of macronutrients such as carbohydrates, proteins and fats depend on the metabolic type, lifestyle and place of residence, as well as daily physical activity. These ratios may be extremely diversified, i.e. for the carbohydrate MIQ and the protein MIQ—but the body's needs remain the same. We should remember that human body cells are built from protein and fats; and while carbohydrates will provide suitable energy and food for our brain, they will never contribute to the

restoration and regeneration of our cell walls. At least for as long as we are mammals, not plants.

Diversity and balance are fundamental to success. No extremes—either vegetarianism or Paleo—will grant health to all the humans on the Earth. Such an effect can be achieved only through a long, personalised lifestyle change and adjustment of nutrition to one’s own metabolic IQ. Combined with the minimalisation of stress factors and environmental hazards, this might lead us to the best possible state of being. When you start living in harmony with your own body, you will stop notoriously fighting illnesses and reach a stable weight in an effortless way, without tormenting yourself, elimination diets and the yo-yo effect. Let’s do it then! Let’s decode your organism.



## **Metabolic intelligence**

### **-unique IQ of every person's organism**

Nowadays, we have intelligent cars, houses, computers, phones, credit cards and bank accounts—but we tend to forget about the intelligence of our internal mechanisms whose knowledge may significantly facilitate our lives. Cooperation with one's own metabolic IQ might help us avoid numerous ailments typical for big city dwellers, people living “on the go” or those constantly pursuing business trips, and forced to eat in a hurry in catering establishments. If we know which products we should choose, we have a chance of eliminating flatulence, constipation, heartburn, stomach disorders, problems with our complexions, leg pain or itchy skin. It's so easy that it seems unbelievable—yet somehow it is true.

Commonly accepted tactics won't work for everybody. Foods that are difficult to digest are unsuitable for the carbohydrate metabolic type, who is a slow burner. Such a person, having eaten a sophisticated Argentine steak, will most likely feel sluggish and melancholic; in extreme cases, a slightly depressed mood might occur. That person should

avoid heavy, purine-high proteins and fats. In the case of the protein metabolic type, seemingly easily digestible foods are the real culprits; these may include sweet salads. Such food deprives that person of energy, concentration, they might even provoke aggressive behaviours. The protein type burns carbohydrates so fast that ingesting them without protein or fats causes constant spikes in blood sugar levels and everlasting hunger.

It might seem ridiculous or trivial; however, we are not aware what kind of threat inappropriate nutrition poses to our physical, mental and spiritual health. Ingesting meals incompatible with our metabolic intelligence might influence the quality of our work, effectiveness when it comes to daily duties, concentration, social life, even our relationships.

All that it takes to learn your metabolic IQ is to take a simple test, which will estimate your general predispositions and ascribe you to one of the metabolic types; each of these is characterised by different tolerance to particular products. Basically, there are three metabolic types: carbohydrate, mixed and protein.

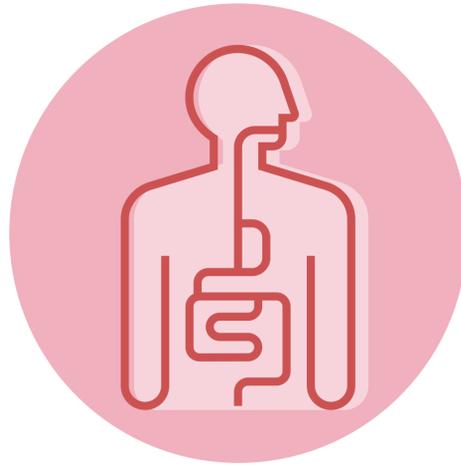
The majority of variations occur within the mixed type; according to one's personal determinants it might be more linked to carbohydrates or proteins. Bear in mind, however, that even if you have the carbohydrate type of metabolism, it does not mean that in terms of reaction to food, strength, weakness, energy level or appetite and other characteristics, you are exactly the same as any other person with such metabolism type. Each of us is unique, also in terms of the individual metabolic type.

**The most common symptoms, which we do not connect with inadequate knowledge of one's metabolic IQ, include:**

- lack of energy and concentration;
- digestive system disorders;
- allergies, hypertension, mood swings;
- no desired results despite following popular diets;
- confusion when facing contradictory advice from dieticians / specialists.

**The advantages of learning about and being aware of one's metabolic intelligence:**

- adjusting nutrition to specific needs of one's body;
- achieving the perfect weight and its effortless maintenance;
- energy flow and a good level of fitness;
- strengthening the immune system;
- elimination of indigestion, fatigue and allergy;
- management of depressive episodes, anxiety and mood swings.



## **A human - a fat & protein constructions**

Ageing processes affect everyone; it largely depends on us, however, how long we will remain young, fit and well. Each day, by the things we do, eat and think, we decide whether we will help our body retain its young state for as long as possible, or quite the opposite—we will help it age. Appropriate lifestyle, which we should adopt as early as possible, decides about the retaining of biological and mental youth. In highly developed countries, over 85% of population aged 65+ is chronically ill. Unfortunately, we tend to forget that we work for our health and comfort of living from our early years.



## Healthy fats

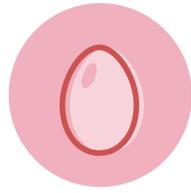
The everlasting issue: to eat or not to eat; and if you eat, then which ones? There is significant confusion surrounding fats—some people recommend margarine, claiming that butter causes atherosclerosis, while some completely eliminate fats from their diet, but that’s a big mistake! Cell walls are built from proteins and lipids. Without good fats, our body cannot regenerate, build cells and digest protein (in the case of high-protein diets with fat elimination, kidney malfunction occurs the most due to the indigested protein retained in the bowel). Particles of fatty acids take part in the composition of cell and intracellular walls, playing a crucial role in their structure, integrity and functions.

**As one of three basic nutrients, apart from proteins and carbohydrates, fats influence numerous aspects of the functioning of a human body:**

- participation in protein modification and hormonal balance conditioning;
- they are a building material for cell walls and white matter in the brain;
- they determine the fitness of the cardiovascular system;
- they are mediators of A, D, E and K vitamin, facilitating also
- their absorbance from other products;

- they influence the condition and appearance of skin, hair and nails;
- they are the most concentrated source of energy for the cells;
- they enable energy storage in cells and adipose tissue;
- they act as a thermal and electrical insulator, as well as stabiliser;
- they provide protection from injuries;
- they determine the function of nervous tissue;
- they provide essential fatty acids (EFA), out of which tissue hormones are produced; tissue hormones regulate the processes in body cells.

If you want to retain a youthful appearance, avoid trans fats! These are produced during the hydrogenation of plant fats, due to which various changes in their characteristics take place. The consumption of these fats results in the increase of the so-called “bad” cholesterol (LDL) and the decrease of the “good” one (HDL). Thus, the risk of cardiac diseases rises—but this is not all. Their consumption also intensifies all the problems related to brain and nervous system functioning, both in children, adults and the elderly. Using such “trashy” ingredients for regeneration and restoration of our cells resembles gluing a broken window with bad-quality adhesive. It is bound to break anyway. Beware! Trans fats are everywhere: in fast foods, ready meals, sweets, fries; nearly all the highly processed products available on the market.



## Protein

Protein serves as a basic component of our body, responsible for appropriate cell restoration, proper brain functioning and the maintenance of blood sugar at a constant level. Proteins could be divided into two types: complete and incomplete. The first include all the necessary amino acids that could be immediately used by our body. Incomplete proteins, however, lack one or more amino acids. These proteins can be found in fruits, vegetables and grains, and they require combination with another source of protein in order to become complete. The problem often accompanying such combinations is the enormous amount of carbohydrates in a meal, causing a rapid spike in blood glucose level, leading to adipose tissue accretion.

Complete protein can be mainly found in animal sources (beef, chicken, fish, turkey) and products of animal origin (like eggs, cheese and dairy). Quinoa and hemp also constitute the most important sources of complete protein.

When searching for the appropriate protein, we should pay attention to its source. Choose meat from small farms, where animals are fed with fodder that does not contain GMO, antibiotics and other toxic substances, which are absorbed along with the food by our body. Avoid soy-based protein supplements—in over 90% of cases soy is genetically modified; it also disrupts the correct functioning of thyroid and impairs

calcium and mineral salt absorption. Most beneficial protein supplements are based on whey protein, enriched with natural vitamins and minerals, gluten-free, with no addition of food colourings, aromas or artificial flavourings. Moreover, they should include fibre, omega-3, omega-6 and omega-9 acids, necessary for proper protein absorption.

Avoid eating raw dairy in the wintertime. All kefirs, yoghurts and other dairy products tend to cool down the organism in winter and cause the process of sliminess. Moreover, raw dairy constitutes a perfect base for the development of viruses and bacteria, which come into play during this particular time of the year. If you eat dairy, for example quark, make sure that it undergoes heat treatment. What's more, dairy products and sugars are also responsible for lack of concentration. Their excess amount in our diet may cause sleepiness, sluggishness and aversion to physical activity, which we are deprived of during the winter. These products slow down the metabolism and their excess quantities lead to abundant organism humidification, which facilitates its cooling and promotes mucus production. All these factors make facial features slightly swollen, pale or yellowish.



## **Appropriate hydration of the organism**

In 80%, longevity is based on the lifestyle. We are not condemned to diseases that run in our family or are supposedly in our genetics. Good water can reset the cell ageing process by providing every cell in our body with everything it needs to function like a young cell. If the cells are not properly hydrated, they cannot function while exploiting their full potential, which accelerates the ageing processes. Water loss and its low level in the organism are among main factors that make us look older. The body of an adult is made up of 75% water, which is a significant ingredient of organs and body parts. Connective tissue is made up of, amongst others, a semi-liquid substance including hyaluronic acid, while collagen and elastin (which retain water in tissues) hold the shape and integrity of connective tissue from which nerves, blood vessels, ligaments and skin layers are made of.

During the ageing process, the functioning of our cells and connective tissue begins to decline, as they lose the ability to maintain optimal water levels. As a result, water starts to

circulate aimlessly around our body causing oedemas, while our body remains dehydrated—because water cannot reach the cells. We can influence the level of cell hydration by strengthening cell membranes and through constant regeneration of connective tissue. The secret to our youth is not drinking countless litres of water; it is proper cell hydration, where water is retained inside the cells. The process of supplying water directly to the internal part of a cell depends on us drinking structural water, eating alive instead of dead foods, as well as the condition of our cell membranes thanks to which the cells function as optimal water containers (or as the opposite—a sieve that enables the water to flow through). Alive foods have a hexagonal structure which carries information to our body cells; dead foods absorb our energy so that it can be digested.

Remember that the hydration level should be defined by the water retained in the body, not the amount of water drunk. If you want to hydrate your body, avoid highly processed foods and microwave meals, which are dead foods. Remember that due to the process of water extraction from the ground and its packaging in plastic bottles, the water loses its natural structure, making it easier for fungi and bacteria propagation. Moreover, such water does not carry information to our cells as effectively as we would wish.

# Vitamins and antioxidants - where to get them from?



# Antioxidants

Free radicals and the body ageing process are closely interwoven. Using antioxidants which neutralise oxidative substances might result in an improvement of body condition in over 80 ageing-related diseases!<sup>2</sup>

Functioning disorders, which according to most doctors are an unavoidable part of ageing, depend in reality on the damage that free radicals managed to inflict upon our body, as well as on the amount of toxins accumulated in it. As long as nothing has been resected, all organs are capable of regeneration. Providing our body with significant amounts of appropriate antioxidants, we do not give free radicals the opportunity to “damage” us from the inside.

How do antioxidants work? Comprehensively. Antioxidants restore damaged cells in our body, and given that every MINUTE as many as 2 MILLION new cells are produced, it is of foremost importance that 2 Dead foods include food without enzymes; it does not provide energy, so the body has to use its own energy to digest it. Structural live foods nourish our cells by providing energy and enzymes. All foods include water. Hence, all of them either have a structure or not. we manage to provide it appropriate building and protecting material. It doesn't matter where; antioxidants appear and operate wherever they are needed. It's not important whether it's a brain, leg, liver or an

<sup>2</sup> Dead foods include food without enzymes; it does not provide energy, so the body has to use its own energy to digest it. Structural live foods nourish our cells by providing energy and enzymes. All foods include water. Hence, all of them either have a structure or not.

eye. They restore damaged cells, therefore not allowing toxins, stress, bacteria and free radicals to consume us.

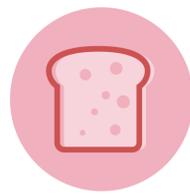
We shouldn't expect that the fruit available year-round at our supermarkets are some kind of an antioxidant bomb. Instead, we should pay more attention to functional foods (such as goji berries, powdered acai berry uree) and frozen, dehydrated and dried fruits. Polyphenols, which are characterised by strong antioxidative action, can be found in red onions, apples, green tea and herbs like rosemary or thyme. Kale, which has recently gained increasing popularity, as well as broccoli and cabbage (unless we have thyroid problems) are also rich in antioxidants.

## Vitamins

During the winter our access to sources of valuable, natural vitamins is significantly limited. Both local and imported fruits and vegetables leave much to be desired when it comes to their nutritional value. We should focus on parsley and lemon, which are rich in vitamin C, and since we consume it without the skin, we do not really have to bother that much about the leftover chemical agents or preservatives. We need it for body regeneration, protection against stress and enhancement of iron absorption.

Vitamin D deficiency is particularly severe during the wintertime. Avoiding sunshine or insufficient exposure causes deficiency, which is a root cause of numerous diseases. We need it for calcium and phosphorus absorption, which translates into bone regeneration and maintenance of their good condition.

It also protects us against muscle atrophy. The human body produces vitamin D in the skin, mainly as a result of exposure to sunlight. To a significantly limited degree we are also able to absorb it from food. If we spend majority of the winter indoors and spend little to no time outside, we should supplement our vitamin D intake—but with natural vitamin, obtained from lanolin. Sources of this vitamin include eggs, mackerel, tuna, herring, salmon, halibut, trout, sardines and cod liver oil. Let us remember, however, that fish from big farms, fed with GMO feed, are not rich in elements which are so important to us. Correct vitamin D3 levels protect us against diseases like diabetes, hypoglycaemia, prolonged wound healing, lupus, kidney and lung diseases, 17 types of cancer, glaucoma, hypertension, cardiac diseases, psoriasis, dandruff, migraines, stroke and many more.



## Age factors - gluten vs. ageing

The abbreviation AGE (advanced glycation end products) stands for end products of advanced glycation. These factors, which remain largely unexplained, are responsible for the development of atherosclerosis, glaucoma and dementia. We usually associate these disorders with the elderly, but AGE factors are being accumulated in our body over our whole life. As we age, more AGE particles can be found in our kidneys, eyes, liver and other organs, even our skin. Visible effects of their activity include wrinkles, sometimes appearing even in twenty-year-olds. They consist of useless remains, which degenerate our tissues by accumulating in our organism. A human is not able to either burn or convert them into energy.

The presence of AGE contributes to the deterioration of kidney functioning, linked with the elimination of waste substances, atherosclerotic plaques accumulation, joint cartilage degeneration and brain cells deactivation as they are replaced by AGE particles.

These elements are supplied to our body along with highly processed foods; they may also appear as a side effect of a high blood glucose level. The process of AGE formation is irreversible, which means that these factors are resistant to digestion and purifying processes taking place in our body. The higher the blood glucose level, the more AGE particles there are in our

body, consequently accelerating the ageing process. Why are gluten and AGE factors so closely interwoven? While eggs, nuts, olive oil or salmon do not cause rapid blood sugar spikes, all carbohydrates cause it. From oranges, through cookies, pasta, gum sweets, and ending with „healthy“ cereal and muesli or wholegrain snacks. When we consider blood sugar spikes, wheat products cause more damage than any other food, as they elevate the blood sugar level to values corresponding to ones occurring in advanced diabetes—even if we do not suffer from it. To sum up, wheat crescent rolls or popular pasta dishes eaten for lunch directly influence our body’s ageing processes, leading to excessive AGE factors’ production. A wheat-free diet is one of the most effective anti-age decisions that you can make for your body.



## Maximum energy level

Physical activity is invaluable. Due to the weather, however, it often requires fierce determination, especially if we are not enthusiastic about winter sports. Our metabolism, slowed down by low temperatures, can be easily boosted by physical activity. Intra-abdominal fat, accumulating at an increased rate during the wintertime, fosters body ageing. Adipose tissue accumulates in our body the highest amount of toxins which disrupt its proper functioning, cause body acidification and block regenerative processes.

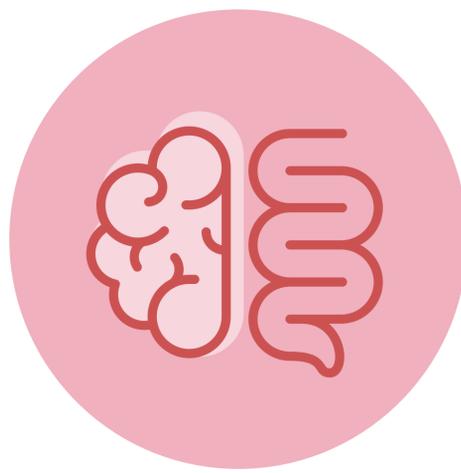
Ageing is triggered by body acidification and gradual accumulation of fatty deposits. At the same time, the resources of minerals, antioxidants and vitamins are used for acid and toxin neutralisation. If we successively keep on acidifying our body and accumulating the junk inside—and during the winter we are even more likely to do that than usually—it will lead to all our internal systems being switched to the survival function. When our body is in balance, it channels its capabilities into full cell regeneration, at the same time protecting the cells from degeneration. Thanks to that we can enjoy a youthful

appearance and well-being on a daily basis.

To boost our immunity, we can take advantage of the beneficial properties of garlic, which stimulates the immune system, regulates the blood sugar level and acts as a great antioxidant. Omega-3 and Omega-6 unsaturated fatty acids are also invaluable; when provided in correct ratios, they prevent inflammations. Our immunity also benefits from products containing iron, which is necessary for energy production and proper functioning of the defense system. It can be found in lentils, eggs and poultry from natural farms, prunes and dried apricots (unless they are sulphured), beets and quinoa.

During the wintertime, ginger is your best ally—it warms you up, as well as facilitates blood and lymph circulation. It also improves your metabolism and the general condition of the joints. If you feel constantly tired, supplement your diet with coenzyme Q. Ginseng will help the liver breakdown fat and boost the metabolism.

Remember that the type of ingested foods should reflect the individual needs of your body, taking into consideration the seasons. Whatever is healthy for one person might be needless, or even harmful to another.



## MIQ in practice

The determination of the metabolic type is based on a holistic approach to every person. Employing an enormous scope of knowledge from the fields of medicine, biology, biochemistry, psychology and genetics, we can create an overall, systemic outline for every person. It is not a new topic, though science development makes it possible to present it more accurately. In the 4th century BC, Hippocrates developed a patient division allowing to ascribe them to various groups. As the father of medicine, he repeatedly stated that “it is far more important to know the type of a patient suffering from a given ailment than knowing which ailment he is suffering from”. Chinese medicine, Ayurveda, homeopathy and healers from various cultures would always refer to the division of people into characteristic types which would allow for the adjustment of proper nutrition and effective therapy.

Although 30 years ago the World Health Organisation decided that every disease starts at a cellular level, I perceive our bodies as if we were built of metal or wooden pieces connected by screws...

All the individual features characterising a given person are rooted in body biochemistry. Every living organism strives to stay balanced; that's why everything we represent constitutes a final picture of our strongly individualised state of homeostasis.

We inherit from our ancestors weakness or strength, which create the differences between our autonomic nervous systems, oxidation rates, balance of catabolic and anabolic processes and hormonal systems. The autonomic nervous system controls the entire reflexive body activity; heartbeat, breathing, digestion, reproductive functions and immune reactions are dependent on it. Oxidation and catabolic- anabolic processes decide about the quantity and quality of produced energy, while the hormonal system influences our metabolism by controlling tissue and cell activity. Evaluating the activity of these systems allows specialists to determine the disorders causing the imbalance of a given organism.

According to biological rules, nutrition is a process of providing the organism with all the substances needed for its survival. Even if only one of these nutrients is systematically omitted or delivered in insufficient amounts, the organism is not able to fully absorb all the other ones. As a result, due to the lack of the required ingredient and energy, as well as excessive toxins, our cells stop functioning properly. Most often this is followed by well-known symptoms of fatigue, headaches, anxiety, insomnia, and general poor wellbeing. When we want to help ourselves in such a situation, we tend to increase the amount of medications taken; these usually eliminate unpleasant symptoms for a short time. In consequence, despite a temporary improvement in

our wellbeing, the main reason behind our health problems, that is malnutrition, is not eliminated. After some time, the negative symptoms come back, usually even worse than before. Step by step, body immunity decreases, infections, allergies, hypertension, weight gain, depressive tendencies and a wide range of ailments that we are well aware of start to occur. The symptoms recede, but the ailment develops further. After some time, tired and unhappy cells rebel, making us painfully aware of the scale of the problem—bringing us something like myocardial infarction, stroke, diabetes, osteoporosis, arthritis, degenerations, cancers, etc. Inappropriate nutrition will, sooner or later, make us sick.

Our ancestors used to eat in a modest, yet healthy way. People used to eat natural foods originating from given community's place of residence, following their intuition, basing on habits and tradition. It is challenging to imagine the Inuit eating sprouts and greenery, just as hard it would be to feed those living close to the equator with seal meat and fish liver oil. Historically, metabolic types most likely weren't in accordance with the diet conditioned by blood group. Nowadays, following centuries-old migrations, these dependencies have blended. It is more and more common to encounter people whose blood group suggests, i.e. a vegetarian diet, while metabolic type—a diet suitable for an Eskimo, or the other way round. After all these age-old, natural and positive habits have been completely erased, with food becoming widely available around the clock and throughout the entire year. We started eating new, pretty, colourful, artificial and unhealthy food. As a result, we consume

lots of excessively processed, artificially preserved, coloured foods available in cans or as ready meals, requiring only to be heated in the microwave. Additionally, we eat copious amounts of white bread, sweets, salt, soy, dehydrated milk and eggs, as well as bad fats, bombarding our bodies with gluten, sugar and trans fatty acids. We drink excessive amounts of various sodas that are not only deprived of any nutritional value, but also include significant amounts of glucose-fructose syrup, chemical colourings, flavourings, aromas and preservatives.

We tend to be even more confused with all these promoted theories concerning vegetarian, high carb, high protein, low calorie, weight reduction, rejuvenating or calorie-rich diets; we completely forget, however, that food cannot litter our organism and has to be chosen individually, based on our current health status and genetic predispositions<sup>3</sup>.

<sup>3</sup> The test was developed in cooperation with doctor Grażyna Pająk PhD.



## Metabolic test

Solving the test below constitutes one of the ways to learn about your metabolic IQ. The questions might seem biased or repetitive, but each of them has been intentionally placed in the test.

Based on my long-time observations of people who see the metabolic test for the first time, I can say that the basic problem they face is the lack of knowledge regarding their body. Very few people observe their bodies and their reactions—even less link them with ingested foods. Oftentimes disease symptoms, such as itchy skin, painful heels, dry mouth, everlasting hunger or fatigue, obsessive search for something sweet and many other symptoms are strictly connected with everything we eat or are still deprived of.

Yet another challenge is referring to our actual preferences instead to the state resulting from a restrictive diet, elimination of some foods from our diet or adjusting to a partner, family, cohabitants or people we spend most of our time with—which often equals eating meals together.

Don't also be fooled by your blood group, as it is very

often not linked to the type of metabolism. It is possible for characteristics linked to these two factors to be mixed, but it can usually be observed in regard to preferences concerning lifestyle, climate, relationships with other people, rarely referring to the reactions following the consumption of particular foods.

## **How to properly solve the metabolic test?**

**Before answering the questions please refer to the Short Test Guide:**

1. While answering the questions, forget for a moment about the general theories on nutrition that you used to know from the media and other sources.

2. When taking the test, skip as well the calorie counting, limiting alimentary components such as carbohydrates, fats, and eliminating eating/meals after 6PM.

3. Answering the questions think of which meal suits you best, after eating which you do not have symptoms such as heartburn, bloating, gas, stomach ache; Think of a meal after which You are full of energy and desire for life.

4. Remember that test check out our reaction to different/ various food products—not to diet selected by ourselves or to our lifestyle.

5. Some of the questions contain only answers C—if this answer does not apply to you, skip them.

### **1. For breakfast, no matter what time I eat it:**

A - I eat something light - a soft-boiled egg, pancakes, granola with fruit, millet or oatmeal, I like to drink something warm

B - I eat a sandwich richly stuffed with lettuce and ham, scrambled eggs in butter or sometimes a smoothie

C - I eat something specific, e.g. well done scrambled eggs with grilled bacon, toast with Parma ham, hot sausages, and sometimes only a double espresso or raw mango slices on the run

### **2. What meals do you prefer:**

A - I do not like overeating, I prefer to feed others, I choose light dishes, e.g. lean chicken breast, pasta, vege salad, soup, and often a starter as a full meal, I will not refuse a light dessert

B - Something between A and C; dishes not too fatty but also not too lean, after a heavy meal I will gladly eat something sweet to improve digestion

C - I often choose one but real meal like a steak, burger with French fries, pork chop, pork knuckle, baked potatoes, fatty fish; if the salad it would be with olive oil or spicy dressing; if I choose a dessert, it's rather cheesecake, although I prefer to eat it separately

### **3. What climate do you feel best in?**

A - I feel great when it is warm and sunny, I tolerate high temperatures well, I like sunbathing, I hate cold, my feet and hands often get cold

B - I feel well both in hot and cold weather

C - I feel much better on cold days, I hate hot weather, if I am beaching, I only do it actively or willingly relaxing in the bar

#### **4. What about coffee drinking:**

A - A cup of coffee makes me feel great; I need it for a proper wake up; I prefer cappuccino or cafe latte

B - In fact coffee does not have a major impact on me, if I drink it I do it to socialize or because I like its taste and smell

C - I like to drink strong black coffee, espresso is my favorite, but if I drink too much of coffee it does not have a positive effect on me, it makes my intestines work faster or my heart beats too fast

#### **5. What is your appetite in the morning when you wake up?**

A - In the morning I like to drink orange juice and to have croissant, with coffee preferably with milk or its vege substitute

B - I have an average appetite without going crazy either way

C - If I had a protein-rich dinner late, I drink strong coffee in the morning and eat breakfast at lunchtime, otherwise I think about eating as soon as I wake up

**6. What is your appetite level at noon:**

A - I often replace my lunch with sweets, and at work I go for it to socialize

B - I like a good meal in the middle of the day, but not too heavy to keep me full of energy

C - I like to eat a protein meal, after which I feel light and good, the flour dishes make me sleepy

**7. What is your appetite level in the evening:**

A - I don't eat after 7 p.m. if so, it is something light, fruit or sweets

B - I like a real meal with lots of veggies

C - It is the most important meal of the day for me, I like to eat a heavy meal in the evening in the company of other people, then I sleep well

**8. Are you prone to coughing, hawking or grunting:**

C - I often feel the need to cough or hawk, without having a cold

**9. When looking for a quick snack during the day, you most often reach for:**

A - Sweet fruit, power balls, sweets, fluffy bread, carrots cut into sticks

B - I am happy to mix salty snacks with a sweet taste, I am most happy with vegetables

C - I definitely choose salty taste, mature cheese, peanuts, pickled cucumbers, crisps, popcorn, dried meat

**10. Do you like desserts?**

A - I love sweets in any form and quantity, because I am not getting fat, it is often beyond my control

B - Sometimes i like to eat dessert but I'm not a big fan of them

C - If I have to eat dessert I will choose Tiramisu or fat cheesecake preferably before the meal, although I prefer Herring and pickled cucumber

**11. How do you imagine an ideal lunch (1 PM to 3 PM):**

A - I like to eat pasta or a salad with lean meat with a predominance of vegetables, or a cream soup with bread

B - Actually, I don't have any particular preferences, as long as the food is fresh and tasty

C - I prefer a real meal rich in protein and vegetables, as long as I haven't had breakfast at 12:00 PM; I would also like to eat an omelette or a gyros once being on holiday

**12. What is the colour of your auricles?**

A - My ears are lighter, paler than my face

B - My ears and my face are of the same colour

C - My ears are darker, redder than my face

**13. What meals do you eat during the day?**

A - Two or three meals, with no snacks

B - At least three meals, but I don't need snacks

C - Three or more meals, additionally some snacks in between

**14. Do you feel wet eyes and nasal mucosa?**

A - On the contrary, my eyes and throat dry up, I try to always have water with me

B - The moisture level is normal

C - It happens to me that my pillow is full of saliva

**15. What's your attitude to fat?**

A - The thought of fat makes me sick

B - I cannot imagine bread without butter, I like fat but without exaggeration

C - I really like fat, I feel good after it, dry meals stuck in my throat

**16. How do you feel after a light fruit salad with a little bit of low fat natural yoghurt?**

A - It is a great meal for me, it keeps me full until the dinner time

B - It is not the peak of my dreams, it satisfies me temporarily, then I have a runny nose

C - I don't eat such things, I feel bad after fruit salads, especially based on low fat dairy products

**17. What is your reaction to mosquito and insect bites?**

A - It's hard to say these days, but as a rule nothing happens to me

B - It itches a bit

C - It itches a lot, the skin reacts strongly with redness and swelling, the mark is visible on the body for a long time

**18. Are your eyes itchy a lot?**

C - My eyes are so frequently itchy / often after a meal or after waking up, on a bicycle (symptoms are not the result of bacterial infections, allergies, mycosis - if you suffer from unexplained itching of the eyes, especially paranasal corners – mark C (if the question does not apply to you, leave it unanswered)

**19. Do you like potatoes?**

A - I don't really like them, if I have to choose I would go for overcooked, mashed or dumplings

B - I can have them but I don't need to

C - I love potatoes, I can eat them all the time, especially baked or French fries, as long as they are not overcooked

**20. How do you feel after having eaten red meat?**

A - I don't eat red meat, it makes me feel heavy or depressed

B - I eat it from time to time, but when I eat it too often or in excess I feel dry

C - Perfect, I love red meat, I feel great after it

**21. How much saliva do you produce?**

A - Not too much, I have a feeling of chronic dry mouth

B - Rather average amounts

C - I drool a lot at night, and the thought of eating often makes me overproduce

**22. Do you like vegetarian meals?**

A - They are perfect, they make me feel very well

B - As an emergency, for I while I can do with such meals

C - For me they are completely unacceptable, except for good humus accompanied by high-quality fat

**23. Eating a meal just before going to bed:**

A - I have a feeling of full stomach, it causes problems with falling asleep, or after a while I wake up from my first sleep and cannot sleep

B - I have not noticed any negative effect unless I eat too much

C - It's the basis, it helps me, I have to eat something in the evening to sleep well and not wake up at night

**24. What about having a cup of orange juice on an empty stomach?**

A - Wonderful, I find it a healthy and tasty drink, especially for breakfast

B - Why not, although I don't like it that much, moments later after drinking it, I feel sick

C - I clearly feel bad after drinking it I clearly feel bad after drinking it; afterwards I have heartburn, hyperacidity, unpleasant sensations, it makes me irritated, even furious

**25. How do you react to a fast that lasts several hours?**

A - 4 - 5 hours without food is not a problem for me

B - I can handle it without a problem, although sometimes I would snack something

C - It's not for me, I stand long breaks between meals very badly I can't function without eating regularly

**26. Irritation, although we rarely realize it, is an emotional state determined by metabolism. When I am irritated?**

A - If I'm upset eating meat or fatty food makes it even worse

B - Sometimes eating calms my anger and it doesn't matter what I ate

C - Anger and irritation subside when I eat meat or something rich in good fats, protein-rich food makes me feel better and calms me down

**27. Anxiety, what kind of food helps you to deal with it?**

A - Eating fruit or vegetables calms me down

B - Eating anything calms me down

C - Vegetables and sweet fruit increase my irritation and anxiety

**28. Heavy chest**

C - If you feel that your chest is heavy, as if you have breathing difficulty - select C (if the question does not apply to you, leave it unanswered)

**29. What food weakens your concentration?**

A - Meat and high fat food

B - It seems to me that no food type impacts my concentration

C - Fruit, vegetables, carbohydrates contained in cereal products

**30. Cracking skin**

C - If your skin is cracking without any particular reason, usually on your fingertips, feet or heels - select C (if the question does not apply to you, leave it unanswered)

**31. Have you noticed any problems with dandruff?**

C - Yes, I struggle with scaly epidermis - if so, select C.

- (if the question does not apply to you, leave it unanswered)

**32. What is your face skin complexion?**

A - Definitely pale

B - Medium

C - Definitely darker or high-coloured

**33. What is your face skin type?**

A - More mat and chalky

B - Average

C - Radiant, luminous, bright

**34. What are your natural nails like?**

A - My nails are thick, strong and hard

B - They seem to be average

C - My nails are definitely soft or weak

**35. Do you have a vomiting reflex?**

A - I hardly ever face retching, it is difficult to trigger this in me

B - It seems that my inclination in this reflex is average

C - It is very easy to trigger this reflex in me

**36. Does your skin itchy a lot?**

C - Some people have constant problems with itchy skin of their scalp, arms, calves, back - as a result they are scratching all the time - if you face such problems - select C (if the question does not apply to you, leave it unanswered)

**37. What are your meal portions?**

A - Definitely smaller than of the others

B - I think I eat no less or more than the others

C - My portions are definitely larger than of the others and I love second helpings

**38. What is your personality?**

A - I keep a distance, I am definitely a solitary type or an introvert

B - I think that I am quite average

C - I am the life and soul of the party or an extrovert, I love people

**39. How does your body react to red meat?**

A - I digest it for a long time, it lowers my condition and well-being

B - I have not noticed any particular reaction

C - I feel good and even better after eating red meat, I am at full strength in my mind and body

**40. What is the size of your pupil?**

A - The diameter of my pupil is larger than my iris

B - My pupil and my iris are of similar size

C - My pupils are smaller than my iris

**41. How often do you sneeze?**

A - Almost never

B - From time to time, even while not having a cold

C - On regular basis, especially after a meal

**42. How do you react to sweets?**

A - I feel happy, they usually satisfy my hunger, and they don't cause any adverse reactions

B - Sometimes sweets don't make me feel too well, they often do not satisfy my hunger

C - If I eat only sweets I mostly don't feel well, they provoke various adverse reactions, additionally they make me continuously crave for them; they wake me up for a while and then I am totally exhausted or nauseous

**43. How do you react to sour food?**

A - I don't really like sour food

B - I like it but without exaggeration

C - I love sour ingredients, I often need them

**44. What makes you put on weight faster?**

A - Excess of meat and high fat dishes make me put on weight

B - Disregarding the food type, I put on weight if I have too much food and too little movement

C - I put on weight if I eat too much bread, and other high gluten products and carbohydrates

**45. What is your best meal for a diner?**

A - Something light e.g. chicken breast without skin, rice, salad, light dessert

B - Most dishes are suitable for me

C - I feel much better if the meal is substantial, e.g. steak,

potatoes, fried cabbage or some salad with olive oil dressing

**46. Which symptoms are the most typical for you?**

A - Constipation, I often have goose bumps, high blood pressure, increased heart rate

B - I often get heartburn or bloating

C - Frequent bowel movements, low blood pressure

**47. How often do you have cereal products ?**

A - I'm often craving for a biscuit, cake, sweet bun or ice-cream

B - If they are around, I sometimes pick some of them, but not necessarily

C - I prefer bacon, dill pickled cucumbers, dry sausage ; I can do with salty bread sticks or crackers, but later I don't feel well

**48. My hands are often:**

A - cold and wet

B - normal

C - warm and dry

## How to correctly interpret the answers ?

1. Count how many answers A, B and C you marked.
2. The sequence of given answers does not matter. Important is the amount of individual responses in each category (A,B,C).

Responses in ranges	Your MIQ Type
A>13, B<14, C<14	<b>Carbohydrate</b>
A>13, B>13, C<14	<b>Mixed carbohydrate</b>
A<14, B>13, C>14	<b>Mixed protein</b>
A<14, B<14, C>13	<b>Protein</b>
other cases	<b>Mixed balanced</b>
A>19 AND B<7 AND C>14	<b>MIQ d type metabolic disorders</b>

Okay, but how to learn about your metabolic type if you have never taken an interest in nutrition or your body's reaction to given products— and, to put it simply, you do not have the faintest idea about this field? Or even worse—what if you are familiar with absolutely all the diet and nutrition theories, which often stand in stark contrast to each other?

There is a way of overcoming that! Conduct a four-day test examining your metabolic type on the basis of the guidelines presented below.



## Weekend metabolic type test

Actually, this test can be conducted on any chosen days of the week; however, most of us do not have time to observe our bodies on a daily basis. If you were not able to answer the questions above, taking a look at your body's reactions and coming to constructive conclusions will surely take a while and require your attention.

In the beginning, we eat for two days products in the 30/70 ratio— where carbohydrates comprise 30% of the products, and proteins and fats make up 70%.

For the following two days we consume products in a reverse ratio, so 70/30—where carbohydrates comprise 70% of the products, and proteins and fats make up 30%. The test can be repeated over two subsequent weekends or, should temporal and logistic conditions allow, for four following days.

We should try to ensure that consumed products are as natural as possible, as ingesting chemicals and highly processed fast foods will neither provide us with reliable results nor present true reactions to the products representing a given group—as it will be far too busy fighting or producing a defense reaction to “junk” or worthless food inundating it.

# What should we do during the test?

## How should we conduct it to make it effective?

- First of all, remember that you are taking this test for yourself. Don't cheat—it is only you who will lose if you do.
- Observe your body and its reactions.
- Take notes or record audio notes about how you felt after a given meal.
- See whether your condition improves with every hour or every day, or exactly the opposite—if you are feeling worse and worse.
- Pay special attention to such elements as: energy level during the day, speed of thinking, appetite level, thirst, craving sweet or salty foods, skin itchiness, anxiety, drowsiness and hunger pangs.
- If your well-being significantly deteriorates during the first day, stop the test and move on to the second stage.

## Summary of test results

If you felt worse on days when your nutrition was based on the following ratio: 30% carbohydrates, 70% proteins and fats, yet felt good when the ratio was reversed—so when carbohydrates constituted 70%, with proteins and fats constituting 30%, your MIQ is of the carbohydrate metabolic type.

If you felt worse on days when your nutrition was based on the following ratio: 70% carbohydrates, 30% proteins and fats, yet felt good when the ratio was reversed—so when carbohydrates constituted 30%, with proteins and fats constituting 70%, your MIQ is of the protein metabolic type.

If over the four days of the test you felt very good, good, moderately well or bad, it means that your MIQ is of a mixed metabolic type. Appropriate selection of protein, fats and carbohydrates ratios, and further maintenance of such state for at least four weeks will allow you to precisely determine whether your MIQ is more protein or carbohydrate—or may also prove that your metabolic type is mixed and balanced.

## **I know my MIQ—what should I do now?**

You already know what your metabolic type is—it is an inherent characteristic, which might change only due to a restrictive elimination diet or adjustment to those people whose eating habits are different. You should always remember, however, that you will never reach a longlasting homeostasis level in your body by providing you cells with food incompatible with your MIQ.

Start introducing the nutrition suitable for your metabolic type and continue that mission for at least four weeks. I can guarantee that you will feel phenomenal and will notice an increase in your body's potential. Obviously, the speed of effect emergence

largely depends on your previous lifestyle, the degree of body acidification and poisoning, as well as the quality of products that you use for meal preparation. Stress levels and surrounding environment, along with the type of work performed, also matter.

Adjust your nutrition, consistent with your personal MIQ, to your lifestyle. If you perform intense training or are a professional athlete, discuss this with your coach. If you live on the go and are constantly on the road, introduce the principle of “the lesser of two evils”. Remember that neither starving nor adjusting to the eating habits of other people in your environment will bring you beneficial results if you have a completely extreme type of metabolism. Everyone knows that a Diesel engine does not work on petrol, but just a few people translate this knowledge into nutrition. Let us repeat one more time: there is no single, universal model of proper nutrition.

<b>Innate factors</b>	Metabolic type DNA Blood group
<b>Acquired factors that undergo modifications</b>	Environmental factors Biology of belief/total biology (EMOTIONS), microbiota



## **The psychology of the types**

### **- MIQ in global view**

We tend to think that we have nothing in common with the inhabitants of distant territories. Obviously, we are aware of the fact that every person has a particular blood group and a unique DNA code—but it's not enough to identify with someone living in, let's say, South America. Would you dare to ask one question: who are you in reality?

Human migration did not start 10, 100 or even 500 years ago— and that's why today it is so hard to divide people into nationalities, races, religions, or talk about eating local products only. We think that tomatoes, so common in Europe right now, have always been there. It would be challenging to imagine Italian cuisine without tomato sauce, yet tomatoes have been available in our region only since Columbus reached South America. This is precisely where these bushes, whose red fruits are currently present in our kitchen, originate from. How, then, could we even divide the products and ascribe them to a given territory if plants, just like humans, have travelled across the entire world?

Momondo search engine launched a „DNA JOURNEY“ campaign in order to make people realise that whatever unites us is far stronger than what separates us. The DNA tests reveals our ancestry. Very often we are not aware how much connects us with people from other countries, and how diversified our DNA code could be. The web portal carried out research—an independent survey on 7292 people from 18 countries. The research showed a clear correlation between travelling and trust. People who travel tend to trust more people with other religious beliefs and from different nationalities. The same research showed that the DNA code of every person includes at least a few nationalities that we would never associate with ourselves or that we have a plain hostile attitude towards.

All race-based divisions of humanity are wrong. There is no such thing as racial purity, unless it is created in a laboratory. The factors that contribute to the characteristics of a given person include:

Over the last 14 years I have visited more than 36 countries, and regardless of the continent, I continue to observe people and guess their metabolic type with unchanged curiosity. We often think that all dark-skinned people are the same—but we couldn't be more wrong. Even among dark-skinned people differences in, e.g. face or auricle vascularisation can be noticed. Regardless of skin colour, we are all united by a body build which is characteristic for a given metabolic type. People with protein MIQ are usually affected by obesity, overweight, as well as ailments resulting in unnatural physical appearance.

We tend to think that thin, slim, tall people representing the carbohydrate type are so lucky—because they don't have to overcome the tendency to gain weight. However, they struggle with depression, insomnia, constipation, arthritis and hormonal disorders: you cannot see it at a glance, yet striving to achieve homeostasis poses a serious challenge for these people.

Children are always the most expressive, as they have not been influenced by bad habits, they eat intuitively, often choosing foods perfect for their metabolic type—obviously, depending on the possibilities. A person with the protein MIQ will demonstrate from their early days a character appropriate for their metabolic type; they are often labelled as the “naughty” ones, try to lead a nocturnal lifestyle, choose sour and salty foods rich in proteins and fats. This is totally the opposite of their brother or sister of an extremely carbohydrate type, who wake up early and go to bed early as well. They prefer to eat sweets or sweet fruits, avoiding meat, fats and foods that are difficult to digest; these are often perfectionists with a slight tendency for hysterical behaviour. If parents were willing to gain knowledge by observing their children, there would be far less health problems in developing and highly developed countries.

It is hard to imagine that there are tribes and places in the world where people are not familiar with the “metabolic syndrome” term and unaware of cardiovascular diseases, diabetes, obesity, arthritis and cancer. In these corners of the world, even the elderly—obviously according to the Western mentality—remain healthy. It is completely different from our

culture, where old age is associated with particular diseases. A global eating pattern, which is part and parcel of popular culture, shortens our life span and leads to numerous physical and mental disorders.

It turns out that these incredibly resilient individuals, living according to their own rules, are not aware of the “blessings of civilisation”, such as medicine, scientists, specialists, costly research on diseases, thousands of widely available dietary supplements, gyms, wellness resorts or media campaigns promoting healthy trends.

Moreover, nutrition schemes found among tribes where people still eat according to the knowledge passed from one generation to another are far from widely accepted (and labelled healthy) dietary norms in Western countries.

That’s why in European or American research institutes we would consider Inuit’s diet as completely unhealthy. These people consume mainly meat and fat of animal origin—in rather large quantities— yet they do not suffer from cardiovascular diseases that are so common in highly developed countries. Swiss highlanders are another example of people who eat significant amounts of fatty cheese and cream, as well as raw goat milk, complementing their meals with rye bread, meat and wine. Despite their eating habits and tough living conditions, they remain healthy and are famous for their longevity. This also applies to the Aborigines, African Maasai, the inhabitants of the Amazon rainforest and the Virgin Islands in the Pacific Ocean.

All scientific research carried out among these populations confirm one thing: their incredible physical strength, resilience, immunity to illnesses and absence of lifestyle diseases.

What's interesting, if any of these tribes would start consuming contemporary foods or adjust their eating habits to the norms widespread in Western countries, their health would rapidly deteriorate. They would be affected by the same diseases that are found commonly in highly developed countries.

Doctor Weston Price carried out research among primitive cultures inhabiting poorly urbanised areas; he found that these people did not struggle with chronic diseases, nor dental problems. They were also unaware of physical deformities. Price published his findings in 1938, in a book entitled "*Nutrition and Physical Degeneration*"; he proved that having switched to a diet popular in developed cultures, native inhabitants of these areas started to suffer from the same diseases as the representatives of these civilisations. He also published photos showing rapid deterioration of health among the representatives of primitive cultures.

# Where did the metabolic type come from?

Throughout a thousand-year-old evolution of our species, due to climate changes, geographical location, change in the availability of plant-based and animal-based products, particular nutritional needs have developed in humans; these are characteristic for the geographical region of their inhabitants,.

Regardless of their origin, all foods are divided into three groups of macronutrients—carbohydrates, proteins and fats. Every macronutrient also includes parts of other components. All humans have the need to consume the same ingredients, yet in entirely different proportions.

Primitive inhabitants of tropical and circum-equatorial regions manifest a natural need to consume carbohydrate-rich products, such as fruits, vegetables and grains. The specificity of such eating habits mirrors climatic conditions of a given area, where the climate is hot and humid, while the population leads an active lifestyle. These people do not feel the need to eat foods rich in fats and animal protein.

It's exactly the opposite in the case of people living in the cold and harsh climate of the northern regions; their organisms are not genetically adjusted to the vegetarian diet. Due to the predispositions to fast burning of ingested meals, they need protein- and fat-rich foods, which will provide them with energy for a longer period of time. The Inuit eat and digest animal fats and protein incredibly easily, with further absorption of nutrients which would be completely unacceptable for the

bodies of those living within the Mediterranean basin.

To sum up, eating habits deemed healthy by a particular social group might trigger disastrous consequences for a person either living in a different region or leading a completely different lifestyle.

Unfortunately, we tend to think that we can unify everything and adjust it to every person. Obviously, in regard to mass production, it is particularly beneficial in terms of economy—but global standardisation of nutrition is not possible, as it does not consider the physiological and biochemical diversity of individual persons. Paradoxically, low-fat diets, which are common among African tribes and recommended in the struggle against cardiovascular diseases, can and very often indeed have the opposite effect on people that follow it.

They lead to cardiovascular system disorders among people of, e.g. Anglo-Saxon origin, who for centuries have been used to eating considerable amounts of foods rich in animal fat, including oily fish.

As much as humans are trying to improve everything and adjust it to the needs of the global market, animals continue to eat according to their own, natural genetic program, which is also linked to the metabolic type. They do not choose their food based on WHO dietary recommendations or aggressive advertising campaigns aimed at promoting a particular product or nutrition style—ones that bring multi-million financial benefits. A human has an amazing capability of adapting to new conditions. Sooner or later, they will try to adapt to a currently promoted lifestyle, different continent or climate—even though

they carry within themselves their primitive genetic code.

Even if we explore our ancestry a couple of generations back, it would be extremely difficult to follow our ancestors' nutrition due to the decrease in diversity of plant and animal species, currently constituting only a fraction thereof. Moreover, water, air and soil parameters have also changed; this means we have poor chances of growing carrot that would be similar to the one cultivated 50 or 100 years ago. It is simply physically impossible.

Even if we consider contemporary environmental and lifestyle needs, the discovery of human genome and metabolic type, it is still nothing in comparison to everything that we have to struggle with on a daily basis in order to stay fit and keep up with the ever-changing planet. A human undergoes a constant process of change. Nothing is given to us once and for all. Maintaining body homeostasis is a never-ending task. It is worth remembering, however, that finding a food blend adjusted to the metabolic type and lifestyle is crucial for guaranteeing ourselves the most optimal health level.



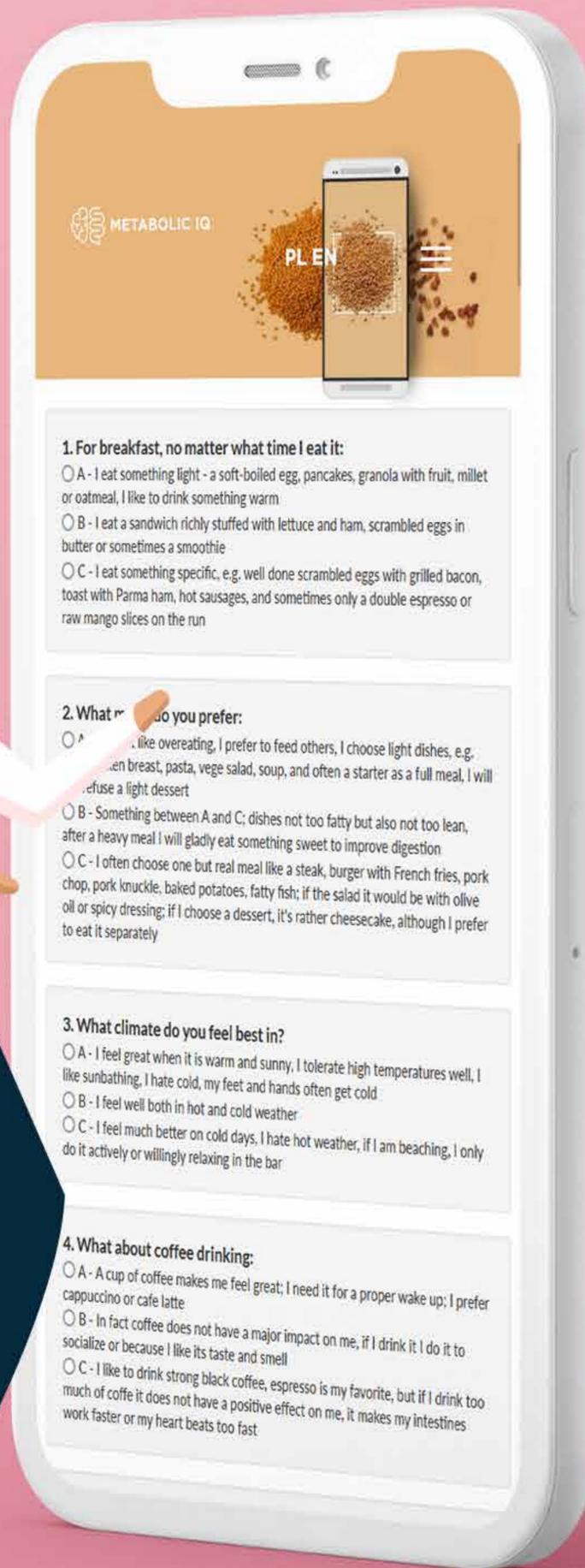
## MIQ vs. partnership

Choosing a partner is also strongly influenced by our body's biochemistry and the metabolic type, regardless of our country or origin and the culture that we were brought up in. Admittedly, many of us are attracted by opposites, which are theoretically supposed to complement each other. However, the lack of knowledge about our partner's MIQ might lead to a catastrophic relationship, even though most of us do not link it to eating habits. Everything starts when opposite metabolic types begin to live together and one of the partners takes over the kitchen. It usually leads to a real disaster! One person sobs in the corner feeling totally overfed, while the other hangs around being constantly irritated and hungry.

Here is a common combination: an extremely „carbohydrate” woman marries an extremely „protein” man. He gains weight in no time, she spends most of the time crying. He is constantly hungry and even fatter, even though he barely eats—and surely not after 6 pm. She is surprised, because she wants the best for him—yet he is becoming more and more aggressive. Nothing will put an end to this situation if they won't understand the extreme biochemistry reactions in their bodies.

Or the other way round: a „protein“ woman marries an extremely „carbohydrate“ man. She continues to eat less because he is eating less—so it’s bad manners to eat so much. She is gaining weight, he remains stick thin. She suffers from insomnia, is tired, becomes hard to live with; he is intimidated and has no idea what is going on—it used to be so great before they moved in together. Soon, she will become even fatter, he will lose even more weight and become scared that eventually, he himself will be consumed.

It is extremely rare for two people sharing the same metabolic type to remain in a relationship. But if it works for them, these relationships are among the happiest ones—as they are based on friendship and personality compatibility, and especially on food preferences. Is there anything that would strengthen a relationship more than going through a starvation diet, for a couple with the carbohydrate MIQ, or a culinary feast for a couple with the protein MIQ?

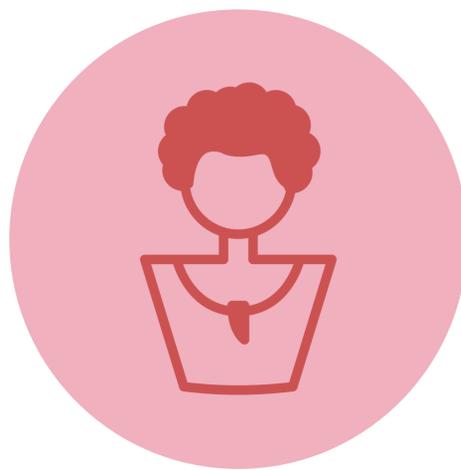


**Metabolic IQ test**  
test available at [metabolicsiq.com](https://metabolicsiq.com)

CHAPTER 2

# Characteristics of five metabolism types





## Carbohydrate

### Metabolic type I.E. Slow burner

It is a person with a tendency for deficiency of the enzymes responsible for decomposing glucose during the citric acid cycle (in the cell cycle)—i.e. decomposes carbohydrates slowly. In order to improve one's metabolism, such person needs a diet: with relatively low amount of light protein to be used well in the citric acid cycle, while supplying more carbohydrate products that are used weakly.

#### Characteristics of carbohydrate type:

- eats to live, not lives to eat
- loves desserts, cakes, cookies, croissants, and rarely gains weight after eating them
- is slim despite the large amount of sugar intake
- likes people but without exaggeration, just as much likes to be alone
- eating late causes that is tired and is not sleeping at night
- does not like fat in any form—even with delicate ham pulls out grease

- feels great on a vegan and vegetarian diet
- fruits and vegetables give him a lot of energy
- heavy proteins like bacon or beef steak sets him in a bad mood
- undernourished feels bad and falls into depression
- is mild, delicate and often highly perfect person
- does also well feeding himself on same lettuce and sprouts
- is gaining weight when eats too much protein
- is acidified with overabundance of protein in the diet
- loves warm and even heat weather
- he is characterized by strong nails and soft skin
- often falls into melancholy and has a tendency to self-pity if he eats incorrectly for his type of metabolism
- has a tendency to constipation, and serious meals cause a feeling o of heaviness



## Slow burner profile

- Domination of the sympathetic nervous system (SNS).
- The breath of a slow burner contains more CO<sub>2</sub> than the breath of a person with a normal metabolic cycle. The body, while getting rid of the carbon dioxide, alkalizing the blood up to the highest limit of the standard pH 7.46—i.e., deacidifies in a natural way.
- Slow peristalsis, low secretion and lazily released digestive enzymes result in incomplete digestion, frequent tympanites and continuous sensation of food deposits and feeling too full.
- The food is burned slowly, and such metabolic type does not feel so hungry at all, so on average two meals a day are sufficient, often with the excuse that there is no time for eating.
- Such person intuitively mostly selects a light and easily digestible meal, frequently opting for a meatless or vegetarian diet.
- While forgetting about proteins and avoiding fats may result in deficiency of these nutrients in one's diet, and thus in metabolic disorders. Then such person often feels unwell, gets awake tired and broken, continuously feels sleepy and absent minded, with thinning hair, weak nails, dry skin and obstructions.
- A carbohydrate type person is slightly asocial, does not enjoy frequent social meetings or parties, and prefers to spend time alone. Due to infrequent and inadequate meals, often struggles with aggression and anger. With

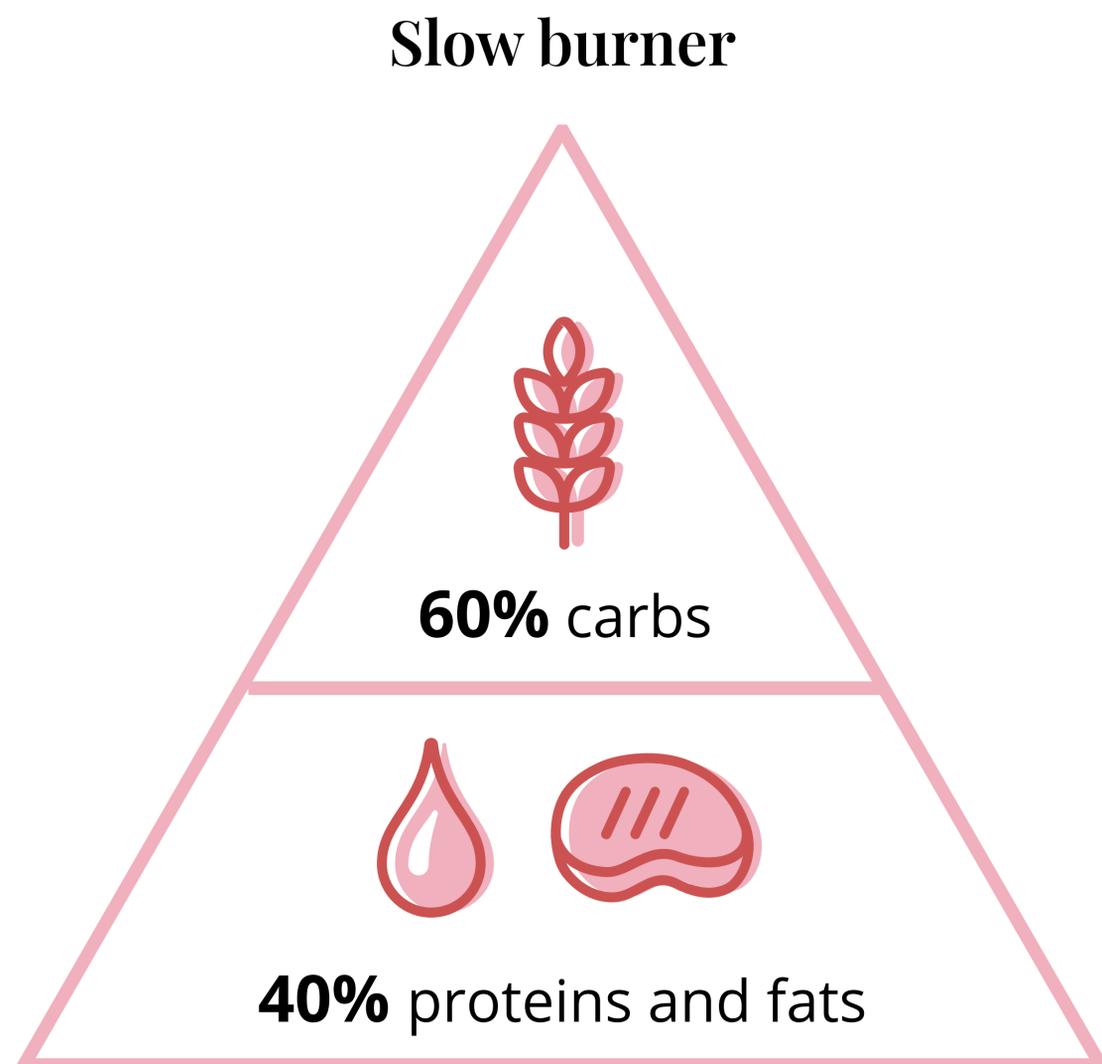
strong domination of the sympathetic nervous system, such person seems to self-interested, cold and abrupt. Additionally the tendency for negative thinking and depression quite quickly ruins physical strength and makes him/ her feel exhausted.

- The sweets set a trap—as long breaks between the meals, relatively small meal portions and secret sweet snacks make the already slow metabolism even slower, attributing to overweight or deteriorated condition, and by the strong domination of the sympathetic nervous system—again making him/ her exhausted, always sleepy, with headaches and hypoglycemia.
- A carbohydrate type person produces too little energy in the citric acid cycle, so to be able to live normal, most often takes a cup of coffee that gives him/ her visibly improved condition.
- The wrong diet, addiction to sweets and highly processed carbohydrates, with deficiency of enzymes decomposing the glucose, increase the risk of type 2 diabetes.
- There is often a tendency for elevated homocysteine level that intensifies inflammatory conditions of blood vessels and the coronary disease.
- Due to the deposited food, with weak peristalsis characteristic for a slow burner—increases the risk of intestine inflammatory conditions, various types of mucosa depletion, ulceration, gallstone, cirrhosis and digestive tract tumours.
- With the remittent vessel contracture, such person has a

tendency for hypertension, more frequent brain strokes and the Raynaud's disease.

- If a slow burner adds a lot of protein to the diet, especially animal protein with high purine and fat contents, the already slow citric acid cycle will get even slower—i.e. there will be even more deficiency in the energy generated—that is why following a dinner with some red meat a slow burner feels dehydrated, sleepy, feeble, irritated, emotionally unstable and unwell.
- A carbohydrate diet stimulates metabolism of a slow burner, supplying the easily accessible fuel to be processed slowly and somehow least utilized, that is why it should be replenished on regular basis.
- All meals should contain not only carbohydrates, but also an appropriate share of proteins and fats.
- A slow burner should have three carbohydrate meals, enriched with small quantities of protein and fat. Fruit can be used as snacks. The last meal should be served a few hours before the night rest to guarantee calm sleep until the morning.
- Too much of carbohydrates in a meal makes one craving for sweets, while supplementing the dishes with small quantities of appropriate protein, improves the metabolism and one's condition.
- A diet of the carbohydrate type proteins and fats should constitute 40%. Well tolerated food includes free-range eggs, natural low fat dairy products, white meat, delicate fish, walnuts, almonds, occasionally green beans, lentils or

chickpea. Vegetable oils should be extra virgin, i.e. in particular linseed, coconut and olive oil, fresh butter and drawn butter. Carbohydrates dominate, constitution approximately 60% of unprocessed, high fibre carbohydrates, containing starch and sugar. This diet allows for high quantities of groats, grains, vegetables and ripe fruit. However, do not fall into a trap of regular having sweets or dishes with high glycemic index and high gluten content.



 <p><b>proteins</b></p>	<p>with low purine content: soured milk, kefir, yogurt, natural dairy products, semi-skimmed cottage cheese, fish—cod, trout, flounder, perch, halibut, white tuna, wild salmon, white parts of poultry, rabbit, veal, occasionally: pork fillet, beef leg cuts, silverside, sometimes free-range egg and green beand</p>
 <p><b>vegetables</b></p>	<p>lettuce, peppers, onion, radish, cabbage, low salt dill pickled cucumbers, red beetroot, sprouts, fresh cucumbers, marrows, courgette, Brussels sprout, broccoli, chard, pumpkin</p>
 <p><b>starch</b></p>	<p>with low purine content: soured milk, kefir, yogurt, natural dairy products, semi-skimmed cottage cheese, fish—cod, trout, flounder, perch, halibut, white tuna, wild salmon, white parts of poultry, rabbit, veal, occasionally: pork fillet, beef leg cuts, silverside, sometimes free-range egg and green beand</p>
 <p><b>sweets</b></p>	<p>easily digestible sweets, i.e. delicate home-baked cakes, jams, plum stew, jellies, mousses, sorbets, raisins, overripe soft fruit, sunflower sprouts, almonds, walnuts</p>
 <p><b>fats</b></p>	<p>in low quantities—butter, drawn butter, only extra virgin oils: coconut oil, linseed oil, olive oil, occasionally other fats</p>

**Carbohydrate type should avoid** strong alcohols, fatty and heavy dishes, excess of legumes, highly processed sweets and late dinners.

### **Necessary supplementation for a slow burner:**

natural vitamin B complex (B1, B2, B6), folic acid, vitamin D, K, C, vitamin H (biotin), iron, potassium, magnesium, copper, manganese: to accelerate the citric acid cycle:

- first of all, select products with a complex of protolithic enzymes, thus facilitating digestion of proteins deposited in the digestive tract
- as a slow burner has lazy bowels, slow peristalsis and slow moving food matter—fibre should be preventively included in the diet
- to protect the heart and vessels, increasing a risk of a brain stroke, this metabolic type should take a complex of Omega 3, Coenzyme Q 10 and natural vitamin E
- a slow burner with overweight problems can take natural iodine extract from sea algae, to dehydrate the fat tissue effectively, to regulate the thyroid function and increase resistance to cold
- vegetable supplements are recommended to calm down the already hypersensitive vegetative system, e.g. oats extract

## Carbohydrate miq tips:

- "Have A Cookie After Dinner, And You Will Full",
- "Do Not Eat Steaks At The Night—You Will Feel Heavy And Uncomfortable",
- "Eat Something Before You Will Get A Headache",
- "Are You Craving For Sweets? Maybe You Eat Not Enough Proteins",
- "Are You Sleepy? Think When Have You Eaten",
- "How Much Fat Have You Eaten Today? Surely Nothing",
- "Are You Not Hungry? Reach For A Snack Before Sugar Level In Blood Will Fall Down",
- "Do Not You Have Time For Food? You Fool Yourself",
- "Do Not Overdo With Sugar!",
- "Are You Angry? Please Recall What Have You Eaten",
- "Do You Feel Like Being Dried? Probably You Have Eaten Too Much Protein And Fat",
- "Do You Get Angry Easily, Feel Anxiety? Reach For A Glass Of Juice Or Have A Healthy Cookie",
- "Are You Going To Dinner After 18? Do Not Eat Too Heavy Meals"
- "Have A Salad And Not Bars All The Time",
- "Have You Got A Headache? Drink Tea With Lemon And Sugar",
- • "Choose Dairy Carefully! Natural Yogurt Or Cottage Cheese Will Be Good",
- "Do Not Eat Candies! Eat Dried Fruits",
- "If You Feel The Energy Loss After Meal, It Was Wrong For You",

- "Do You Feel Cold? Drink Tea With Ginger Or Eat Good Broth",
- "Your Throat Is Dried? Reach For A Glass Of Linseed",
- "Do You Have Bloating? Drink A Cup Of Meridian Fennel Or Fennel Tea",
- "Have A Meal Before Training! It Will Help You Avoid Hypoglycemia",
- "Do You Have A Big Appetite For Sweets? Probably You Have Eaten Too Much Starch In Relation To The Proteins",
- "Do Not Eat Any Products Made Of White Flour!",
- "Fresh Vegetable Juices Are Ok For You",
- "Eating Fruits Is A Good Idea, Drink Juice Less Often",
- "Drink Mixed Fruits Instead Of Juices",
- "If You Want To Drink, Drink Water",
- "Eat Legumes From Time To Time",
- "Do You Want To Leave The Party? Have A Piece Of Cake, You Will Be More Sociable",
- "Do Balance Your Snacks, Do Not Eat Too Much Sugar!",
- "Avoid Milk Powder And Trans Fats",
- "Choose Organic Coffee And Cut It Down To Two Cups",
- "Be Careful With Most Of Commercial Products!",
- "Do You Have A Dry Skin, Weak Nails And Hair? Increase The Amount Of Good Fats In The Diet",
- "Are You Trembling? Drink A Glass Of Juice Or Eat Candy"



## **Protein**

### **Metabolic type I.E. fast burner**

It is a person who digests carbohydrates very rapidly. Such person needs more proteins in the diet, as with high quantity of glucose coupled with the citric acid cycle, getting back to balance is required. Being under the influence of the parasympathetic nervous system, everything is accelerated, all the digestive enzymes release fast, the peristalsis is accelerated, and thus the intestinal transit movement is very rapid.

#### **Characteristics of protein type:**

- likes coffee and feels good after it lives to eat, loves to cook, experimenting in the kitchen and explore new tastes rather does not like sweets, if he has to—for example at the party—chooses fat cheesecake or cream brulee; reaches for sugar in extreme cases when he is extremely hungry or exhausted
- has a tendency to gain weight, especially after carbohydrates and sugar
- paradoxically, does not get fat after eating products of high protein and healthy fat

- loves people, he loves events, he is soul of the party
- if he is not eating dinner before going to sleep, will not sleep or wake up at night and looking for food
- fruits, especially those with a high sugar content, makes him gaining weight, he feels bad and has sugar spikes which worsen his condition and leads to aggression, if hungry sometimes becomes nasty
- large gaps in the meals makes him gaining weight and be with no power
- feels wonderful after having meals rich in protein and fat, especially animal
- if does not eat according to his metabolic type tends to have bursting heels and accumulation of calloused skin
- is acidified with overabundance of carbohydrates in the diet
- is gaining weight by eating large amounts of carbohydrates, especially flour products containing gluten
- quickly burns carbohydrates and their excess causes frequent defecation



## Fast burner profile:

- Domination of the parasympathetic nervous system.
- Increased quantity of CO<sub>2</sub> in blood, additionally, with high quantity of protein in the diet, the tissues are acidified by protein transformation products (urea, uric acid, lactic acid), that is why a fast burner has a tendency for shifting down the blood pH to the lower limit—7.24, i.e. on the borderline of the acidosis—and thus needs to remember to de-acidify the body.
- Overproduction of digestive juices, rapid and too active intestinal peristalsis, resulting in diarrhea.
- A protein type person digests food very rapidly and always stays hungry, two meals—just breakfast and dinner are unbearable, and when he/ she opts for sweet snacks, they make his/ her feel unwell and irritated, when skipping a meal often he/ she tends to get nausea, fainting or dizziness.
- A protein type person has tendency for functional hypoglycemia—after having a high sugar, glycaemic meal the glucose level increases in the blood and then drops rapidly, often below the lower limit.
- Insulin that gets shot immediately into the bloodstream, at high glucose level, facilitates depositing of the fat tissue.
- A protein type instinctively opts for protein, rich, salty food, as due to the rapidly burnt carbohydrates, there is constant protein deficiency in the citric acid cycle.
- Such person cannot stand low calories carbohydrate diet meals need to be frequent with no empty calories.
- A protein type suffers from deficiency of calcium and magnesium and is exposed to depletion of mineral salts, often

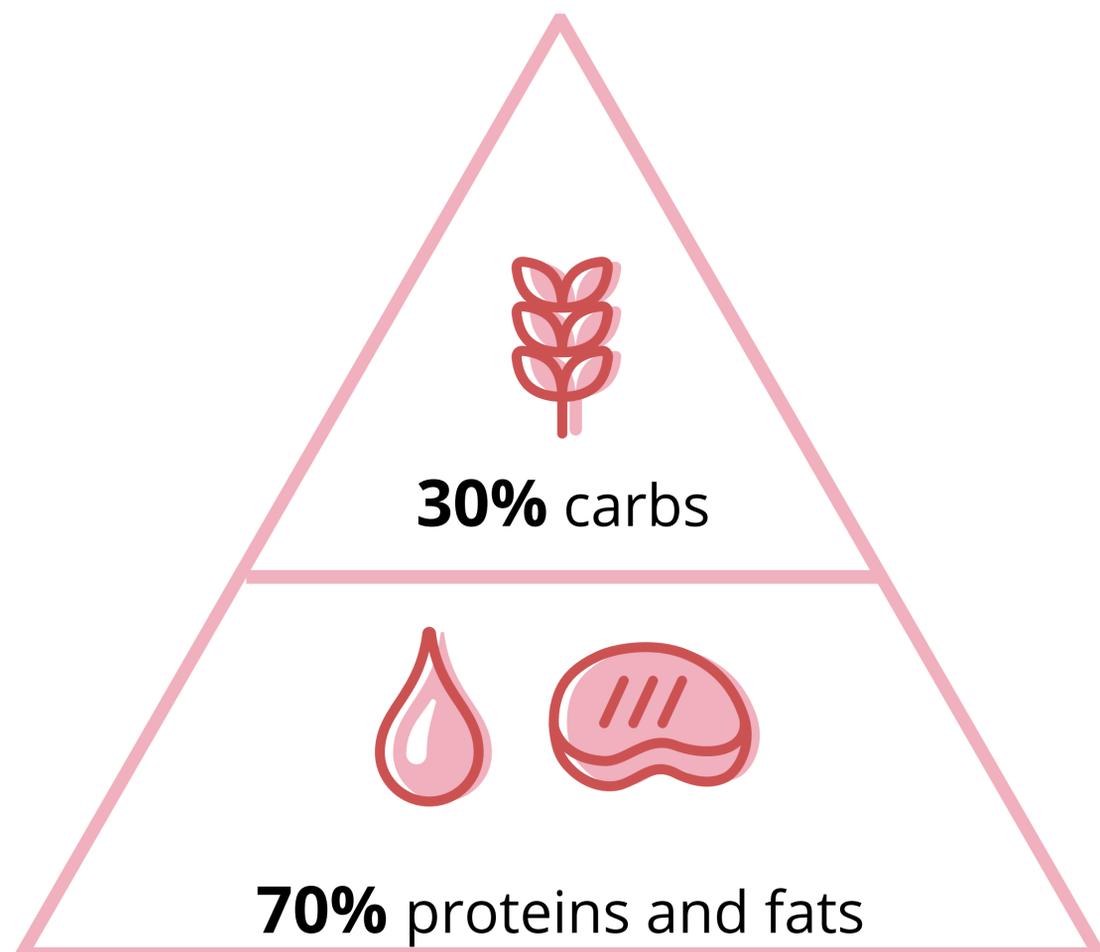
resulting in osteoporosis.

- The acidified body transports oxygen less efficiently, thus resulting in ischemia and hypoxia.
- A fast burner suffers from excessive mucus generation, his/her nose is always running, the eyes are wet and there is overproduction of saliva.
- A fast burner has a tendency for slow heartbeat (bradycardia) and rather low blood pressure.
- If the wrong diet takes longer, a fast burner additionally has problems with itchy skin and painful heels.
- Alcohol is a poison for a protein type, as a simple sugar it accelerates the already fast metabolism, intensifying all the tendencies characteristic for the type, most of all depositing of the fat tissue.
- Ripe fruit, peach, grapes, citrus fruit and all fruit juices are not recommended as they contain too much sugar for this type.
- Light dairy is not the best friend of the protein type, except for rich naturally fermented cheese.
- We need to remember that an Eskimo can never be fed with an equatorial diet. To function well, a fast burner needs 70% proteins and fats, and 30% carbohydrates. The best are animal proteins: red meat, dark parts of poultry, wild oily fish, offal of naturally fed domestic animals, traditional cold meat cuts. It is necessary to include sometimes unskimmed cottage cheese, Parmesan, mozzarella with olive oil, rich cream, nuts, almonds and all legumes, except for soya. The fats should include fresh and drawn butter home-made lard, traditional bacon and olive oil. Carbohydrates in the diet should have low starch and sugar

contents, with majority of green vegetables. Unprocessed rice is allowed: wild, dark, red and brown, roasted and unroasted buckwheat groats, amaranth, sometimes millet, bread only based on sprouted grains and natural sourdough.

- A protein type person should eat 6 medium calorie meals a day, starting the day with breakfast and ending with protein dinner, approximately one hour before the night rest.

### Fast burner



 <p><b>proteins</b></p>	<p>with high purine content: red meat, dark parts of poultry, home-made sausages, offal of naturally fed domestic animals (duck, partridge, home-made pork chop, pig neck, beef, lamb), oily sea fish, herring, sardines, caviar, sea food, most mushroom, legumes i.e. beans, peas, lentils, chickpea, broad bean, peanuts, sprouted grains, meat gravy, free-range eggs in any form, sometimes unskimmed cottage cheese, Parmesan</p>
 <p><b>vegetables</b></p>	<p>with high purine content: beans, peas, lentils, chickpea, cauliflower, spinach, asparagus, celery, avocado, artichokes, sweet potatoes, potatoes occasionally and only fried in butter</p>
 <p><b>starch</b></p>	<p>only whole grain cereals, with low gluten and high purine contents. Unprocessed rice is allowed: wild, dark, red and brown, roasted and unroasted buckwheat groats, amaranth, sometimes millet, bread only based on sprouted grains and natural sourdough. Recommended flour types: made of chestnuts, almonds, chickpea, buckwheat and millet</p>
 <p><b>sweets</b></p>	<p>cereal free or based on allowed flour types, rich cheesecake with xylitol, butter cream cake, home-made ice-cream with rich whipped cream and nut topping, cream and sultanas sundae, high fat sour hard fruit, genuine halvah, sesame, nuts, almonds</p>
 <p><b>fats</b></p>	<p>butter, drawn butter, lard, home-made bacon, extra virgin vegetable oils: pumpkin seed oil, nut oil, pistachio oil, olive oil, fish oils, home-made mayonnaise based on linseed and rice oils (1:1)</p>

**Protein type should avoid** sharp and very sour spices, fruit juices, sweet carbonated beverages, monosaccharides, coffee, strong tea, beer and other alcoholic beverages.

### **Necessary supplementation for a fast burner**

natural vitamin B12, vitamin PP, citrus bioflavonoids, pantothenic acid, calcium, magnesium, iodine, phosphorus, zinc, sodium, in general, mineral supplementation:

- a fast burner should first of all use natural calcium supplements and minerals, to neutralize the continuous deficit
- natural antioxidants—vitamin C, A, E (lack or deficiency of these vitamins may attribute to calcium and magnesium depletion from the bone tissue).
- oats extract or Garden Angelica with camomile may slightly settle down the excessively reactive smooth muscle tissue in the digestive tract
- the Omega 3 acids are helpful in eliminating chronic mucosa inflammatory condition and relieve all allergic reactions and pseudoallergic ailments,
- Pau D'arco, probiotics (powder milk free), inulin extract and properly selected dietary fibre will effectively de-acidify the body
- white bean extract will provide effective protection against excess of carbohydrates in the diet

## Protein miq tips:

- “Is Your Skin Itching? Eat Protein”,
- “Are Your Heels Aching? Your Body Lacks Proteins”,
- “Do You Have Dark Stains In Front Of Eyes, Do You Feel Dizziness? You Have Missed Meal Or You Haven’t Eaten For A Long Time”,
- “Remember French Croissant And Orange Juice Are Not A Breakfast For You”,
- “Bacon And Scrambled Eggs Are Your Friends”,
- “Do Not Be Afraid Of Fats, You Will Not Gain Weight”,
- “Avoid Bread And Pasta”,
- “Remember To Eat The Last Meal 1 Hour Before The Bed Time”,
- “Do Not Exercise In The Morning, On Empty Stomach, Especially If You Had Supper At 18”,
- “Instead Of Sweets, You Would Better Take Pickled Cucumber Or Cheese”,
- “Going To The Party? Do Not Forget About Proteins”,
- “Do You Have A Headache? Probably Your Blood Sugar Level Fell Down”,
- “Do Not Have Dessert After Dinner!”,
- “Salads And Cake Should Be Eaten As A Snack Before A Meal”,
- “Do Not Combine Cottage Cheese Or Meat With Sugar”,
- “If You Are Planning Exercises, Forget About Pasta And Full Grains”,
- “Always Combine Carbohydrates With Fats, It Will Slow Down Burning”,
- “If You Have Nothing To Eat, Reach For Fatty Ice Cream”,

- “Are You Hungry? Eat The Meal Rich In Protein And Fats”,
- “Do Not Drink Tea With Sugar”,
- “Do Not Drink Black Coffee On Empty Stomach Or White After Meal”,
- “Do You Feel Like Eating Sugar? Cut Down Carbohydrates”,
- „Remember That Sugar In Your Type Lowers Energy, It Causes Irritability And Annoyance”,
- “Cutting Down Calories And Hunger Cause That You Are Gaining Weight”,
- “When You Feel Passive And Restless, The Meal Will Improve Your Fitness”,
- “Choose Proteins Rich In Fats And Purine”,
- “Fat And Protein Give You More Energy Than The Carbs”,
- “You Burn Carbs Too Fast! Avoid Them!”,
- “Diet Rich In Proteins And Fats, Will Keep Your Weight, Keep You In The Physical And Mental Form”,
- “Eating According To Your Type, Will Help You Prevent From Degenerative Diseases”,
- “Metabolic Imbalances Cause Chronic Diseases”,
- “Protein Makes You Lose The Weight And Can Help You Gain A Great Fitness”,
- “Lack Of Proteins Causes Chronic Fatigue, Anxiety Or Depression”,
- “Carbohydrate Snack? Is Not For You, Unless You Want To Gain Weight”,
- “Listen To Your Body Dialog Can Make Your Life Easier”,
- “Watch Out For Cereals, Vegetables Full Of Starch And Fruits— They Are Your Enemy”



## **Mixed balanced**

### **Metabolic type I.E. moderate burner**

It is a person which has balanced levels of enzymes that break down glucose during the Krebs cycle (in the cell cycle)—it means that systematically breaks down carbohydrates. To maintain metabolic balance, that person must maintain a proportional amount of sugars, proteins and fats in the diet ; disturbing the harmony of macronutrients in food that person is struggling with the

#### **Characteristics of mixed balance type:**

- likes to eat but without exaggeration
- too large gaps in the meals make him feel worse
- is gaining weight if he eats too much of everything and
- does not move enough
- last meal can be eaten late, but too heavy dinner makes
- that food will stack up in the intestines for long, causing a
- feeling of heaviness
- likes people
- feels great in both warm and cold days

- is acidified with too much of both carbohydrates and proteins
- is happy to mix different ingredients in the meals
- is a gentle, cheerful person but can be angry too
- has a tendency to workaholism but he also likes laze around
- does not like sweets but sometimes he likes to eat good, not too sweet cake
- likes coffee and feels good after it



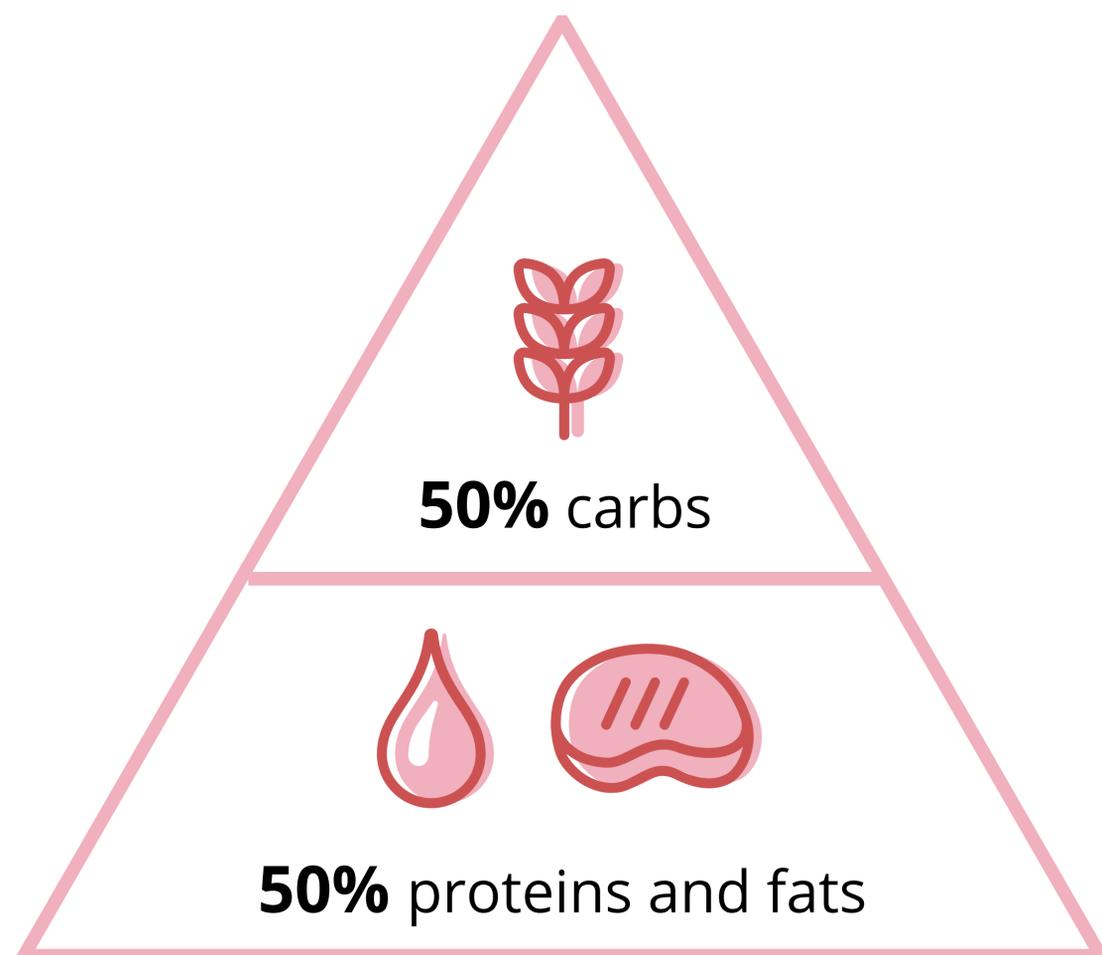
## Moderate burner profile:

- The mixed type stays in between the carbohydrate and protein types, (i.e. between an equatorial and an Eskimo type). This is a classic “cocktail” of possibilities.
- Such person may eat everything from the healthy food list, just not to exaggerate.
- However, failing to observe a well-balanced nutrition rules may result in a shift into the reaction pattern characteristic for carbohydrate or protein types.
- If a mixed type person misbalances the proportion of nutrients or has one-sided eating habits, this often results in overweight problems.
- The mixed metabolic type enables you to use a wide range of products. In the homeostasis condition all the good feature of both types can be maintained in the body—both of the carbohydrate and the protein type. However, once the balance is upset, the principles get neglected and the body is not cared for effectively, one may develop all the health problems typical for a slow burner and for a fast burner.
- Mixed type persons are less vulnerable to disorders.
- In order to maintain good health and balance, you just need to observe the common sense principles of nutrition.
- The mixed type functions the best while having appropriate quantities of all macro-elements, i.e.—all proteins, fats and carbohydrates, not to have it too light, too fatty or too sweet.
- By having frequent and small meals, appropriately adjusted individual diet, majority of serious degenerative diseases may be prevented, wherever such disorder is based on the entire

body metabolism.

- Listening to your own body, using protein in each meal, avoiding processed food, we can adjust the diet to be able to eliminate overweight and the need for sweets.
- Careful approach to cereal product, limiting wheat gluten, sugar and Trans fatty acids one can feel better just in a few days' time.
- If you are craving for sweets directly after a meal, it means
- that your dish contained too little protein.

### Moderate burner



In this case, we eat equal amounts of carbohydrates and proteins as well as fats by choosing from carbohydrate and

	<b>slow burner</b>	<b>fast burner</b>
 <b>proteins</b>	<p>with low purine content: soured milk, kefir, yogurt, natural dairy products, semi-skimmed cottage cheese, fish—cod, trout, flounder, perch, halibut, white tuna, wild salmon, white parts of poultry, rabbit, veal, occasionally: pork fillet, beef leg cuts, silverside, sometimes free-range egg and</p>	<p>with high purine content: red meat, dark parts of poultry, home-made sausages, offal of naturally fed domestic animals (duck, partridge, home-made pork chop, pig neck, beef, lamb), oily sea fish, herring, sardines, caviar, sea food, most mushroom, legumes i.e. beans, peas, lentils, chickpea, broad</p>
 <b>vegetables</b>	<p>lettuce, peppers, onion, radish, cabbage, low salt dill pickled cucumbers, red beetroot, sprouts, fresh cucumbers, marrows, courgette, Brussels sprout, broccoli, chard, pumpkin</p>	<p>with high purine content: beans, peas, lentils, chickpea, cauliflower, spinach, asparagus, celery, avocado, artichokes, sweet potatoes, potatoes occasionally and only fried in butter</p>
 <b>starch</b>	<p>only whole grain cereals, with medium and high starch content—amaranth, barley, rye, natural rolled oats, unprocessed rice, buckwheat, millet, only dinkel wheat, potatoes (from time to time),</p>	<p>only whole grain cereals, with low gluten and high purine contents. Unprocessed rice is allowed: wild, dark, red and brown, roasted and unroasted buckwheat groats, amaranth,</p>

 <p><b>starch</b></p>	<p>whole grain “al dente” pasta, sourdough rye bread, home-baked according to old recipes, natural rice gruels, flakes and wafers</p>	<p>sometimes millet, bread only based on sprouted grains and natural sourdough. Recommended flour types: made of chestnuts, almonds, chickpea, buckwheat and millet</p>
 <p><b>sweets</b></p>	<p>easily digestible sweets, i.e. delicate home-baked cakes, jams, plum stew, jellies, mousses, sorbets, raisins, overripe soft fruit, sunflower sprouts, almonds, walnuts</p>	<p>easily digestible sweets, i.e. delicate home-baked cakes, jams, plum stew, jellies, mousses, sorbets, raisins, overripe soft fruit, sunflower sprouts, almonds, walnuts</p>
 <p><b>fats</b></p>	<p>Fats—in low quantities—butter, drawn butter, only extra virgin oils: coconut oil, linseed oil, olive oil, occasionally other fats</p>	<p>butter, drawn butter, lard, home-made bacon, extra virgin vegetable oils: pumpkin seed oil, nut oil, pistachio oil, olive oil, fish oils, home-made mayonnaise based on linseed and rice oils (1:1) fats</p>

**Mixed balance type should avoid** strong alcohols, fatty and heavy dishes, excess of legumes, highly processed sweets and late dinners, sharp and very sour spices, fruit juices, sweet carbonated beverages, monosaccharides, coffee, strong tea, beer and other alcoholic beverages.

### **Necessary supplementation for a moderate burner**

natural vitamin B complex (B1, B2, B3, B6, b9, b12 ), C,D,K vitamins, vitamin H (biotin), citrus bioflavonoids, pantothenic acid, calcium, magnesium, iodine, phosphorus, zinc, sodium, in general, mineral supplementation, iron, potassium, copper, manganese to accelerate the Krebs cycle.

Mixed balance type should choose supplements depending on how she/he feels like.

## Mixed balanced miq tips:

- Variable appetite, you eat like a horse or you have no appetite at all?”,
- “Lack of balance in nutrition may cause excess willingness to eat sweets”,
- “If you balance components, you will not gain weight”,
- “You are lucky! Your diet seems to be the most liberal of all the types!”,
- “Combine meals proportion of both types—protein and carbohydrate”,
- “Make sure you are mixing fruits and vegetables properly”,
- “Do not go to extremes! Balance in your case is the key to success”,
- “Try to balance vegetables with high content of starch and purine”,
- “You are working the best if you consume well balanced amount of protein, fat and carbohydrates”,
- „While keeping balance, you can prevent from many degenerative and chronic diseases”,
- “Protein in every meal can maximize your sources of energy”,
- “Lack of protein can cause chronic fatigue, emotional imbalance, melancholy”,
- “Carbohydrates snacks can cause jumps in the blood sugar level!”,
- “Excess of carbohydrates in a diet can cause gaining weight”,
- “Every type of protein is beneficial to a mixed type”,
- “Too much or too little fat and proteins may cause disorders

- of your energy, mood and welfare”,
- “Have a snack, if you need it”,
  - “Small quantities of proteins from time to time, can allow you to keep balance”,
  - “Any type of healthy snack is good for you”,
  - “Food should give you satisfaction and energy!”,
  - “Listen to your body!”,
  - “If you are very hungry, dairy products are not the best for you”,
  - “Check consumption of cereals, fruits and vegetables with high starch content”,
  - “Eat cereals in moderate way”,
  - „Do not eat too much bread!”,
  - “Do not consume any products made of purified cereals”,
  - “If your sugar jumps, avoid wheat or eliminate it at all”,
  - “Crackers and bread should be replaced by rice or groats”,
  - “If you feel like having sweets after meals, probably you have eaten too much carbohydrates”,
  - “Remember that the purified flour blocks calcium absorption!”,
  - “If you eat bread, always butter it—to avoid jumps of blood sugar and increase fatty tissue”,
  - “Watch out for fruits! Eating them excessively may cause trouble”,
  - “If you are hungry, it is better to eat proteins than fruits”,
  - “Excessive drinking of juice can cause gaining weight in your metabolism type”,
  - “Use moderate quantity of fats and oils”,
  - “Fats and oils are not harmful for you if you eat them in their natural form”



## **Mixed carbohydrate**

### **Metabolic type i.E. medium slow burner**

It is which is prone to partial deficiency of enzymes that break down glucose during the Krebs cycle (in the cell cycle) it means that breaks down carbohydrates on average basis. to improve your metabolism, she/he needs in her/his diet light protein, which in Krebs cycle is well used. still she/he must also provide the body with more carbs that are slowly burned.

#### **Characteristics of mixed carbohydrate type:**

- likes to eat but without exaggeration
- too large gaps in the meals make him feel worse
- is gaining weight if he eats too much of everything and
- does not move enough
- last meal can be eaten late, but too heavy dinner makes
- that food will stack up in the intestines for long, causing a
- feeling of heaviness
- likes people
- feels great in both warm and cold days

- is acidified with too much of both carbohydrates and proteins
- is happy to mix different ingredients in the meals
- is a gentle, cheerful person but can be angry too
- has a tendency to workaholism but he also likes laze around
- does not like sweets but sometimes he likes to eat good, not too sweet cake
- likes coffee and feels good after it



**Medium slow burner profile:**

- The mixed type stays in between the carbohydrate and protein types, (i.e. between an equatorial and an Eskimo type). This is a classic “cocktail” of possibilities.
- Such person may eat everything from the healthy food list, just not to exaggerate.
- However, failing to observe a well-balanced nutrition rules may result in a shift into the reaction pattern characteristic for carbohydrate or protein types.
- If a mixed type person misbalances the proportion of nutrients or has one-sided eating habits, this often results in overweight problems.
- The mixed metabolic type enables you to use a wide range of products. In the homeostasis condition all the good feature of both types can be maintained in the body—both of the carbohydrate and the protein type. However, once the balance is upset, the principles get neglected and the body is not cared for effectively, one may develop all the health problems typical for a slow burner and for a fast burner.
- Mixed type persons are less vulnerable to disorders.
- In order to maintain good health and balance, you just need to observe the common sense principles of nutrition.
- The mixed type functions the best while having appropriate quantities of all macro-elements, i.e.—all proteins, fats and carbohydrates, not to have it too light, too fatty or too sweet.
- By having frequent and small meals, appropriately adjusted individual diet, majority of serious degenerative diseases may be prevented, wherever such disorder is based on the entire

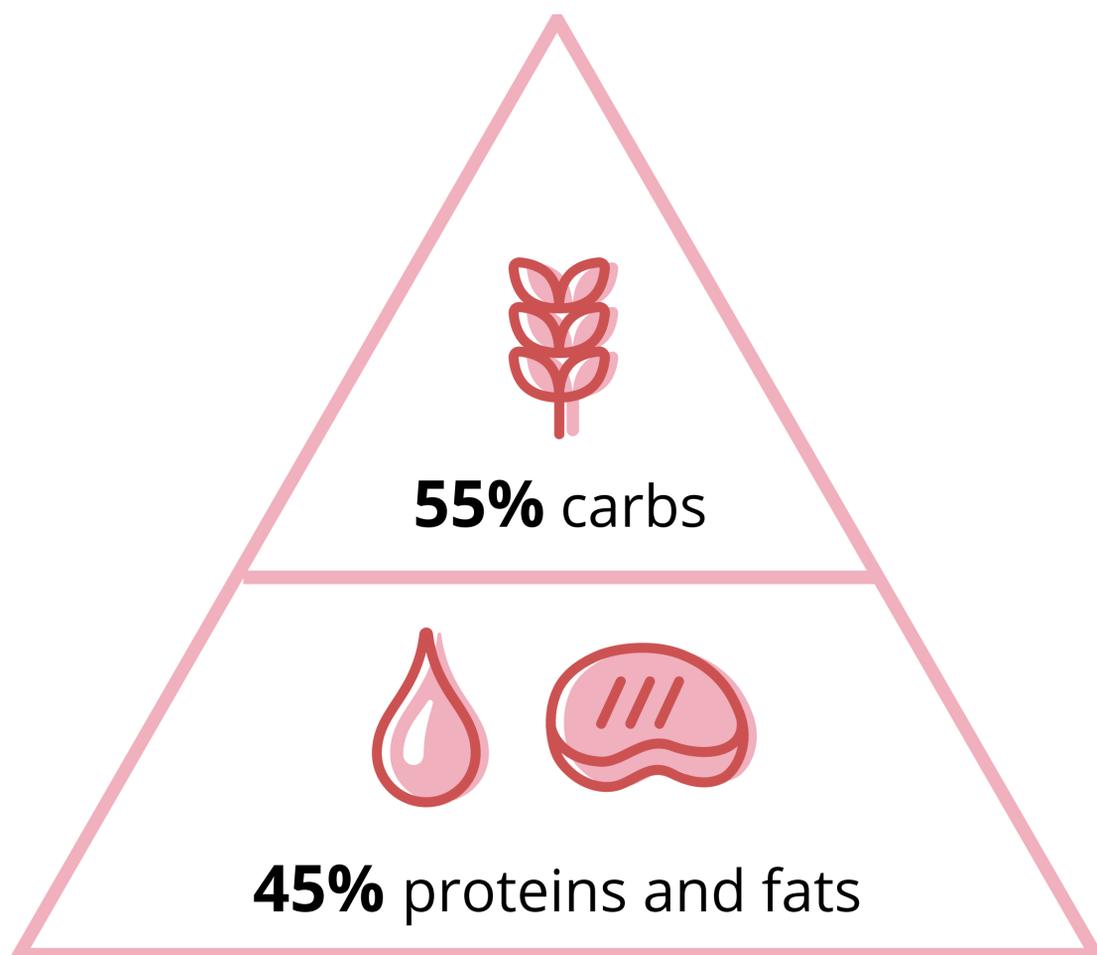
body metabolism.

- Listening to your own body, using protein in each meal, avoiding processed food, we can adjust the diet to be able to eliminate overweight and the need for sweets.
- Careful approach to cereal product, limiting wheat gluten, sugar and Trans fatty acids one can feel better just in a few days' time.
- If you are craving for sweets directly after a meal, it means that your dish contained too little protein.

### **Medium slow burner**

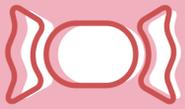
The diet for people of this MIQ type should not contain extreme nutrients associated with protein MIQ type. In this case the extreme nutrients are those which are not adapted to carbohydrate MIQ type. Those are people who are moderate burners with a tendency towards slow burner. They should choose for their diet 2/3 products from slow burner list and 1/3 from fast burner list.

## Medium slow burner



	slow burner	fast burner
 <b>proteins</b>	with low purine content: soured milk, kefir, yogurt, natural dairy products, semi-skimmed cottage cheese, fish—cod, trout, flounder, perch, halibut, white tuna, wild salmon, white parts of poultry, rabbit, veal,	with high purine content: red meat, dark parts of poultry, home- made sausages, offal of naturally fed domestic animals (duck, partridge, home-made pork chop, pig neck, beef, lamb), oily sea fish, herring, sardines, caviar, sea food, most mushroom, legumes i.e. beans, peas, lentils, chickpea,

 <p><b>proteins</b></p>	<p>occasionally: pork fillet, beef leg cuts, silverside, sometimes freerange egg and green beans</p>	<p>broad bean, peanuts, sprouted grains, meat gravy, free-range eggs in any form, sometimes unskimmed cottage cheese, Parmesan</p>
 <p><b>vegetables</b></p>	<p>lettuce, peppers, onion, radish, cabbage, low salt dill pickled cucumbers, red beetroot, sprouts, fresh cucumbers, marrows, courgette, Brussels sprout, broccoli, chard, pumpkin</p>	<p>with high purine content: beans, peas, lentils, chickpea, cauliflower, spinach, asparagus, celery, avocado, artichokes, sweet potatoes, potatoes occasionally and only fried in butter</p>
 <p><b>starch</b></p>	<p>only whole grain cereals, with medium and high starch content—amaranth, barley, rye, natural rolled oats, unprocessed rice, buckwheat, millet, only dinkel wheat, potatoes (from time to time), whole grain “al dente” pasta,</p>	<p>only whole grain cereals, with low gluten and high purine contents. Unprocessed rice is allowed: wild, dark, red and brown, roasted and unroasted buckwheat groats, amaranth, sometimes millet, bread only based on sprouted grains and natural</p>

 <p><b>starch</b></p>	<p>sourdough rye bread, homebaked according to old recipes, natural rice gruels, flakes and wafers</p>	<p>sourdough. Recommended flour types: made of chestnuts, almonds, chickpea, buckwheat and millet</p>
 <p><b>sweets</b></p>	<p>easily digestible sweets, i.e. delicate home-baked cakes, jams, plum stew, jellies, mousses, sorbets, raisins, overripe soft fruit, sunflower sprouts, almonds, walnuts</p>	<p>cereal free or based on allowed flour types, rich cheesecake with xylitol, butter cream cake, home-made ice-cream with rich whipped cream and nut topping, cream and sultanas sundae, high fat sour hard fruit, genuine halvah, sesame, nuts, almonds</p>
 <p><b>fats</b></p>	<p>in low quantities—butter, drawn butter, only extra virgin oils: coconut oil, linseed oil, olive oil, occasionally other fats</p>	<p>butter, drawn butter, lard, home-made bacon, extra virgin vegetable oils: pumpkin seed oil, nut oil, pistachio oil, olive oil, fish oils, home-made mayonnaise based on linseed and rice oils (1:1)</p>

**Mixed carbohydrate type should avoid** strong alcohols, fatty and heavy dishes, excess of legumes, highly processed sweets and late dinners, sharp and very sour spices, fruit juices, sweet carbonated beverages, monosaccharaides, coffee, strong tea, beer and other alcoholic beverages.

**Necessary supplementation for a medium slow burner:**

natural vitamin B complex (B1, B2, B3, B6, B9, B12 ), C,D,K vitamins, vitamin H (biotin), citrus bioflavonoids, pantothenic acid, calcium, magnesium, iodine, phosphorus, zinc, sodium, in general, mineral supplementation, iron, potassium, copper, manganese to accelerate the Krebs cycle. Mixed balance type should choose supplements depending on how she/he feels like.

## Mixed carbohydrate miq tips:

- “Variable appetite, you eat like a horse or you have no appetite at all?”,
- “Lack of balance in nutrition may cause excess willingness to eat sweets”,
- “If you balance components, you will not gain weight”,
- “You are lucky! Your diet seems to be the most liberal of all the types!”,
- “Combine meals proportion of both types—protein and carbohydrate”,
- “Make sure you are mixing fruits and vegetables properly”,
- “Do not go to extremes! Balance in your case is the key to success”,
- “Try to balance vegetables with high content of starch and purine”,
- “You are working the best if you consume well balanced amount of protein, fat and carbohydrates”,
- “While keeping balance, you can prevent from many degenerative and chronic diseases”,
- “Protein in every meal can maximize your sources of energy”,
- “Lack of protein can cause chronic fatigue, emotional imbalance, melancholy”,
- “Carbohydrates snacks can cause jumps in the blood sugar level!”,
- “Excess of carbohydrates in a diet can cause gaining weight”,
- “Every type of protein is beneficial to a mixed type”,
- “Too much or too little fat and proteins may cause disorders

- of your energy, mood and welfare”,
- “Have a snack, if you need it”,
  - “Small quantities of proteins from time to time, can allow you to keep balance”,
  - “Any type of healthy snack is good for you”,
  - “Food should give you satisfaction and energy!”,
  - “Listen to your body!”,
  - “If you are very hungry, dairy products are not the best for you”,
  - “Check consumption of cereals, fruits and vegetables with high starch content”,
  - “Eat cereals in moderate way”,
  - „Do not eat too much bread!”,
  - “Do not consume any products made of purified cereals”,
  - “If your sugar jumps, avoid wheat or eliminate it at all”,
  - “Crackers and bread should be replaced by rice or groats”,
  - “If you feel like having sweets after meals, probably you have eaten too much carbohydrates”,
  - “Remember that the purified flour blocks calcium absorption!”,
  - “If you eat bread, always butter it—to avoid jumps of blood sugar and increase fatty tissue”,
  - “Watch out for fruits! Eating them excessively may cause trouble”,
  - “If you are hungry, it is better to eat proteins than fruits”,
  - “Excessive drinking of juice can cause gaining weight in your metabolism type”,
  - “Use moderate quantity of fats and oils”,
  - “Fats and oils are not harmful for you if you eat them in their natural form”



## **Mixed protein**

### **Metabolic type I.E. medium fast burner**

It is a person who quickly digests carbohydrates. In the diet still needs more protein and fat because with a large amount of glucose coupled to the Krebs cycle it must be balanced. The autonomic nervous system in this metabolic type is quite balanced, with a slight dominance of the parasympathetic system; too much carbohydrates leads to acceleration of all metabolic processes.

#### **Characteristics of mixed protein type:**

- likes to eat but without exaggeration
- too large gaps in the meals make him feel worse
- is gaining weight if he eats too much of everything and does
- not move enough
- last meal can be eaten late, but too heavy dinner makes that food will stack up in the intestines for long, causing a feeling of heaviness
- likes people
- feels great in both warm and cold days

- is acidified with too much of both carbohydrates and proteins
- is happy to mix different ingredients in the meals
- is a gentle, cheerful person but can be angry too
- has a tendency to workaholism but he also likes laze around
- does not like sweets but sometimes he likes to eat good, not too sweet cake
- likes coffee and feels good after it



## Medium fast burner profile:

- The mixed type stays in between the carbohydrate and protein types, (i.e. between an equatorial and an Eskimo type). This is a classic “cocktail” of possibilities.
- Such person may eat everything from the healthy food list, just not to exaggerate.
- However, failing to observe a well-balanced nutrition rules may result in a shift into the reaction pattern characteristic for carbohydrate or protein types.
- If a mixed type person misbalances the proportion of nutrients or has one-sided eating habits, this often results in overweight problems.
- The mixed metabolic type enables you to use a wide range of products. In the homeostasis condition all the good feature of both types can be maintained in the body—both of the carbohydrate and the protein type. However, once the balance is upset, the principles get neglected and the body is not cared for effectively, one may develop all the health problems typical for a slow burner and for a fast burner.
- Mixed type persons are less vulnerable to disorders.
- In order to maintain good health and balance, you just need to observe the common sense principles of nutrition.
- The mixed type functions the best while having appropriate quantities of all macro-elements, i.e.—all proteins, fats and carbohydrates, not to have it too light, too fatty or too sweet.
- By having frequent and small meals, appropriately adjusted individual diet, majority of serious degenerative diseases may

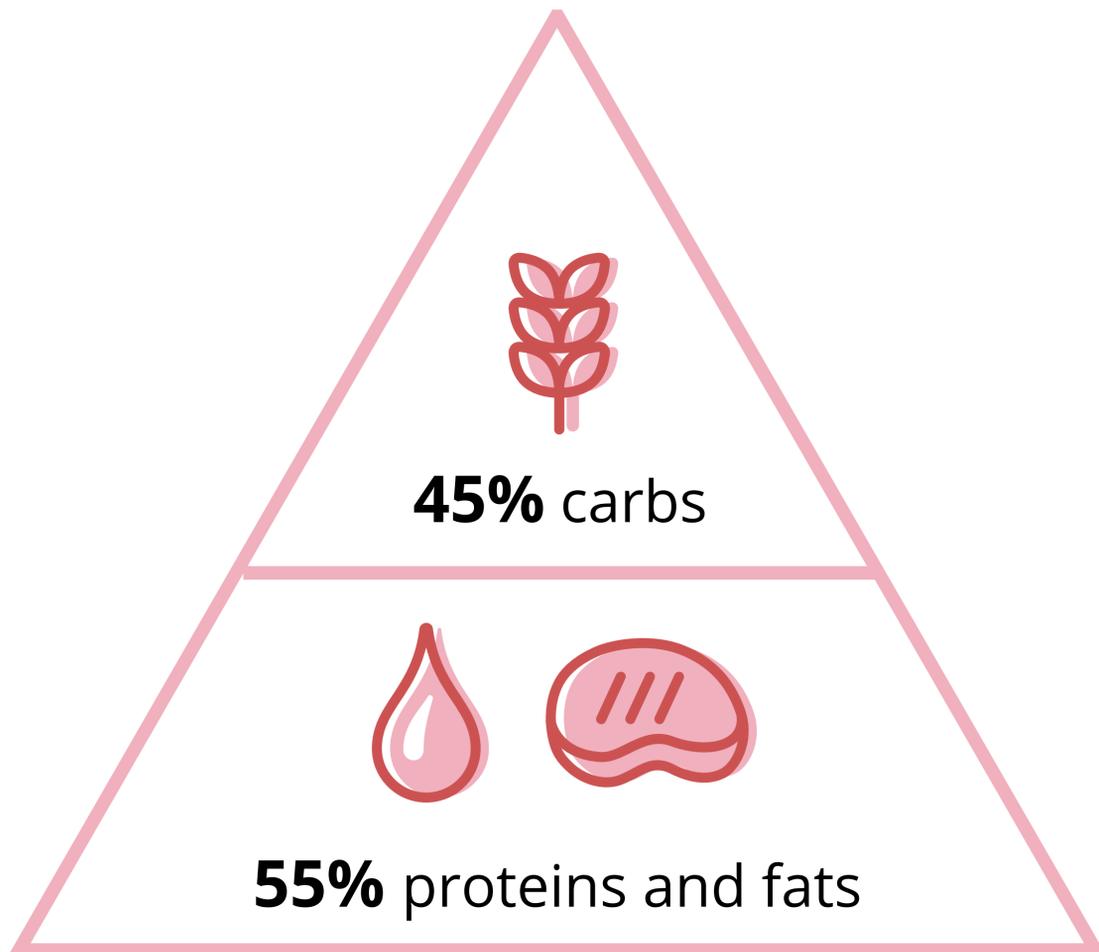
be prevented, wherever such disorder is based on the entire body metabolism.

- Listening to your own body, using protein in each meal, avoiding processed food, we can adjust the diet to be able to eliminate overweight and the need for sweets.
- Careful approach to cereal product, limiting wheat gluten, sugar and Trans fatty acids one can feel better just in a few days' time.
- If you are craving for sweets directly after a meal, it means that your dish contained too little protein.

### **Medium fast burner:**

The diet for people of this MIQ type should not contain extreme nutrients associated with carbohydrate MIQ type. Those are people who are moderate burners with a tendency towards fast burner. They should choose for their diet 1/3 products from slow burner list and 2/3 from fast burner list.

## Medium slow burner



	<b>slow burner</b>	<b>fast burner</b>
 <b>proteins</b>	<p>with low purine content: soured milk, kefir, yogurt, natural dairy products, semi-skimmed cottage cheese, fish— cod, trout, flounder, perch, halibut, white tuna, wild salmon, white parts of poultry, rabbit, veal, occasionally: pork fillet, beef leg cuts, silverside, sometimes free-range egg and green beans</p>	<p>with high purine content: red meat, dark parts of poultry, home-made sausages, offal of naturally fed domestic animals (duck, partridge, home-made pork chop, pig neck, beef, lamb), oily sea fish, herring, sardines, caviar, sea food, most mushroom, legumes i.e. beans, peas, lentils, chickpea, broad bean, peanuts, sprouted grains, meat gravy, free-range eggs in any form, sometimes unskimmed cottage cheese, Parmesan</p>
 <b>vegetables</b>	<p>lettuce, peppers, onion, radish, cabbage, low salt dill pickled cucumbers, red beetroot, sprouts, fresh cucumbers, marrows, courgette, Brussels sprout, broccoli, chard, pumpkin</p>	<p>with high purine content: beans, peas, lentils, chickpea, cauliflower, spinach, asparagus, celery, avocado, artichokes, sweet potatoes, potatoes occasionally and only fried in butter</p>

 <p><b>starch</b></p>	<p>only whole grain cereals, with medium and high starch content—amaranth, barley, rye, natural rolled oats, unprocessed rice, buckwheat, millet, only dinkel wheat, potatoes (from time to time), whole grain “al dente” pasta, sourdough rye bread, homebaked according to old recipes, natural rice gruels, flakes and wafers</p>	<p>only whole grain cereals, with low gluten and high purine contents. Unprocessed rice is allowed: wild, dark, red and brown, roasted and unroasted buckwheat groats, amaranth, sometimes millet, bread only based on sprouted grains and natural sourdough. Recommended flour types: made of chestnuts, almonds, chickpea, buckwheat and millet</p>
 <p><b>sweets</b></p>	<p>easily digestible sweets, i.e. delicate home-baked cakes, jams, plum stew, jellies, mousses, sorbets, raisins, overripe soft fruit, sunflower sprouts, almonds, walnuts</p>	<p>cereal free or based on allowed flour types, rich cheesecake with xylitol, butter cream cake, home-made ice-cream with rich whipped cream and nut topping, cream and sultanas sundae, high fat sour hard fruit, genuine halvah, sesame, nuts, almonds</p>
 <p><b>fats</b></p>	<p>in low quantities—butter, drawn butter, only extra virgin oils: coconut oil, linseed oil, olive oil, occasionally other fats</p>	<p>butter, drawn butter, lard, home-made bacon, extra virgin vegetable oils: pumpkin seed oil, nut oil, pistachio oil, olive oil, fish oils, home-made mayonnaise based on linseed and rice oils (1:1)</p>

**Mixed protein type should avoid** strong alcohols, fatty and heavy dishes, excess of legumes, highly processed sweets and late dinners, sharp and very sour spices, fruit juices, sweet carbonated beverages, monosaccharaides, coffee, strong tea, beer and other alcoholic beverages.

**Necessary supplementation for a medium fast burner:**

natural vitamin B complex (B1, B2, B3, B6, B9, B12 ), C,D,K vitamins, vitamin H (biotin), citrus bioflavonoids, pantothenic acid, calcium , magnesium, iodine, phosphorus, zinc, sodium, in general, mineral supplementation, iron, potassium, copper, manganese to accelerate the Krebs cycle. Mixed balance type should choose supplements depending on how she/he feels like.

## Mixed protein miq tips:

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- “Lack of balance in nutrition may cause excess willingness to eat sweets”,
- “If you balance components, you will not gain weight”,
- “You are lucky! Your diet seems to be the most liberal of all the types!”,
- “Combine meals proportion of both types—protein and carbohydrate”,
- “Make sure you are mixing fruits and vegetables properly”,
- “Do not go to extremes! Balance in your case is the key to success”,
- “Try to balance vegetables with high content of starch and purine”,
- “You are working the best if you consume well balanced amount of protein, fat and carbohydrates”,
- “While keeping balance, you can prevent from many degenerative and chronic diseases”,
- “Protein in every meal can maximize your sources of energy”,
- “Lack of protein can cause chronic fatigue, emotional imbalance, melancholy”,
- “Carbohydrates snacks can cause jumps in the blood sugar level!”,
- “Excess of carbohydrates in a diet can cause gaining weight”,
- “Every type of protein is beneficial to a mixed type”,
- “Too much or too little fat and proteins may cause disorders

- of your energy, mood and welfare”,
- “Have a snack, if you need it”,
  - “Small quantities of proteins from time to time, can allow you to keep balance”,
  - “Any type of healthy snack is good for you”,
  - “Food should give you satisfaction and energy!”,
  - “Listen to your body!”,
  - “If you are very hungry, dairy products are not the best for you”,
  - “Check consumption of cereals, fruits and vegetables with high starch content”,
  - “Eat cereals in moderate way”,
  - „Do not eat too much bread!”,
  - “Do not consume any products made of purified cereals”,
  - “If your sugar jumps, avoid wheat or eliminate it at all”,
  - “Crackers and bread should be replaced by rice or groats”,
  - “If you feel like having sweets after meals, probably you have eaten too much carbohydrates”,
  - “Remember that the purified flour blocks calcium absorption!”,
  - “If you eat bread, always butter it—to avoid jumps of blood sugar and increase fatty tissue”,
  - “Watch out for fruits! Eating them excessively may cause trouble”,
  - “If you are hungry, it is better to eat proteins than fruits”,
  - “Excessive drinking of juice can cause gaining weight in your metabolism type”,
  - “Use moderate quantity of fats and oils”,
  - “Fats and oils are not harmful for you if you eat them in their natural form”

## **“D” metabolic type – disordered metabolism**

Your test result suggests that your metabolism is disrupted to a degree which prevents our system from determining your metabolic type. Provided answers confirm that the reactions to extreme product groups are similar, yet they do not indicate the mixed metabolic type, characterised by the diversification of answers.

It is the unstable autonomic nervous system that rules your body. Sometimes, it is your sympathetic nervous system – a herbivore – but it is soon dominated by the parasympathetic system – a carnivore.

Right now, your Metabolic IQ resembles a dual metabolic personality – you are just like Dr Jekyll and Mr Hyde. Either retake the test answering all questions carefully or perform a weekend metabolic type test which can be found in our book.

CHAPTER 3

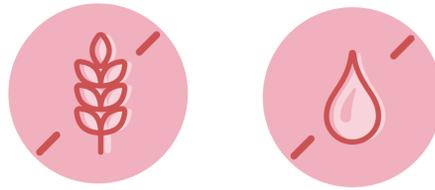
# General Rules of Healthy Eating



# Healthy eating

There are as many theories on healthy eating, as there are dieticians. And in addition, there are bloggers, vloggers and celebrities. Each of these persons considers their eating habits or diet to be a panaceum, often promoting it as the only appropriate path for every human on the Earth—but they could not be more wrong. Why? Each of us has a specific character, ascribed to a given metabolic type. In every case, during the citric acid cycle, carbohydrates are burnt in an entirely different way; that's why we cannot all eat the same food. In general, diets are based on an elimination of one of the macronutrients: carbohydrates, proteins or fats, leading either to a nutritional imbalance in our body or rapid blood sugar level spikes, from hyperglycaemia (when blood sugar level is extremely high) to hypoglycaemia (when it rapidly decreases). All such actions result in a metabolic destabilisation and disrupted body balance.

Diets are helpful as a short-term solution. It is a gradual lifestyle change, however, that is essential for health. Such an approach leads to the minimisation of mental, physical and environmental stress. That's why I have created the SLOW plans, based on the general rules of healthy eating. In order to present clearly the steps which need to be taken to achieve a metabolic balance, I have divided these plans into four steps (depending on how advanced you are): from the easiest one, that is Simple Slow, up to SuperSlow Pro, being the highest level that we can achieve.



## Simple Slow

The Simple Slow Program relies on the elimination of highly processed products, reduction of ingested sugar, trans fats, as well as adjusting the meals to your metabolic IQ. Water, which comprises 75% of our body, also usually constitutes a significant factor. Our wellbeing, immunity and quality of information transfer between our body cells depend on the kind of water we drink. If we do not provide our organism with structural water, we wreak havoc and intercellular communication disorders in it. Water is present in every system of our body—from our teeth to our brain.

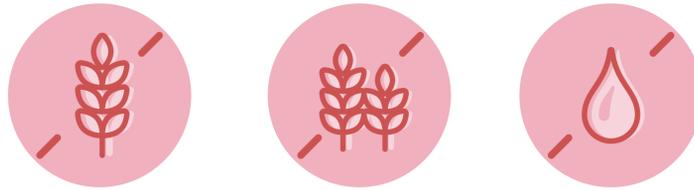
**NO HIGHLY PROCESSED PRODUCTS**

**LIMITED SUGAR**

**TRANS FAT FREE**

**ADJUSTED TO YOUR MIQ**

**WITH STRUCTURAL WATER**



## Medium Slow

The Medium Slow program relies on the elimination of wheat, which is currently deemed to be one of the three most harmful plants; due to the modifications, it no longer has anything in common with the grain that we used to know in the past. Nowadays it is a modified hybrid, which has only one thing in common with its ancestor—the name. Other program objectives are similar as in the Simple Slow program: limitation of sugar and trans fats intake, adjustment to the MIQ and highlighting the meaning of water for proper functioning.

**WHEAT FREE**

**LIMITED SUGAR**

**TRANS FAT FREE**

**ADJUSTED TO YOUR MIQ**

**WITH STRUCTURAL WATER**

# **Why should you decide to introduce the simple slow or medium**

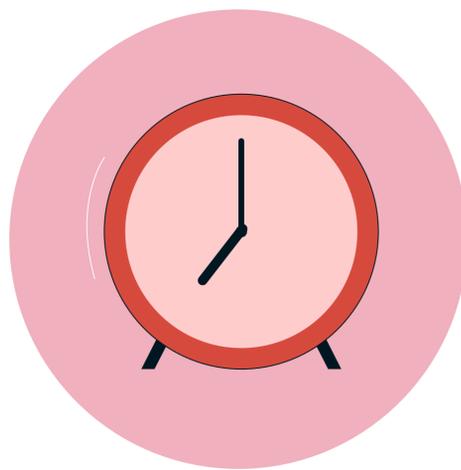
## **Slow program—and what else should you also remember about**

Slow Food seems to stand in opposition to fast food—but not really. The real essence of slow food lies not within the speed of meal consumption but in its quality, preparation method and used products. Slow Food, combined with ecology and the popularity of cooking, becomes a life philosophy which radiates to all of its fields: work, leisure, social relationships, place and type of living, etc. We definitely do not mean by that living at a turtle's pace and going back to the Stone Age; it is all about the synergy of human and the surrounding world, the environment. When someone talks about living in harmony with nature, they do not have to mean total abandonment of the greatest breakthroughs or technological novelties, as well as trendy and useful gadgets. It is more about the ability not to become addicted to modern technologies—and to know how to minimalise their harmful influence on our lives.



## 1. Calories

Calories, calories, calories—everyone is talking about them, and consumers are constantly frightened by them. People wanting to maintain their weight tend to obsessively count them, trying to eliminate from their diet anything that exceeds a given number of calories—and that’s a big mistake! The majority of people do not distinguish between two fundamental issues. Calories are divided into the EMPTY ones—which are harmful to us—but also into those that are NUTRITIOUS. It does not matter HOW MANY calories we provide, but WHAT KIND OF calories they are. A diet is not supposed to be a punishment—it should be treated as an everyday opportunity of nourishing ourselves. Understanding that starving our bodies or consuming a limited range of products will not make us beautiful, healthy, and youthful, is fundamental to our success. People tend to go to extremes; most often, they either treat their stomach like a landfill or starve themselves, ruining both their body and mind. Balance is essential for success.



## 2. Eating after 6 p.M.

According to a popular opinion, eating after 6 p.m. is plain wrong; in some cases, it might even pose a deadly threat to our perfect figure. We could not be more wrong. We have to consider a few factors. First of all, STABLE BLOOD SUGAR LEVEL is crucial for optimal weight maintenance. To keep it at such level, we should eat 5-6 small meals a day. When we skip meals—and it's quite common in modern societies living hastily—we cause rapid blood sugar level decreases, when our body starts to burn muscles. If we decide to nourish our body after a relatively long break from eating, it accumulates the ingested food as fat—which most frequently causes our fantastic ab muscles to be hidden under new layers of fat. Metabolic type also determines the best meal times. Basically, we are divided into slow and fast burners, as well as the intermediate ones. There are persons with the mixed type—almost everything is beneficial to them. The rest is divided into protein and carbohydrate types. The first group benefits from protein products, the latter from carbohydrates. All groups need the same ingredients, but in entirely different

proportions. This is important to remember, as one of the most common mistakes among persons with the protein type is limiting their meals after 6 p.m., which results in their case in weight gain, sleep disorders, anxiety and nervousness.



### 3. Trans fats—trans fatty acids

An everlasting issue with fats: to eat or not to eat? And if you eat, then which ones? There is significant confusion surrounding fats—some people recommend margarine, claiming that butter causes atherosclerosis, while some completely eliminate fats from their diet, but that’s a big mistake! Cell walls are built from proteins and lipids. Without good fats, our bodies cannot regenerate, build cells and digest protein (in the case of high-protein diets with fat elimination, kidney malfunction occurs most often due to the indigested protein retained in the bowel).



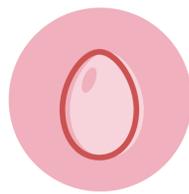
## 4. Chemical substances

Very often, we are not even aware of what we actually fill our stomachs with. Currently, every year we ingest ca. 7-8 kilograms of chemical additives with food! Over 24 hours, we exhale 85 thousand litres of air, while 170 litres of blood go through our kidneys—try to imagine, then, how hard our bodies have to work when they are exposed to artificial junk food. The effect of eating such food is a feeling of satiety. Our bodies, however, instead of being provided with energy originating from food, are deprived of it—as they have to spend it on digesting the “trash” we eat. What about the skin? It is the largest link with the outside world. We absorb various substances via the skin and sweat out the toxins found in the body. The skin surely does not welcome these chemical substances either. Synthetic cosmetics, clothes, chlorinated water full of heavy metals and other pollutants—how much can we handle? We keep on bombarding our bodies both from the inside and outside, until our health tell us: enough is enough!



## 5. Antioxidants

Read more about antioxidants on page 30. Currently, a USA-patented substance, AcaVie, shows the highest antioxidant capacity. It is a blend of antioxidant-rich acai puree with Enlivenox, the most important substance found in acai. It contains ten times more polyphenols than traditional fruit. The substance is additionally enriched with Jucara fruit, which shows four thousand units in the ORAC test.



## 6. Protein

Let us remember that it is not the amount of ingested protein that matters the most. It is the content of synergic ingredients, which are absorbed in a better way and build healthy muscle when supplied to our body with high-quality protein.



## 7. Eco

Eco—currently the most fashionable word, appearing literally everywhere. I am still waiting for ecovulcanisation—now, that would be really innovative. The word “SPA” was a precursor of this trendy “eco” word; as it used to be added to every name (a new brand or product), but had little to do with the actual, primary sanus per aquam idea. It could be understood as “health through water”. It is important to distinguish between those products and services that are actually ecological or bio and those that are ecological in name only. Unfortunately, everything depends on manufacturers’ ethics and whether they really care about the components that make up their products. We have to be able to distinguish between natural products and the ecomarketed industrial ones. Consumers also don’t have it easy, because majority of us use products and spare little thought on their real ingredients. A great number of slogans appearing on packages is regulated by restrictive laws; still, this does not mean that the manufacturers share the “gospel truth” with consumers. There are always some ways to “amp” the label. The most sneaky slogans that are not subject to precise standards include: “clean”, “natural”, “enriched”, “smoked”, “made of”, “fat-free”. Most eco markings declare that a given product does not have a negative impact on the environment. Do these eco-standards, however, consider a human to be an integral part of the environment?

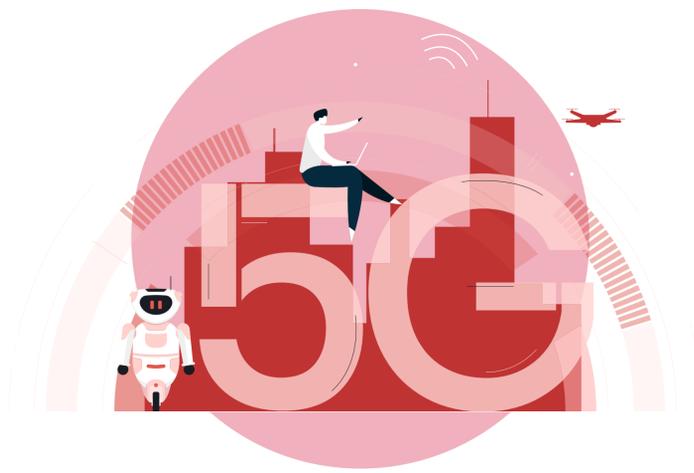
eco?! natural products  
or the ecomarketed like ?





## 8. Exercise

The majority of us wake up in the morning and leave it all to “destiny”, allowing fate to decide about our wellbeing, mood, energy= and health. But it is not the only factor that determines our life—we also have a voice. Humans are made to move around; a sitting position has deadly consequences for us. According to research conducted at many universities (including Harvard), only 14% of people know what they expect from life and have precise aims. Only 3% of the population have written these aims down and have a plan allowing their achievement. Prepare an action plan and take care of your health—hitting the gym alone will neither help in reaching a desired level of fitness, nor improve body endurance. Aim for a better life and enhanced immunity to stress and daily struggles. Cardio exercises burn the most fat.



## 9. Electromagnetic field (EMF)

What does a modern man look like? A laptop on his knees, a smartphone in his pocket, a wireless receiver in his ear—and he is ready to go! Moreover, he spends most of his time either in the car equipped with all the possible technological novelties or an equally awesome office. Health risks? Brain cancer, impotence, digestive disorders, low immunity and body endurance, sleep disorders, hyperactivity, chronic fatigue, lack of concentration, general nervous system disorders, etc. The list is relatively long. Not everyone experiences in the same way the impact of electromagnetic fields generated by mobile phones, Wi-Fi networks, mobile operators' antennas, high voltage lines and tonnes of other electronic devices. Research shows, however, that these fields remove important calcium ions from cell membranes, resulting in a leakage into the cell's interior and long-lasting disturbances in their functioning.



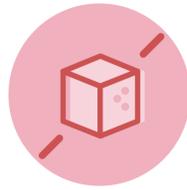
## 10. GMO

New French research shows that a long-lasting intake of GMO products can cause serious health disorders. For two years, 180 rats were fed with a genetically modified NK603 corn, Roundup Ready2 type. They were subsequently tested for 100 various parameters. The tests revealed numerous health complications in animals, including hormonal disorders, pituitary gland and kidney functioning disorders, as well as nipple tumours. An increased mortality was also observed. This research constitutes the first such broad and long-lasting trial of this type. It confirms that ingesting GMO—including also the Roundup herbicide, used during the cultivation of corn type used in research— might be detrimental to health<sup>4</sup>.

<sup>4</sup> [www.greenpeace.org/poland/pl/wydarzenia/swiat/GMO-niebezpieczne-dla-zdrowia/](http://www.greenpeace.org/poland/pl/wydarzenia/swiat/GMO-niebezpieczne-dla-zdrowia/), dostęp online 28.07.2017.

GMO  
Watch out serious  
health disorders !





## Super Slow

The SuperSlow Program is a more advanced issue. Here, we completely eliminate, not only limit, the intake of such elements as gluten, sugar and trans fats. We adjust the plan to our metabolic IQ, and—as previously—remember about the quality of water drunk. By introducing this nutrition system, we are able to significantly increase our body's potential, its endurance, cell regeneration speed, as well as ensure a youthful appearance. I call it a G3 formula—GO GLUTEN-FREE, GO SUGARFREE, GO TRANS FREE. Below you will learn what benefits the elimination of these ingredients will bring.

**GLUTEN FREE**

**SUGAR FREE**

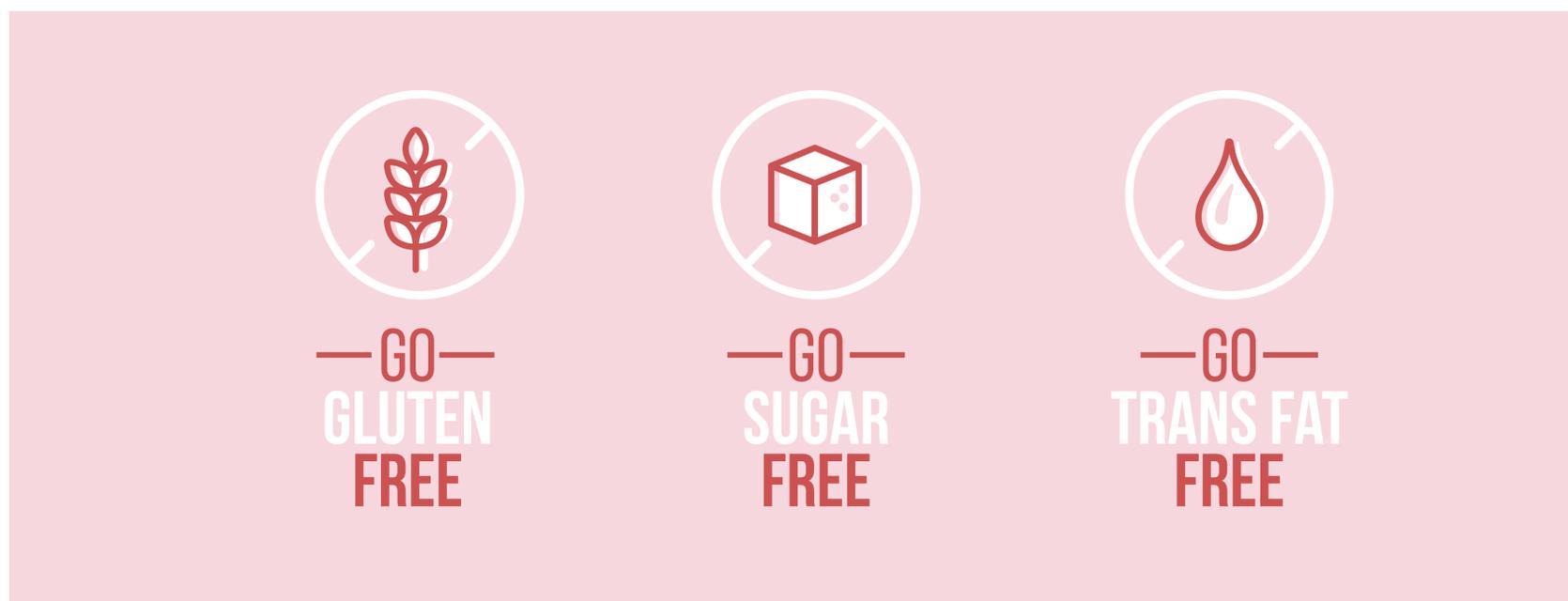
**TRANS FAT FREE**

**ADJUSTED TO YOUR MIQ**

**WITH STRUCTURAL WATER**

# A G3 Formula

A G3 formula is supposed to eliminate from our diet the three main culprits responsible for our problems with health and appearance—namely gluten, sugar and trans fats. I cannot promise that this will be easy—I promise, however, that it will be effective. Eliminate these 3 ingredients from your diet for 3 weeks—and feel 3 times better.



## Why go gluten free?

Gluten is a protein which has a detrimental impact on our health. It can be found mostly in wheat, rye, triticale, oat flakes (due to contamination, as oat itself does not contain gluten) and barley.

Grains were planted for the first time thousands of years ago in Syria. This event changed human lifestyle forever. The ability to cultivate crops meant that humans could stay in one place. Wheat, as a calorie-rich and convenient filler (easily obtainable and providing quick satiation) allowed mankind to survive without hunting. Even back in these days, however, consuming it in excess was bad for human health. The first references of coeliac disease are dated 100 AD.

Currently, we mostly eat gluten as baked goods (bread, rolls, popular ciabatta bread, pita bread, tortillas, French croissants, hot-dogs, hamburgers), pizza, pasta, and even crisps (as they are not always made of potatoes only). Wheat gluten, however, is the most harmful to human health.

Genetic modifications introduced in wheat and other plants over the last 50 years have turned out to be a real Pandora's box. Ingesting increasingly larger amounts of wheat products, also the wholegrain ones, has led to global epidemics of various diseases, especially in so-called highly developed and developing countries.

According to scientific research carried out over the last two decades, eating the new, "improved" wheat and its derivatives contributes to the disorders causing, among others, abdominal obesity, diabetes, arthritis, overweight, epilepsy, schizophrenia, brain functioning disorders, dementia, premature ageing processes, leukaemia and many other diseases which we do not link at all with ingested foods. It is an absolute rarity to deem cookies or wholegrain baked goods—advertised as healthy—responsible for these diseases.

gluten free

Are you sure your whole  
grain is healthy?



# What does wheat contain?

Modern wheat contains 75-80% carbohydrates and 10-15% protein. Gluten comprises 80% of all protein found in wheat, including both glutelins and gliadins.

**According to scientists, the properties of particular wheat components are as follows:**

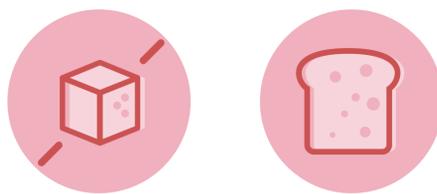
- **GLUTEINS** cause the cake batter to be sticky, flexible and compact. It also makes it increase its size under the influence of yeast;
- **GLIADIN** triggers the strongest immune response, that is coeliac disease; alpha-gliadin is responsible for the inflammation of the small intestine. Gliadin and zonulin cause leaky gut syndrome;
- **GLUTEN** is responsible for stickiness and flexibility of baked goods, properties appreciated by both bakers and consumers;
- **LECTINS** trigger autoimmune responses, such as arthritis or lupus erythematosus;
- **AMYLOPECTINA** is a multi-sugar, which is easiest to digest. This is why it is most effective in increasing blood sugar levels; the most easily digestible form of this sugar can be found in wheat.

## Important

- Wheat triggers in the brain reactions similar to those following heroin intake.
- Polypeptides from gluten cross the blood-brain barrier, while zorphines (exogenous morphine-like compounds) can serve as activators of many mental disorders.
- Wheat can influence the central nervous system similarly as nicotine or cocaine, presenting symptoms of addiction, withdrawal, or even hallucinations.
- Apart from other symptoms of nervous system disorders triggered by grains containing gluten, such events might occur: motor coordination disorders, epileptic seizures, autism, schizophrenia, ADHD, Parkinson disease, MS, urinary incontinence, dementia.
- Destructive immune responses also affect the brain tissue, causing irreversible changes.
- The elimination of bread, cookies and other popular baked goods will result in mood elevation, better concentration and deeper sleep within just a few weeks and sometimes, just a few days.
- You will also combat constant fatigue, uncontrollable mood swings and the general feeling of confusion.

## Fact

The most powerful thing made of flour—French bread—was prepared with flour, sourdough, water and salt. The sourdough was the starter ingredient and needed up to 15 hours to mature. It required to be fed and left to stand 3-4 times while the dough was kneaded. The preparation of enormous quantities of bread exhausted the bakers who had to knead ca. 90 kilograms of dough in 45 minutes. Sometimes they would jump on the dough and knead it with their bare feet. When some bakers turned to beer yeast—so that the dough would rise faster and thus be easier to knead—society loudly opposed the change. Doctors declared that since the yeast acted fast, by “shaking the bread”, eating it brought about effects as toxic as eating rubbish.



## Why go sugar free?

Christopher Columbus initiated the sugar rush. It has led us to the bitter supersize era and the global pandemic of obesity. The world of science continues to look for the next culprits responsible for countless diseases affecting the modern world. More and more people, however, have become aware that the enemy is waiting in their own fridge and in the maze of supermarket shelves filled with tens of thousands of products perceived as “foodstuffs”.

Did you know that in order to provide a preliminary age estimation of skeletal remains, archeologists check the teeth? Why? Because before humans started to consume sugar, tooth decay was practically non-existent.

**“I serve you bitter pills in a sweet glaze.  
The pills are not harmful; the poison  
is in the sweetness”.**

– Stanisław Jerzy Lec

In 1980, the average sugar consumption per person in the US amounted to little more than two kilograms per year. Currently (data from 2009), it amounts to 61 kilograms per year—over the last 20 years it has systematically increased by 0.45 kg each year. The problem lies within the fact that market globalisation

means that whatever the US eats today will be eaten by the rest of the world tomorrow. Today, every Western country consumes more sugar than at any point in its history—and it has a tremendous impact on human life, health and body.

The interest in sweet things lies in our nature. The tip of our tongue immediately responds to sweet taste. It is a characteristic that has developed through evolution in all primates. It helps us distinguish between ripe fruits from the raw ones, edible foods from the food which has spoiled, as well as verify which plants contain the largest amount of vitamins and minerals. However, we have learnt to manufacture sugar, cheating nature and ourselves. As a result, we started to overburden our bodies with saccharose, which has led to an actual sugar addiction. Sugar is available in unlimited quantities, round-the-clock; it can even be found in products which we would never expect to contain sugar. Not only the candy aisle is filled with sugar; cold cuts, meat, bread, light products, crisps, pickles, marinades, jams, cereal for children, salads, sauces, dips, juices, sodas—and even water—are spiked with sugar.

A long time ago, when humans used to wander the earth while searching for food, an ability to accumulate excess food as fat (most often around the waist and the buttocks) developed. The fat used to be burnt only during food shortage. Nowadays, we don't have to run—we don't even walk as much as our ancestors used to. Still, our bodies are programmed to accumulate fat for a "rainy day".

The difference is, we don't really have to make an effort to find food. It is available everywhere, in unlimited quantities, at very low prices.

**no sugar**  
excessive sugar consumption  
- the plague of the new century



# Why does sugar cause diabetes?

The pancreas is one of the least demanding organs in our bodies. It supplies enzymes to the intestinal juice; always when we eat carbohydrates, it secretes a hormone called insulin. In times gone by, people did not have access to refined sugar. They used to eat tubers, grains and fruits. After their consumption, a lot of time had to pass until the carbohydrates underwent decomposition and glucose was produced. This process was in harmony with nature. Nowadays, just as smoking causes cancer, excessive sugar consumption causes diabetes. It has become the plague of the new century and a social disease which excludes from a normal life an increasing number of young people and children. Glucose, which is vital for life, can get into the cells only via the insulin. In a sick person this system does not work this way—glucose reaches the cells either in insufficient amounts or does not reach them at all. This happens due to insulin shortage or when cells decline sugar absorption. Type 2 diabetes occurs most often; 90% of patients suffer from it. It used to be called an old age disease, yet now it affects even those very young. The worst threat stemming from this disease, however, are high glucose values—if too much glucose is accumulated in the blood, the effects might be devastating to the organism.

Sugar, everything sweet, products made with plain flour, as well as refined, polished rice are mainly made up of a quickly dissolvable glucose. Since the fibrous tissue, which can be naturally found in these plants, has been previously removed

mechanically during their production, the stomach and intestines do not have a lot work to do. Glucose is immediately transferred from the intestinal mucosa to the bloodstream, and the blood sugar level rises rapidly. The pancreas goes crazy. This tiny organ has to produce enormous amounts of insulin in the shortest possible time—to transfer it to the blood. Each insulin particle equals 51 protein components. The pancreas has to produce billions or even trillions of such particles after the consumption of a single piece of a sweet cake. Following the consumption of tiramisu, the glucose value increases to 300 mg/dl or even higher; the sugar in our blood becomes a poison. After the CPR performed by the pancreas, blood sugar level rapidly decreases below the physiological level—up to 70 mg/dl. It was not accidental that nature set the optimal blood glucose value at 100 mg/dl. Glucose is the only fuel for nerve and brain cells. In contrast to the energy originating from fat (which is produced following the transformation of fat into energy by muscle cells), the energy from glucose “explodes” immediately. And that’s because in case of unforeseen stress or an emergency, the brain and nerves have to respond immediately.

## Important

- The diseases associated with diabetes include atherosclerosis, cardiac disorders, sight damage and kidney diseases.
- 1/2 of patients at psychosomatic clinics and mental hospitals are indirect or direct victims of excessive or permanent sweets or soda intake.
- 60 to 90% of people affected by type 2 diabetes are overweight.
- Diabetes attacks and weakens the immune system, which causes infections to affect the whole body.
- Undiagnosed diabetes can trigger the most severe sight damage, such as cataract or glaucoma. It might even lead to a complete vision loss.
- Nature equipped us with empty fat cells in case of extreme situations. In normal conditions, when a newborn or a toddler receives far too much sweet food, the excess glucose is transformed into triglicerydes, which is transformed into real fat cells, triggering a tendency to obesity.
- Due to numerous reasons, sugar shares the responsibility for every excess kilogram in our body. Along with insulin, glucose smuggles fat particles to fat cells; the sugar dissolves immediately and leads to a rapid increase in blood sugar level. If too much of it

is accumulated, it is transformed into fat—according to a law of nature which states that we should not get rid of any valuable nutritious substance. We should accumulate it for a “rainy day” instead. And this is precisely how sodas, sweets and other products full of the sweet “evil” are transformed into fat.

- First warning signs of diabetes: sight disorders, excessive thirst, flu-like symptoms, weight loss, slow-healing wounds, neurasthenia, infections.

## Fact

Sweetness and anguish—for over 400 years, sugar remained a very expensive medication and a rare luxury for the rich. Spices, and especially sugar, constituted the cornerstone of the Mediterranean ports’ economic power, particularly in the case of Venice. This sweet commodity was light, easy to transport and was immediately sold to rich merchants who were ready to pay enormous sums for this luxurious delight, which still remained a rare delicacy. For example, back in 1226, King Henry III of England had trouble finding a little more than one kilogram of this delicacy! Sugar’s value urged the Prince of Portugal to establish a sugar cane plantation in Madeira, as well as to broaden business endeavours linked with the cultivation of this plant in the New World.



## Why go trans fat free?

If you want to maintain your youthful appearance, you have to avoid TRANS FATS! TRANS fats are produced during the hydrogenation of plant fats, due to which various changes in their characteristics take place. The consumption of these fats results in the increase of the so-called “bad” cholesterol (LDL) and the decrease of the “good” one (HDL).

Thus, the risk of cardiac diseases rises—but not only. Their consumption also intensifies all the problems related to brain and nervous system functioning, both in children and adults or the elderly. Beware! Trans fats are everywhere: in fast food, ready meals, sweets, fries; nearly all of the highly processed products available on the market.

## Good fats

We should remember that cell membranes are built from proteins and lipids; without appropriate fats, we cannot regenerate our body, build cells and digest proteins.

The particles of fatty acids decide about the build of cell membranes and intracellular membranes, playing a crucial role in their structure, integrity and functions.

**As one of three basic nutrients, apart from proteins and carbohydrates, fats perform numerous essential functions:**

- participation in protein modification and hormonal balance conditioning;
- they are a building material for cell walls and white matter in the brain;
- they determine the fitness of the cardiovascular system;
- they are mediators of vitamin A, D, E and K, also facilitating their absorbance from other products;
- they influence the condition and appearance of skin, hair and nails;
- they constitute the most concentrated source of energy for the cells;
- they enable energy storage in cells and adipose tissue;
- they act as thermal and electrical insulator, as well as stabiliser;
- they provide protection from injuries;
- they determine the function of the nervous tissue;
- they provide essential fatty acids (EFA), out of which tissue hormones are produced; tissue hormones regulate the processes in body cells.

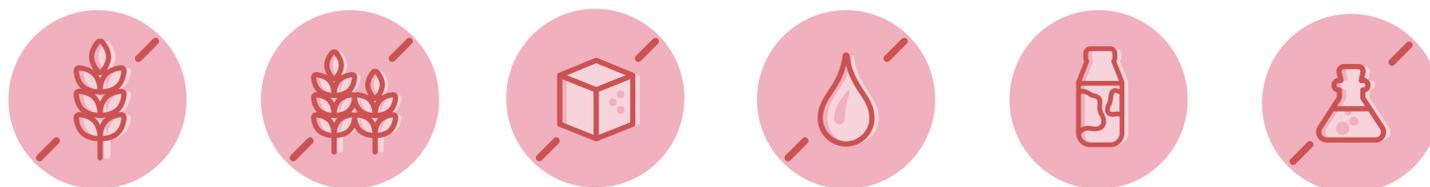
## Important

- Trans fats increase the level of the “bad” LDL cholesterol and decrease the “good” HDL cholesterol levels.
- Trans fats consumption increases the chance of cardiovascular system disorders development and myocardial infarction.
- Trans fats lead to the development of TYPE 2 DIABETES.
- Many foodstuffs and ready meals contain these fats, such as confectionery, doughnuts, cakes, cookies, biscuits, frozen pizza, crackers, sandwich spreads, margarines, butterlike products, ready sauces, crisps, crunchy snacks, sweets, dried fruits and nuts, ready-to cook food.
- Trans fats lead to chronic inflammation of the whole organism.
- They also lead to the development of autoimmune diseases and the metabolic syndrome.
- They also foster nervous system disorders, leading to the development of dementia, Parkinson and Alzheimer’s disease.

## Fact

“Italians... seemed never to die. They eat olive oil all day long... and that’s what does it.” (William Kennedy).

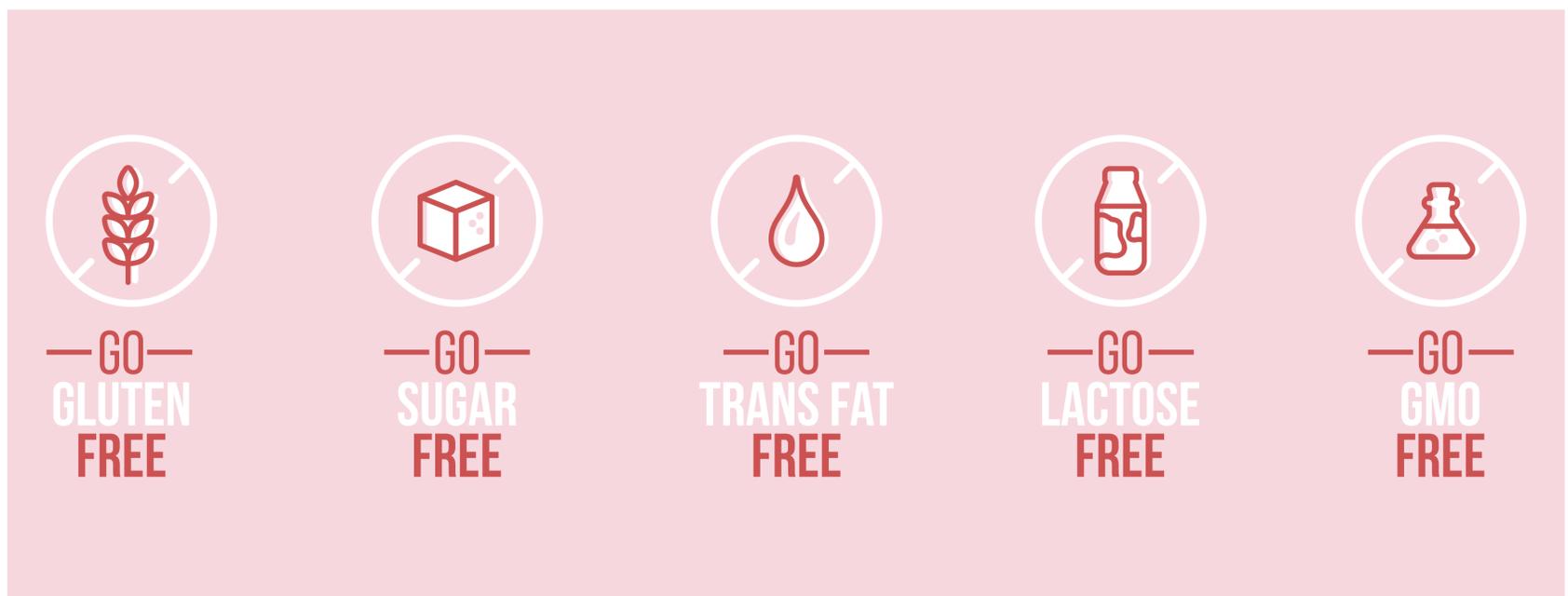
It is not certain when exactly olive trees appeared on the Earth, but discovered fossils confirm that wild olives grew in the Santorini area as long as 60 thousand years ago. Still, their cultivation with culinary use in mind began only six thousand years ago, in the area of modern-day Syria and Palestine; later the olive trees spread to Turkey, Greece, Italy, Southern France and Spain. Their mass distribution is attributed to the Roman Empire, whose inhabitants used olives for basically everything—food, cosmetics, and even the lubrication of chariot wheels.



## Super Slow Pro

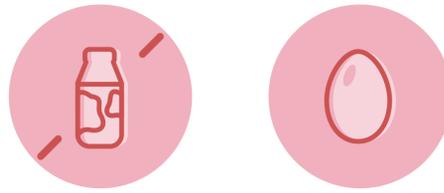
Super Slow Pro is the most advanced level in the nutrition program. We are not only following the G3 formula, that is the complete elimination of gluten, sugar and trans fats, but we are also introducing the G5 formula, also eliminating lactose and genetically modified plants.

Determination of the metabolic type and intake of structural water remain a standard. Thanks to that we enhance oxygen transport in the blood and organise the molecular order of the fluids; this, in turn, influences the immune system, which can act in a more effective way, fighting unfavourable microbes, fungi, viruses and bacteria.



## **G<sub>3</sub>+G<sub>2</sub> = G<sub>5</sub> Formula**

The G5 formula is the most advanced level of nutrition. Apart from the elimination of gluten, sugar and trans fats, it also eliminates from the daily menu all genetically-modified plants and lactose.



## Why go lactose free?

What's all the fuss about milk? We have all heard the famous "Got Milk?" slogan at least once in our lifetime; we have also heard about the free milk at schools. However, more and more scientific studies prove that the consumption of sweet milk, especially cow's milk, leads to numerous diseases.

Cow's milk is characterised by a high content of fat and casein— a protein which is difficult to digest for the human digestive system. As a result, milk often triggers numerous diseases: allergic reactions, asthma, earache, runny nose, acne, eczema, apathy and even irritability. Moreover, many people lack the enzyme called lactase, which is responsible for the digestion of milk sugar, commonly known as lactose. Lactose intolerance results in such symptoms as flatulence, diarrhoea, and constipation. Both thermal treatment and fermentation of cow's milk lead to protein and sugars decomposition, thanks to which these are more easily digestible for the human organism.

People struggling with irritable bowel syndrome report an immediate improvement following the elimination of dairy from their diet—and that's due to limited lactose intake. Hypersensitivity to dairy products is a result of the body's defense reaction following its contact with one of two proteins— casein or whey protein. Immune system activates IgG, IgA or

IgE antibodies or reacts with immunoaggression. If a person is hypersensitive to dairy, leukocytes will start to secrete harmful granulocytes that trigger inflammation in the organism. With such an agitated body condition other pathological food reactions might be revealed; it might even lead to cross-reactivity when one factor is able to trigger the body's hypersensitivity to literally every, even the smallest inappropriate stimulus.

The easiest way to check whether we are lactose tolerant is to eliminate for some time products that contain this sugar. Carefully observe your body and its reactions. If we have previously struggled with various gastric disorders, these should resolve.

According to Chinese medicine, dairy products and sugars do not foster concentration; moreover, their excess amount in the diet leads to sleepiness, sluggishness and aversion to exercise. Moreover, dairy products and sugars lead to an increase in moisture/mucus in the organism, which causes our metabolism and cell metabolism to slow down. Moisture, along with the decrease of body temperature, leads to organism sliminess; in consequence, we are sluggish and apathetic. All of this results in diseases of the upper respiratory tract, obesity and cellulite.

dairy



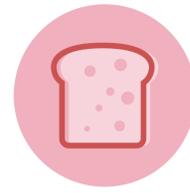
You feel sleepy ? According to Chinese  
medicine, dairy products and sugars  
do not foster concentration

## Important

- The product named “UHT milk” has nothing to do with milk.
- If you do not want to eliminate dairy from your diet, choose fermented products.
- Goat and sheep milk is far easier to digest by humans.
- Buffalo and camel milk also cause less digestive tract disorders than cow’s milk.
- With all the intestinal ailments, eliminating raw dairy (or at least sweet milk) from our diet will significantly improve our quality of life.
- People consuming excess amounts of dairy have a pale, swollen face.
- 2/3 of the global population has a limited ability to digest lactose.
- Digestive disorders triggered by lactose include stomach ache, vomiting, nausea, burping, diarrhoea, the feeling of a full stomach, as well as movements of the digesta.
- Lactose tolerance is conditioned genetically. If we do not have an appropriate enzyme which will break this sugar down, its particles will move around our digestive tract, causing body functioning disorders.
- Human milk contains 7.2 g lactose per 100 ml; for cow’s milk, this amount equals 4.7 g per 100 ml.
- Sea-lion’s milk does not contain any lactose.

## Fact

Lactose intolerance can be easily examined by performing a diagnostic breathing test. If it is indeed lactose that contributes to the series of unpleasant gastric disorders in our body, the amount of hydrogen level in exhaled air will be increased. It will confirm the process of lactose fermentation performed by intestinal bacteria. To diagnose potential hypersensitivity to dairy, an immune system test should be performed. During such examination, the reactions of particular antibodies are checked. Immunoglobulin level to proteins such as casein and whey protein can be checked with a full blood count..



## Why go GMO free?

Why is GMO dangerous? Let's start with what GMO—that is Genetically Modified Organisms—actually is. Plants can produce herbicides or pesticides, or be resistant to them. The Monsanto corn produces pesticides which eradicate insects. How is this even possible? A bacteria gene is added to the DNA of such corn; in consequence, a plant modified in such a way produces a toxin which is deadly to insects. In case of herbicide-resistant plants, such as ROUNDUP READY SOYBEAN, a bacteria gene is also introduced into the DNA. Consequently, despite strong and multiple crop spraying aimed at the eradication of weeds, this type of soy will still develop.

Most of the research on the safety of GMO intake was carried out by companies using that technology; these have never been reviewed by independent scientific centres. Nobody asked consumers about their opinion; we were not allowed to decide whether we want to eat such products or not.

GMO is not aimed at the improvement of food quality, protection of life or the natural environment. It is only the financial gain that matters, achieved by poisoning of humans, soil, water and air. Traditional seeds are planted once a year, and the crops are rotated in such a way that the soil can regain its strength. GMO seeds are sown only once (no yearly change

in their cultivation is implemented, no crop rotation) and the field is exploited to its last gasp.

When referring to popular theories on the progress of humanity and the need to feed an increasingly growing number of people inhabiting our planet, we have to remember that food manufactured from such raw products floods with junk food mainly the shelves of Western supermarkets. It does not even reach the countries that need support. Also, in small countries GMO cultivation often inflicts damage upon local farmers' crops.

## **What happens to us and our food?**

It is mainly soybean, corn and wheat that undergo modification—the three plants that have dominated global cultivation when it comes to both food and farm animal feed production. That's why we buy ice cream labelled as “natural”, yet it turns out that the milk comes from cows fed with modified soybean and corn. Instead of eating natural products, we ingest GMO. Consumers should influence cultivation methods in industrialised countries, as seeds' diversity constitutes the heritage of humanity.

The truth is that only a few people are aware of what we actually eat. The majority of consumers take part in one of world's largest scientific experiment. By ingesting GMO

plants, we ingest animal genes—and nobody knows how far these modifications could alter a human genome. The above mentioned research on rats confirmed enlarged kidneys and liver in males and nipple tumours in females.

The first symptoms were observed in 4th–5th month of their GMO corn consumption, when in 50-80% of rats 2-3 tumours have been discovered, while in the case of the males, the oestrogen level has doubled and digestive tract disorders have developed. It should be highlighted that when introducing the NK603 corn to the European market, Monsanto had been conducting their research for merely 3 months...

On average, rats live two years. In human years, that gives ca. 30-40 years—and that's precisely the age when the vast majority of women discover breast and other organ tumours. To sum up, the research confirmed that large doses of Roundup kill human cells, while smaller ones disturb the body's hormonal balance.

## Important

- Plants cultivated on a waste land full of pesticides do not provide us with nutrients.
- 98% of GMO is produced in countries where consumers are not informed about products' ingredients.
- Theoretically edible, corn is formally registered as an insecticide.
- Three biggest chemical conglomerates control 53% of the global seed market.
- Chemical companies own their plants and seeds, therefore controlling food production up to the moment when they reach market shelves—thus leading to the monopoly of food products.
- Washing such plants will remove some of the chemicals found on the outside; inside, however, they are saturated with toxic substances.
- GMO crops damage the natural environment of the whole planet, leading to monocultures and elimination of other plant species which amount to about 700,000.
- Toxins accumulated in plant cells are absorbed into a human body; there, they build up, leading to various disorders in its functioning.

## Fact

McDonald's, the well-known restaurant chain, cooperated with Monsanto, a chemical giant, to create the "perfect" fries. Genetically modified potatoes were supposed to have been packed with pesticides.

This variety was called New Leaf. Thanks to the modification, these potatoes were able to produce an insecticide called BT (Bacterial Toxin). This modification was aimed at the annihilation of any potato bug which would attack the potato, by the plant itself. New Leaf Potatoes were registered in the American EPA organisation (Environmental Protection Agency) as a pesticide. They were placed on the market in 1996 and were immediately used by the McDonald's chain—and by other companies. Producers of such brands as Pringles and FritoLay crisps or Hardee's fries also used this potato variety.

CHAPTER 4

# Health coach -health training in a few easy steps





## Why a healthy diet should be a cornerstone of our life?

A healthy lifestyle is essential for our good health. Diets come and go, but lifestyle remains—it emerges and slowly strengthens its position. That's why I suggest starting with small changes, which slowly and gradually, with a long-term perspective, will lead to success. Let's remember that we can achieve the maximum of our potential through appropriate nutrition. Isn't it wonderful to know that we are responsible for our health in 80%? We ourselves decide whether we will be vital, agile, happy, whether we will look good and feel great despite the passage of time. We all have a choice—becoming a couch potato and spending our life with a television remote and pizza in hand is also our decision, not a coincidence. Becoming overweight by a dozen of kilograms, suffering from a myocardial infarction or circulatory collapse are not sudden events—they are the result of our longterm excuses and decisions. Unfortunately, an increasing number of newborns are already born with health problems, often resulting from their mother's diet during pregnancy. Only we can decide whether we want to take care of our body or gradually lead to its collapse.

# What is the slow diet made up of?

## Ingredients and rules

First of all—slow is not a diet, it's a lifestyle. A diet is usually associated with problems, something temporary, some - times even with a disease. Slow is a method of daily nutrition. The slow food movement originated in Italy, where people respect both food and their bodies. I lived in Italy for two years. You would rarely encounter there someone who, despite their age, would put anything in their stomach, just like they would in a rubbish bin. The slow idea is based on eating seasonal fruits and vegetables, fresh and local produce manufactured according to traditional recipes which are often passed from one generation to the other. It appreciates food consumption with people who are closest to your heart, enjoying the taste and quality of the food. The slow philosophy has no limitations. Its main condition is to eat everything that we were given by Mother Nature—vegetables, fruits, ggs, cheese, pickles, oils. We should avoid only highlyprocessed foods and goods originating from mass production.

## What products should we avoid if we want to live and eat in a more slow way?

First of all, we should eliminate highly processed products from our diet. We should buy seasonal foods—that is, we should try not to eat tomatoes in January, being aware that their growth is artificially stimulated. We should avoid cold cuts loaded with harmful ingredients, ready and instant meals, instant soups, UHT milk, powdered beer, bread made from bread mixes, butter made from margarine, tea containing starch and juices without the actual juice. Unfortunately, we live in the era of paradox. On the one hand, we talk about global hunger and inundate Africa with powdered milk and other gifts that cause diseases among the local population. On the other hand, in highly developed and developing countries there are more people who die from overeating (to avoid saying that they eat themselves to death) than there are victims of malnourishment in poor countries.

Slow means taking our life slowly. Living in haste and making quick decisions is a sign of our times—there is no place for slow in it...

# Why should we take a closer look at our plate—or even spend more time wandering around the supermarket aisles?

Due to numerous projects, trips and business responsibilities, I spend most of my time in a hurry, on the road. This does not stop me from nourishing myself in a slow way. Obviously, when we look at the shelves in a supermarket or investigate the available catering, it is not easy to stick to the rules of this philosophy—but it is perfectly doable. A gradual improvement of this situation can be observed, both in Poland and abroad. It seems that eating healthy while travelling is basically impossible, but still—it can be done. In a worst case scenario, I'm always trying to choose the lesser evil; but that happens only when I have absolutely no other choice.

Product turnover in supermarkets is enormous. The fact that today we are reading a list of ingredients and it seems okay does not guarantee that it's going to be the same in a few weeks' or months' time. A standard behaviour of most producers is quite simple. They put on the market a product of good quality, with a price slightly higher than the one of maximally processed foods. They gain a conscious customer, who is never easy to obtain—and after some time they keep the same price and change the ingredients.

More and more people are shopping consciously, and sooner or later these people realise that this initially great

product has lost its quality over time. Do the manufacturers count on customers' naivety? We can cheat a consumer, we can even cheat ourselves. But we will never be able to cheat our bodies. If we will flood it with "junk" food, sooner or later it will show us who really is in charge.

## **Why do I think it is important to devote our time to what we eat? Is BIO a lifestyle?**

A popular slogan states that "You are what you eat". As much as 70% of our immunity comes from the gut. In fact, the vast majority of our physical, mental and spiritual health depends on us. Unfortunately, most people do not enjoy the responsibility and the feeling that everything is in our hands—it is easier to find someone or something that we can blame for a given situation.

Food is like fuel—the better food we buy, the further and longer we can go. If we eat a meal that contains an appropriate amount of nutrients in ratios suitable for our metabolic type, we will be energetic, happy, and we will be able to function for a longer time. If we eat a processed meal, full of trans fats, sugar, gluten, and other harmful ingredients—additionally heated in a microwave oven—in fact we are consuming a bunch of deadly substances. Moreover, instead of providing us with energy, such meals deprive us of it, as we have to use our own energy deposits to digest such products. As a result, we are

tired, we feel unwell and we are not in a mood to do anything. We might even have to take a few pills: one for flatulence, one for heartburn, one for invigoration.

In some sense, bio is a lifestyle. We have to, however, draw a line between buying and consuming bio-originating products from the bio/eco fashion. Let's not go to extremes and be aware whether food producers are fair towards us.



## **Which names should we avoid when shopping?**

Well, it would be easier to list everything that is actually edible. If the ingredient list of a given product contains substances whose names are unreadable—we should not eat it. Dear mothers, if popular baby food jars have charming, colourful labels, cute lettering and are advertised by a kind lady explaining the product's safety, this does not mean that they are definitely the best food for your child. Look out for the

popular and cheap MSM among the ingredients. Let me remind you that MSM stands for mechanically separated meat, namely bones, tendons, cartilage, and fat—all the leftovers from mass production that contain the most toxins and chemicals. The remains of animals fed with antibiotics or GMO are certainly not good building blocks for the human body, let alone a tiny human's organism.

We should also avoid all highly processed plant fats, such as margarines, universal oils, trans fats, palm oil, powdered milk (labelled also as milk protein), nitrates, sulphur derivatives, synthetic colourings and aromas, glucose syrup, sugar, gelling agents and many more. We are not even able to enumerate all of the harmful ingredients that are currently on the market. If you have never heard about a given substance and cannot remember it from your chemistry class, it would be better not to eat it. It's just safer.

msm / gmo  
Are you sure what you are  
feeding your baby with?



## Why should we beware of words such as “bio”, “enriched”, “smoked”, “natural”, “100%”? Which names are tricky?

According to standards, “smoked” relates to the product’s flavour, not the fact that a given food was actually smoked. A client thinks about a real smokehouse, where wood or rotisserie are being used. In reality, the product undergoes a chemical or artificial smoking process, with the use of, i.e., colourings or smoke flavourings. Everything is legal. And that’s how products labelled as “smoked” are made.

First of all, we have to remember that we live in a time when it is the name, not the actual product, that is being sold. These usually have little to do with their real ingredients or quality. We should also not count on the fact that large companies treat consumer’s wellbeing as their priority—it is financial gain that matters.

“Enriched” means that a product has been sterilised so much during the processing that some nutrients had to be added for it to be even called a food product. Products such as enriched muesli, breads or flours had their initial nutrients removed; therefore, synthetic vitamins were added, so that they would be classified as foodstuffs. Enriched foods have nothing to do with nutritious products which contain the necessary nutrients.

“Natural” is the least reliable slogan ever found on a label! Why? There are no standards regulating its actual meaning

in the food industry. Still, many advertising agencies confirm that it draws customer attention. The phrase itself might be convincing, but it says little about the product's nutritional value—it does not even say anything about its safety. “Natural” does not equal “nutritious”. Almost all the “natural aromas” contained in numerous processed products are prepared in laboratories so that they become “identical to the natural ones”. They are derived from neurotoxic and cancerous substances which should not be ingested.

Did you know that the same aromas are used in the production of yoghurts and toilet soaps?

## **How to do a sugar detox?**

It's not easy, especially since research conducted on a group of teenagers confirmed that the young generation has a significantly higher sugar tolerance threshold. Products which seem too sweet or completely unsuitable for consumption to adults are not sweet enough for teenagers and children. We should definitely eliminate white refined sugar from our diet. At first, we can substitute it with cane sugar or birch xylitol. The latter is much sweeter than traditional sugar; moreover, it has anti-bacterial and anti-inflammatory properties. Beware of corn xylitol! This one is definitely not welcome in our menu. We should avoid products sweetened

with corn syrup—it is cheap, ubiquitous, fattening and addictive.

Gradual elimination of sweet products from the menu will also make us less accustomed to their excess amounts in our diet. Protein is also essential for this process. If we provide our body with enough protein, we maintain a stable blood sugar level; we feel satiated, so we are not looking for sweet snacks to energise ourselves—we just don't crave them. So simple, yet so true.

## **How is slow food different from the popular fit food?**

First and the foremost, slow food is real. This includes foodstuffs whose consumption improves our general condition, nourishes our body, provides energy, health, strength for action. By eating such food, we are able to regenerate and rebuild new, healthy cells in our whole body. Slow originates from small producers that put their heart and soul into their work. Cultivation or farming are their passion. Such food is usually available directly from the farmer, in small, niche stores or at local farmers' markets. These products might be neither cute, nor fashionable, nor wrapped in sophisticated packaging, but they have a unique flavour. And you can taste it. Many people complain that they are perishable, but here's the deal: we either want to eat the real food or fill ourselves with chemicals

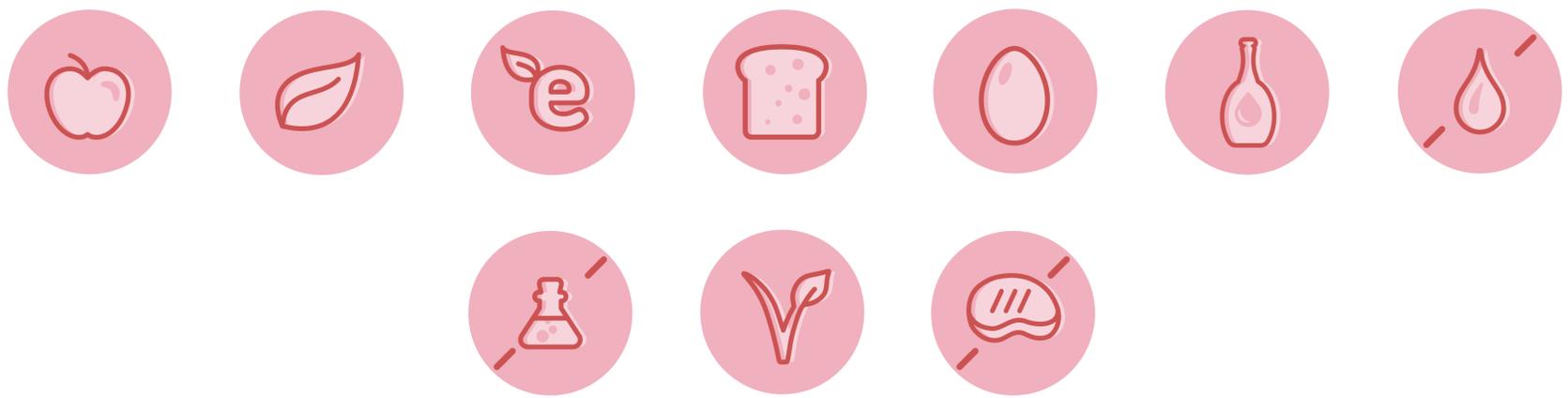
containing a long list of additives whose names are often unreadable.

The majority of “fit” products are fit by name only. This slogan draws thousands of customers who want to lose a few pounds, improve or maintain their figure. Unfortunately, very often it is only the name that is “fit”. The effect is closer to the fat side of the spectrum. All the fit yoghurts and dairy snacks contain cancerous sweeteners and highly processed, modified grains instead of sugar. Even though there is a skinny lady on the packaging, the yoghurt alone will not provide us with such results. If someone has a protein metabolic type, consuming large amounts of sweet, processed cereal will cause rapid blood sugar spikes and quick accumulation of adipose tissue. Let me remind you one more time that there is no single way of nutrition suitable for everyone. If you want to be fit, use your head, think about your eating habits and lifestyle. See where your previous strategy has taken you so far.

# super foods

Are all trends healthy?





## **SUPERFOODS**

### **– following the fashion**

Superfoods, functional foods, super strength—these phrases have long dominated both food and food supplement industries. Do we really know, however, what they actually mean and what all the fuss is about when it comes to healthy food with special functions?

Functional food used to be known in a particular place, by a certain group of end users. Globalisation, the development of transport and logistics, as well as a nearly unlimited access to information via the Internet and other media, have made an ever-increasing number of people aware of products such as acai, goji berry or barley grass. So-called superfoods are mainly plant products with many unique health-promoting properties. Apart from their basic function—that is satisfying the hunger—they have additional influence on the immune system, body regeneration, cell nutrition and saturating our body with antioxidants, which are much needed in the battle against free radicals.

We live in the age of unlimited access to products from across the globe. Over the past few years, both the wellness and organic food industries have been developing faster than the IT industry. This is a positive step, but we still must remember that first and foremost, it is still just business—one linked to enormous profit. The choice is not easy. Among hundreds of allegedly beneficial health-promoting products we can find a large range of products which are superfoods in name only, as well as those that contain only trace amounts of truly nutritious substances. That's why it is so important to know what are we buying—and why.

### **Acai berries (pronounced asai)**

They are small, dark-coloured berries originating from the Amazonian Rainforest. Acai berries are perceived as an antioxidative bomb and a protein-rich fruit. Native Brazilians have been eating them for centuries, appreciating their incredible properties. The berry pulp contains valuable omega-3, omega-6 and omega-9 fatty acids—that's why their freshness does not last long. If we want to take advantage of their benefits in Europe, we should choose frozen fruits or dehydrated powder. These two forms help preserve as much of the berries' health-promoting properties as possible. According to the newest research, the acai berry helps in stem cell production, meaning that their consumption enables faster body regeneration, thus influencing our life span and quality.

### **The most prominent properties of acai berries include:**

- they are rich in fibre;
- they include all the necessary omega fatty acids;
- they have a low glycaemic index;
- proportionally, they contain more protein than chicken eggs;
- they enhance stem cell production;
- they contain 19 amino acids required for protein production in our bodies.

### **Goji berries**

Berries which originated in Asia and have been appreciated for over five thousand years by the Chinese, Mongolian and Tibetan people. They are characterised by their intense red colour. Most often, they are sold as dried fruits, since this form of preservation lengthens their shelf life. They are widely considered to be a source of youth and strength. And a small fact: the majority of 100-year-olds inhabit the areas where these bushes are cultivated. The ageing process in these areas is also different from the one we are familiar with. The elderly who consume goji berries are active, healthy and full of energy.

Li Ching-Yuen popularised the fruits. Allegedly, he lived to the age of 252 years<sup>5</sup>, owing his longevity to a daily habit of drinking tea containing goji berries, ginseng and reishi mushrooms. There are also goji varieties that grow in the desert areas in, among others, Arizona, California, Colorado, Mexico and South America. This plant was also fundamental to the nutrition of Indians inhabiting both Americas.

<sup>5</sup>D. Wolfe, Superfoods. The Food and Medicine of the Future. Translation by B. Kotarski, Białystok 2015, p. 30.

**The most prominent properties of goji berries include:**

- they influence longevity by stimulating human growth
- hormone secretion; this hormone delays ageing processes; on average, 100 g of ripe fruits contains 11 mg of iron, which is necessary for the blood production process; they contain twice or triple as much antioxidants as blueberries;
- they are a source of polysaccharides, which strengthen the immune system;
- they contain amino acids which enhance the functioning of adrenal glands (phenylalanine) and are essential for serotonin production (tryptophan);
- they contain 21 trace elements, such as zinc, iron, calcium, phosphorus, selenium, as well as vitamins B1, B2, B and E.

**Noni (also known as indian mulberry)**

This plant can be mainly found in Polynesia. Local healers have been using it for over two thousand years. It is yet another superfruit packed with antioxidants and many other substances enhancing our body's performance.

**The most important ingredients of noni are:**

- selenium—responsible for skin elasticity and health;
- glycosides—providing defence against free radicals;
- scopoletin—has anti-inflammatory properties;
- terpenes—enhancing body detoxification;
- xeronine—regenerating the cell structure.

Noni  
is enhancing  
our body's  
performance



Noni fruits are especially valued for their effective immune system regeneration through the stimulation of leukocytes. They also have antifungal and antibacterial properties. In Europe, they are mostly available as noni juice. A hot-water extract can also be prepared with the use of noni leaves; the infusion stabilises the blood sugar level, relaxes, facilitates digestion and cell detoxification.

### **CHIA (*salvia hispanica*)**

This plant was the main food of the Aztecs. Its name is derived from Latin word *salvare*, meaning “to feel good and healthy”. It is rich in protein, has a low glycaemic index, and prevents inflammation. It might be an important factor during the weight loss process. Contains more omega-3 fatty acids than Atlantic salmon and more calcium than milk. Thanks to these tiny seeds, the Tarahumara tribes were famous for their incredible strength and resilience. Even though they ate nearly exclusively chia seeds, they were able to run for over 300 kilometres without taking a break. Just a few teaspoons of chia seeds added to a meal provides our body with many necessary nutrients. It should be remembered, however, that chia seeds should be soaked or added to liquid food. If we consume them without liquids, the seeds will absorb water from our digestive tract.

## **Maca**

A root cultivated in the Peruvian Andes. It is the highest growing food crop in the world. It was used as an enhancer and a substance activating the immunity and libido. Consuming maca root also has a positive influence on such health issues as anaemia, chronic fatigue syndrome, depression, infertility, and low libido. It might be helpful in fighting menopause symptoms, menstrual disorders, stress and even tuberculosis.

Doctor Gloria Chacon de Popovici, a Peruvian biologist, suggests that this root influences the hypothalamus, pituitary gland and adrenal glands. By activating these regions, it also increases the levels of energy, vitality and libido. Extensive research confirms that it additionally fosters the elimination of thyroid problems in persons with predispositions for such disorders. Laboratory tests show that consumption of maca root improves the condition of the thyroid gland.

## **Cocoa tree**

The fruits of this wonderful plant have health-promoting, antioxidative and mineral properties; they also regenerate the neurotransmitters. For years, cocoa beans have been considered the “food of the gods”. They support the cardiovascular system and restore natural emotional balance. Some people consider chocolate to be a superfood, while others credit it with healing properties. Unfortunately, most of these characteristics disappear during the cocoa bean processing. The consumption of raw beans has nothing to do with the taste of chocolate available in the stores, the one that we know so well. The cocoa



coconut

In Hindi, the coconut tree is known  
as “tree that provides everything  
needed for life”

tree is the best natural source of such substances as antioxidants, magnesium, iron, chromium, manganese, zinc, copper, vitamin C, omega-6 acid, phenethylamine (responsible for concentration and appetite reduction), tryptophane (necessary in serotonin production), serotonin, fibre, theobromine (an antibacterial substance and blood thinner which supports heart functioning).

## Coconut

In the Hindi language, the coconut tree is known as kalpa vriksha, that is a “tree that provides everything needed for life”. Products resulting from the processing of this plant include not only coconut oil, but also coconut milk, water and meat. Coconut acts like a natural water purifier. To reach its core, water must pass through all the fibres, which purify it on the way. The water that can be found inside the nut is one of the most electrolyte-rich liquids available. The composition of coconut water is comparable to human plasma. Combining it with plant-derived chlorophyll, we provide ourselves with a kind of natural blood transfusion.

### **The most prominent properties of coconut:**

- it enhances tissue regeneration;
- it limits free radicals' degenerative activity;
- it improves the functioning of the nervous system;
- it stimulates milk production in new mothers;
- it increases the production of semen in men;
- it improves digestion;

- it activates the absorption of fat-soluble vitamins;
- it prevents hypoglycaemia;
- it serves as the richest source of the antiviral lauric acid;
- it boosts metabolism.

### **Algae (chlorella, spirulina)**

Recently, the market has been inundated with algae-based products, as they include large amounts of easily absorbed protein necessary for metabolic processes in a human body. Moreover, they include relatively substantial quantities of chlorophyll, which supports haemoglobin production. Algae are prized for phycocyanin—a pigment which stimulates the production of stem cells in bone marrow, thus influencing immune system regeneration. Research has confirmed the presence of 40 major elements in AFA algae. Protein is necessary for the production and regeneration of every kind of tissue in our body. Bones, teeth, muscles, nerves, heart, glands, blood, liver, hair and skin need amino acids as the fundamental and essential building block. However, not all scientists consider algae to be superfoods which should be consumed.

**algea**  
- chlorophyll source  
to support your  
immune system



## Dr Grażyna Pająk's commentary

Do algae really have truly super-nutritious properties? The most valuable algae, available as supplements, include chlorella and kelp. Chlorella is a member of the green algae family, occurring in sweet, sun-exposed bodies of water. For years, it has been considered a wonderfully nutritious product, especially in Japan. It is promoted as a supplement which eliminates poisonous substances and heavy metals from the body. Chlorella contains lots of chlorophyll, amino acids, vitamins and mineral salts. Its main advantage lies in the ability to increase albumin levels in the blood; it is a protein that plays a key role in cell metabolism.

Kelp, on the other hand, belongs to the brown algae family. These plants develop along the sea and ocean coastlines, absorbing nutrients from the environment. For years, they have served as a source of valuable minerals and trace elements in the diet of the inhabitants of Japan and Polynesia. Kelp is a source of natural, organic iodine, necessary for proper thyroid functioning.

Spirulina, on the other hand, is not algae. It is a cyanobacteria, known for the mass algae bloom in muddy bodies of water. Even if in numerous world regions it occurs in copious amounts, nowhere and never has it been consumed by humans. A commercial AFA name hides an enormously

toxic aphanizomenon—yet another cyanobacteria—not algae—which often produces neurotoxins. A mass blooming of spirulina and aphanizomenon in bodies of water causes the death of fish and other organisms, hence the alerts warning against coming into contact with such water. Even though large amounts of microelements might indicate potential therapeutic properties of cyanobacteria, up to this day we are not aware of the exact influence of all metabolites derived from this group of organisms—their toxicity changes depending on weather conditions. During the cyanobacterial bloom, a production of strong toxins has been confirmed on multiple occasions. Such toxins belong to the groups of hepato- and neurotoxins (some of whose toxicity is 50 times greater than one of the most dangerous dioxins). The vast majority of spirulina available on the market is derived from industrial cultivation, where sea water is mixed with sweet water, artificial fertilisers and soda. In many places, sewage discharged into the sea has already lead to a total degradation of the marine ecosystem. After seventeen years of work at the Polish Academy of Sciences (PAN), having gained over twenty years of experience as a natural therapist, I highly recommend algae in the form of chlorella or kelp. I would advise against taking supplements derived from cyanobacteria in the form of spirulina or AFA (especially from unknown farms).

## Barley grass and wheatgrass

Recently, both these plants have become immensely popular. These products contain large quantities of green colouring, namely chlorophyll. This substance fosters body de-acidification and toxin removal. Both grasses are rich in amino acids, minerals, vitamins and enzymes. Wheatgrass juice contains ca. 70% of chlorophyll, whose structure resembles the one of haemoglobin. Its consumption enhances red blood cell production, which translates into the improvement of oxygen transport in the body. Research confirms that a combination of chlorophyll with vitamins A, E and C, which are also found in these grasses, increases its effectiveness. Thanks to this, these substances protect us from radiation (green colouring neutralises cancerous benzopyrene and 3-methylcholantrene) and free radicals.

The power of barley grass lies within the combination of digestive enzymes and valuable nutrients, such as proteins, minerals and vitamins. Protein found in barley grass contains 18 amino acids, including all exogenous and ten endogenous acids. Barley grass juice contains thirty times more B vitamins than milk, and provides a large dose of vitamin A. It also includes seven times more vitamin C than an orange and five times more iron than spinach. It provides the body with a powerful dose of zinc, copper, potassium and magnesium.

## Dr Grażyna Pająk's commentary

The immense popularity of supplements containing large amounts of green plants is partially due to fashion, and partially it is a necessity. Natural products, such as barley grass or wheatgrass, are supposed to supplement the deficiency of enzymes and basic nutrients. Young grasses are a valuable source of chlorophyll, fibre, vitamins, minerals and protein.

Added to a daily diet, they help detoxify the organism, cleanse the intestines and regulate digestion. High chlorophyll content improves haemoglobin synthesis and erythropoiesis, while the presence of antioxidants helps eliminate inflammation and infections. These plants balance acid-base homeostasis, allowing the maintenance of appropriate pH. Thanks to their high fibre content and cleansing properties, they support and contribute to the prevention and combating of lifestyle diseases.

There's only one condition—every type of grass supplement must be derived from plants that were sown with the use of nonmodified seeds, cultivated, harvested and processed according to the rules of ecology. Any novelties stemming from trends do not foster that, however. When choosing a product, we should check who produced it, verify the history of our grass and how much it actually has to do with nature.

Choose consciously. Let's remember that in order to take full advantage of the possibilities given by superfoods, we need synergy. Wellness is an integration of many social, emotional, mental, spiritual and physical aspects; altogether they increase the potential to achieve a good quality of life, effective work performance and satisfying social life. Superfoods might help us remain healthy and maximise the use of our vitality—but they won't do everything for us. If we have unhealthy habits, shun exercise and provide inadequate nutrition, superfoods might only slightly mitigate the negative effects of such a lifestyle. They will not, however, make us super healthy.

# The calorie counting myth

## Why are calories unreliable?

The packaging of nearly every food product contains information about its calorific value. Most of this data is imprecise, as it does not consider the complexity of the digestion process.

The amount of energy found in food is determined by units called calories. According to the definition, 1 calorie equals the amount of energy required to increase the temperature of 1 kilogram of water by 1°C. It is assumed that:

- 1 gram of fat equals 9 calories,
- 1 gram of protein equals 4 calories,
- 1 gram of carbohydrates equals 4 calories.

Recent research shows that the amount of calories that we obtain from food depends on the variety of plants or animals, meal preparation method, type of bacteria present in our digestive tract or the amount of energy required for the digestion of a given food product. None of these factors are considered in nutritional values. The process of food breakdown is so complex and conditioned by individual features of every human that a reliable estimation of its unified progress is impossible.

**Everything that you know about the caloric value is false, because:**

- we use more energy to digest protein than fat;
- high temperature facilitates digestion;
- the appetite of intestinal bacteria varies depending on the individual features of a host's organism.

## **The influence of processed foods on the human body**

Nowadays, when within one year a human consumes on average nine kilograms of chemical substances and food additives—and in the European Union alone 170,000 tonnes of flavourings and synthetic aromas are used over one year—we should start counting the amount of unwanted substances found in ingredient lists.

Apart from well-known food additives, which increasingly make us apprehensive, contemporary and mass-produced goods also include a wide range of other contaminants, such as: pesticides, genetically modified substances, chemicals released from packaging or nanoparticles—a new threat on the list of factors which directly influence our health.

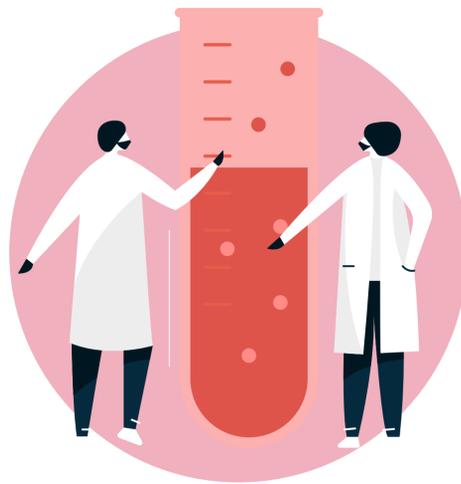
## **From a moment of pleasure to cancer**

When eating “junk” food or widely available sweet snacks, we tend to justify our decisions—that it is just a bit, we do it rarely, only from time to time. Food manufacturers defend their actions in the same way, convincing the consumers that ingesting synthetic food additives in such scarce amounts is not

harmful—despite the fact that they cause cancer in animals that they are tested on. Some chemical compounds used in the food industry are so poisonous that they could kill instantly when ingested in larger quantities. Moreover, substances considered to be cancerous, ingested in trace amounts—but regularly over a long period of time—lead to the development of cancer in susceptible people.

One moment of elusive pleasure, derived from eating a chocolate bar or cookies packed with chemicals, might turn into some very serious health problems. Excessive weight usually marks their beginning. Why is it so? According to scientists, ingesting trace amounts of synthetic food additives causes an accumulative effect. If we reach a certain level of accumulation of such substances and exceed the period of their hidden activity, the effect of ingesting these substances may take the form of a tumour.

All the delicacies, sweets, and colourful snacks that we eat today, may manifest in the future in the form of cancer. We are the ones to decide: is it worthwhile to deceive yourself right now and fight for your life in a few years' time?



## **Russian roulette**

### **—unknown interactions of chemicals**

Low doses of chemical compounds added to food become enormously dangerous as a result of synergy. When combined, they form a kind of a ticking time bomb. Two harmful substances, when blended together in a given product or a human body, become far more toxic than any of them would be separately. Our body has many defence mechanisms and regenerative properties fostering the functioning of cells and organs—but it has its boundaries.

### **Pesticides**

Social campaigns and dieticians urge us to eat healthy fruit and vegetables, convincing us that by doing so we will lose weight and improve our health. Unfortunately, when we buy these products from widely available stores, more and more often we also ingest insecticides, rodenticides, herbicides that destroy weeds, fungicides that destroy fungi and mould, as well as various bactericides. The fact that they are not visible

to the naked eye or cannot be tasted does not mean that they don't exist. Research proves that pesticides can damage the nervous system, cause diabetes, cancer, and other ailments. The products that are contaminated the most with pesticides include apples, beer, bread, cereal bars, cheese, cucumbers, lemons, grapes, pears, raspberries, potatoes, rice, spinach and wine. Pesticides can influence our weight, as they disrupt metabolism, hormonal balance, as well as negatively impact the process of protein synthesis and enzyme production.

### **Monosodium glutamate**

MSG—the sodium salt of glutamic acid—is found in nearly all processed products, ready meals and fast foods. It improves the bland taste of products made from low-quality raw materials; at the same time, however, it damages the neurotransmitters and has a direct influence on rapid weight gain, as it decreases—and even blocks—the burning of adipose tissue.

This compound is used by the majority of restaurants, especially in vegetarian and low-protein dishes. The producers that are aware of customers' increasing knowledge on food additives, more and more often label their products as "no MSG". This compound is also hidden under names such as: glutamic acid, glutamate, autolysed yeast extract, autolysed yeast protein, yeast extract, textured vegetable protein, sodium caseinate, "natural flavours", hydrolysed corn, and enzyme modified ingredients. The main symptoms following the intake of this compound include: extreme blood pressure changes, arrhythmia, depression, dizziness, anxiety or panic attacks,

migraines, muscle swelling, epilepsy, joint pain, muscle pain, chest pain, diarrhoea, stomach cramps, runny nose, nausea and vomiting. The research conducted in the 1950s shows that rats treated with a single dose of MSG displayed damaged neurons in the retina and brain damage. Analyses have shown that humans are six times more sensitive to monosodium glutamate activity.

## **Glucose-fructose syrup**

Also known as the high-fructose corn syrup. It is a purified, concentrated water solution of monosaccharides (glucose and fructose). The syrup is derived from corn processed into corn starch. With the use of enzymes or acids, the starch is then processed into the syrup containing 55% of glucose, 42% of fructose and ca. 3% of other sugars. Highfructose corn syrup can be found in such products as: carbonated and non-carbonated drinks, isotonic drinks, energy drinks, flavoured waters, juices for children, fruit beverages, alcohols, liqueurs, dairy drinks and yoghurts, ice cream, jams, jellies, fruit pulp, salads and canned fish, etc. The syrup is used as honey substitute in confectionery industry and as a means of preventing bread staling in breadmaking.

### **The glucose-fructose syrup causes, among others:**

- rapid weight gain and chronic obesity, as it increases adipose tissue production, especially around internal organs;
- enormous appetite, which leads to reactive hypoglycaemia (rapid changes in blood insulin and glucose levels);

- increases the level of low-density lipoprotein and triglycerides;
- causes a decrease of the body's sensitivity to leptin;
- the inhibition of ATP production;
- increases the risk of irritable bowel syndrome;
- might result in diabetic cataracts.

## **Aspartame**

Sugar substitutes, such as aspartame, are much sweeter than the sugar itself. Thus, they confuse human taste receptors and make them perceive less sugary products—which are healthier—as not tasty. This causes us to choose increasingly more sugary products, in a bid to satisfy our taste buds. Research shows that artificial sweeteners disrupt natural brain chemistry and the body's hormonal balance, both of which are responsible for the control of appetite and satiety. More and more epidemiological tests prove that people consuming sweeteners display metabolic changes and are more prone to obesity and type 2 diabetes.

## **Powdered milk, milk protein, Dehydrated eggs**

Powdered milk, which is increasingly often found in ingredient lists as “milk protein”, as well as dehydrated eggs, belong to the group of oxysterols. To make a long story short, it is an oxygenated cholesterol, which leads to the development of atherosclerotic plaques. Moreover, powdered milk contains four times more lactose than regular milk! Excess consumption of processed dairy in the form of yoghurts, snacks and other

inventions of the food industry, causes oedemas and mucus overproduction; it may also lead to the development of atherosclerosis. Interestingly, the products promoted by the industry and the media as healthy have the opposite effect on our body. In the USA, a large dairy company was sued for intentional deception of consumers. They convinced the public that the consumption of yoghurts and dairy drinks improves digestion and boosts immunity. This deceitful campaign cost the company over 20 million dollars in the form of a financial penalty! Human genetic potential falls between 120 and 140 years. Nowadays, in the entire world there are five groups of people who achieve such life span; they live in a clean environment. Meanwhile, the health of people fed with mass-produced food deteriorates globally with each passing generation.



once you pick the eatery  
place trust yourself  
more than pictures



## Gastronomical decalogue

Up until recently, eating in expensive restaurants or dining out was considered to be a sign of success, big city life and a high material status. As a result of the current level of catering services, the ever-changing regulations applicable to the food industry and mass processing of food, the real luxury are home-made meals and dishes eaten at small eateries which adhere to the slow food philosophy. There we can talk with the owner and the chef, learn about their passion for food and verify the freshness of the products that the meals are made of.

There are places where it is good to be seen, and places where you can eat well. In the case of the former, it is not always important what the meals are made from—it is the company and the conversation topics that are crucial. My own experience as a food expert, and also a former employee within various sectors of gastronomy, tells me that no stars and prizes can guarantee that food in a given place is of high quality. Every business person knows that most meetings, during which crucial decisions are made, are held in restaurants. What should we eat to make sure that we are full of vitality and that we can

achieve whatever we are striving for? There are simple rules that might save us from a gastric disaster and help us close a once-in-a-lifetime deal.

**1. Drink lots of water.** If you have a chance, order water from a local water bottling plant—the smaller the plant, the better the water. Ask the staff to squeeze lemon juice directly into the water or serve lemon juice separately. Lemon zest accumulates 96% of toxins and pesticides! Such a dose of chemicals certainly won't improve your wellbeing.

**2. If bread is served before the main dish, refrain from eating it.** Should you decide to consume it, dip it generously in olive oil or butter it. This way you will slow down the release of sugar and limit sugar blood level spikes (in doing this, the bread will not stay forever around your hips).

**3. Ordering a chicken salad?** Make sure that the sauce does not contain sugar or honey—otherwise, you can be sure that stomach cramps and flatulence will follow! Sugar disrupts protein digestion. If you want a light lunch that will provide you with strength, ask for a salad without the sauce and drizzle it with pure, high-quality olive oil. Remember! Genuine first cold pressed olive oil is green in colour. The more yellow the hue is, the higher probability that this product is olive oil by name only.

**4. Ordering scrambled eggs?** Ask whether the place serves fried eggs. If the staff informs you that they do not serve them,

refrain from ordering scrambled eggs. In 99% of the cases that means that scrambled eggs are prepared from dehydrated eggs.

**5. Are you offered free cheese as a snack or a “gift” from the restaurant?** There are two options: either they really want to pamper you, or the cheese is past its best before date.

**6. Potatoes—in any form which you can think of:** fries, potato slices, wedges, noisettes, etc. Unfortunately, 90% of the so-called “potatoes” in restaurants are in fact highly-processed products made from potato pulp, dehydrated potatoes, potato and soy fillers, covered with cancerous acrolein and soaked with universal trans oils! Don’t eat them! Ask if they cut potatoes on their own—very often you can order roast herb potatoes prepared with good fat. Don’t pack your body with chemicals! If there are dark spots on the fries or they have irregular shapes, that means that they were prepared from real potatoes.

**7. Lasagne, ragoût & co.—**remember that processed meat products are usually used as a means of recycling the leftovers from fridge cleaning. It is financial gain and loss minimisation that matter—even at the best premises. Don’t expect minced and processed products to be prepared from beef tenderloin. Very often all meat scraps are processed. A typical cycle for large catering outlets looks like this: day 1—meatballs, day 2—spaghetti Bolognese, day 3—lasagne. Dishes such as chopped beef burgers are an exception—but even an amateur will notice the difference after the first bite or straight after cutting the meat.

**8. If the owners and employees eat at their own premises that means the food there is good.**

**9. Fish and seafood**—a simple rule states that you should not eat fish while being far away from bodies of water. While in the mountains, do not order halibut; while at the seaside, do not choose trout. Even though the majority of fish served at the Polish seaside is frozen, you have a higher chance of getting fish that is fresh or that was appropriately transported when choosing local products. Don't expect to eat fresh prawns in Zakopane or delicious mussels in Lublin.

**10. Desserts**—eat them as a separate meal, before the main course or 1-2 hours after lunch/dinner. Want to maintain a good figure? Eat the dessert before your main course—it will not accumulate in your body as adipose tissue. Choose between alcohol and cake. A frivolous person chooses both—but you don't want to get a double serving of carbohydrates and a few excess kilograms, right?

People care about those who care about themselves. So, if you want to be successful in life and business, take care of your body—its condition influences directly both your mind and soul. Don't treat your stomach like a rubbish bin and don't regret spending money on high-quality products. Very often, their final price is lower than restoration and re-generation of a damaged organism. You are what you eat.



# Shopping IQ

## shopping decalogue



## **What does a food shopping assistant do? Where did such a profession originate from?**

In the USA, this profession is popular mainly in New York and on the West Coast; California is known for its love of anything wellness-related. More and more people in Poland would like to eat healthy—but since they don't know how to do that, they turn to specialists for help. First of all, we live and work at an increasingly fast pace, so we don't really have time to read all the information on the labels of products—and there are more and more of them as well. Very often, we also don't understand these labels or are not familiar with complicated names of chemical compounds. Instead, we can go shopping with a specialist/assistant/trainer, and learn a few things—or just rely on their knowledge in this field.

## What can you learn during such a grocery run?

You can certainly learn some simple rules of combining products which will spare you health problems—especially those linked to your digestive system. You will also learn about the ingredients that are the most harmful to a human body; ones which should definitely be avoided.

Margarine is one of them; trans fats that can be found in it are unhealthy and ruin our health. We should also beware of gluten, especially wheat gluten, which can be found almost everywhere—not only in bread or pasta. Cold cuts, meat, highly processed products, dairy—even yoghurts and cream—all contain gluten. It is also recommended to eliminate sugar whenever possible; everything is sugar-coated anyway.

I keep on highlighting something that might seem controversial—that we should not buy tropical fruits, such as bananas. Let's be honest, as they have to travel such a long way, they certainly do not reach us in their natural state. During a visit to a store, especially in the wintertime, we should avoid colourful fruits and vegetables that do not grow naturally in our environment during a given season. Our health is ruined on a daily basis by ready meals heated in the microwave oven, soups, instant sauces, highly processed sweets, snacks, cookies, etc. Juices are troublesome as well—you always have to thoroughly check their ingredient list. Unfortunately, the word “juice” has become a commercial name; even the most

processed products can now be labelled as juice. Some of them contain so many chemicals that the list of benefits gained via their intake is non-existent, or transforms into a list of harmful ingredients instead. As a result, we provide our body with a deadly cocktail of various chemical compounds.

## What should we be most aware of?

We should beware of such words placed on the packaging as: “natural”, “made from...”, “100%”, “fat-free”, “enriched”, “smoked”, “made from wholegrain”. For example, butter should contain at least 82% of milk fat—currently, the producers place on the packaging only one piece of information, that it contains “82% fat”. But what kind of fat? Nobody reveals which fat is included in the ingredient list of a product marketed as “butter”. Very often, these involve the cheapest universal oils, that is trans fats, or palm oil, which hardens at low temperatures, so it is hard to recognise the fraud. Some time ago I came up with a “toast” test—if butter has an unpleasant smell when I spread it over warm bread, this means there is something bad in its ingredients. Real butter does not have any aroma. The same goes for yoghurts, which are a blend of artificial colourings, thickeners and fragrances. It is similar for some of the expensive pro-biotic drinks which are banned in the West and have been withdrawn from the market (e.g. in France) due to the lack of the outstanding results advertised by the manufacturers.

**Real butter**  
is one of the most appropriate fats  
we need to build up new cells !



# Grocery shopping decalogue

Over the last few years, the number of products available on market shelves increased from a few hundred to tens of thousands! The choice that a contemporary customer has might be impressive—but this is just an illusion. The ingredient lists are similar, with 80% of them being inedible if we consider the health criteria. Do not be fooled by high prices and product brands; these do not always go hand in hand with quality. Manufacturers have realised that the consumer is more and more curious about the ingredients; that they read the labels, exchange information with other consumers, follow the trends and gather information. Consequently, they resort to new tricks, which make us buy a given product thinking that we are investing in our health, while it might be quite the opposite. Slogans such as: “grandma’s sour cream”, “farm eggs”, “clarified butter”, “fit yoghurt”, “healthy cereal”, “natural”, are very often just a trade name, which does not have to mirror the product’s quality, origin and the ingredients.

Moreover, according to law, only the last producer is obliged to list all the ingredients on the packaging. If there are many subcontractors in the production chain, we have no chance of learning all the ingredients of a food product. That’s why we should stick to a few simple rules that remain valid, despite the continuous changes in the food industry.



## Water

This topic seems trivial. Everyone knows that water makes up 70% of our bodies and that it is recommended to drink at least two litres of water a day. Which one, though? It has always surprised me that abroad, in any country, you can safely drink water—be it the one bought for just a few cents or the one that costs significantly more. In Poland, on the other hand, I have suffered numerous bouts of food poisoning triggered by water. Finally, after many conversations and a small market review, I understood why they happened in the first place. It turns out that water plants are not obliged to regularly inspect the water; they must do so right after opening of the source and following the first water extraction. Moreover, their laboratories are very often closed. In September, I called the popular water brand's office with the information about the food poisoning; I did it straight after that event. I was told that the laboratory would be working again in January... and to this day, nobody called back.

Let's get down to business—how to choose good water? If possible, buy water in glass bottles. If only plastic bottles are available, look for water from small companies. Very often good water comes from Georgia—basically, all Georgia-based brands can be trusted. If you buy water produced by popular manufacturers and it has a bitter taste, do not drink it!!

Why? Such water, even if it happened to be good at the source, might have been subjected to high temperatures during transportation or storage (very often outside). Incorrect storage fosters virus, bacteria and fungus cultivation; these begin to dissolve plastic, resulting in an unpleasant aftertaste of the liquid.

If you are ordering lemon water in restaurants, ask for lemon juice instead of a sliced lemon with the skin, floating in the glass. Why? Lemons, even if their interior is healthy, accumulate a whole lot of chemicals, pesticides and other harmful substances—well, you don't really think that someone in the restaurant pours boiling water over every lemon, do you? Sparkling water is actually not as bad as people say. After a meal that is difficult to digest it improves digestion and the functioning of the pancreas; when drunk in moderation it might be considered a sort of an antidote, especially for the protein metabolic type.

# How to choose good cheese?





## Cheese

How to choose good cheese? Real aged cheese dries into a stone—it should not be covered in mould or turn into mycelium. If you melt cheese on a pizza or toast and an unidentified substance—often dense sediment which is red and orange in colour—leaks from it, it's quite possible that the cheese was packed with chemical additives and multi-purpose oil. During heat treatment, real cheese will simply burn, become golden and remain pleasantly thready. It should be alarming if during the melting process various substances are released from the cheese. Stay away from cheese-like products, also known as cheap protein. How are such cheeses made? Instead of ageing for ca. 36 months, just like they should do (and we are not even talking about the mature cheese), mass-produced cheese ages for a maximum of three weeks. Moreover, substances such as powdered milk, multi-purpose oil and cancerous liquefactors are added to it.

Such ingredients are used to create the most popular “cheeses” which go bad incredibly fast. Therefore, supermarkets have agreements with dairies, allowing them to return the cheese that has gone bad. What happens next? Most often, such cheese is shredded and the above-mentioned ingredients are again added to it. This mix is processed for cheap cheeses used

in gastronomy, shredded cheese for pizza and toasts, or even for sliced, separately packed cheeses. In the next round, when even this cheese from the postproduction goes bad, it is turned into processed cheese—the final link of the dairy recycling...



Avoid all the light  
and 0% fat products!



## Dairy

Statistical research that we have carried out shows that 95% of students indicate yoghurts and kefir as a source of fibre—instead of fruits and vegetables! In practice, that means that they identify TV commercials of popular dairy products as a source of knowledge. Moreover, young generations consider advertisements to be absolutely reliable. The real, old-school dairy includes fermented milk, bacteria, and maybe fruit. Today we have gums, thickeners, colourings, flavourings and ingredients that are not even listed on the package, such as substances used to whiten the greyish, rather unattractive powdered milk—or silicone, which perfectly thickens yoghurts. Moreover, we also have a few aromas—the same ones that are used in toilet soaps.

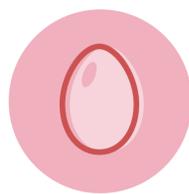
Avoid all the light and 0% fat products, diet yoghurts, etc. If good, healthy fat was removed from them, synthetic fillers had to be used instead in order to preserve the flavour and texture. If the producer removed the fat, he surely traded it for harmful trans fatty acids; if he eliminated sugar, it was substituted by aspartame or other toxic sweeteners. Marketing slogans such as “with real fruits” or “made from real fruits”—very often found on products designed for children—are not regulated legally in any way. This means that a producer does not have to inform how much fruit was actually used in the production of a particular

yoghurt or cream cheese. These products very often contain more sugar, preservatives and other toxic substances than the actual fruits.

What does the “fat-free” phrase mean? It just means that in order to achieve the desired product texture, after the removal of fat, it was packed with emulsifiers, GMO starch, sugar or toxic sweeteners, as well as synthetic flavourings.



Egg is healthy as a whole.  
Both egg white and yolk.



## Eggs

Remember just one thing from all the contradictory theories—that egg is healthy as a whole. Both egg white and yolk—provided that the hen was healthy as well.

### **Standard egg descriptions mean that:**

- 0—biological eggs from hens fed with bio feed;
- 1—eggs from free-range production;
- 2—eggs from barn egg production;
- 3—battery-cage eggs.

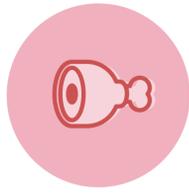
Don't be fooled by slogans that producers place on the packaging, such as "farm eggs", "fed with a non-GMO feed", etc. You open the package and still find battery-cage eggs inside. The line between advertising slogans and phrases determining the quality or origin of products are becoming increasingly blurred. Legal provisions remain a different aspect. According to some of them, if there is a window located near where a chicken is kept—we can assume that it is free-range...

The eggs are also sold outside these categories—from a farm or from a farmer. These eggs are not labelled in any way. Remember, however, that it has to be a trusted person. Why? Well, in every business there are some creative people, and it's not different in the case of egg trade. So, a clever man

hires a kind old lady, buys the cheapest battery-cage eggs in a store and removes the numbers. Then, the old lady sells them on his behalf as free-range eggs at a farmers' market.

The hen's living conditions and the food that it receives directly impacts both quality of the eggs, as well as our body's reaction to the ingested food. Very often, people who undergo expensive allergy tests and are certain that they have allergy to eggs... are not allergic to them at all. It is the chemicals and substances found in eggs and other toxic products that they eat on a daily basis that trigger particular reactions.

Why should we avoid battery-cage eggs? Apart from the issue of animal cruelty, the breeding conditions, and the quantities of antibiotics that the animals are packed with, it is also the content of omega acids in eggs that matters. In natural conditions, the ratio of omega-3 to omega-6 acids is as follows: 1 particle of omega-3 per 4 particles of omega-6. In the case of battery-cage eggs, it amounts to 1 to 19—or even 1 to 25! Excess amounts of omega-6 fatty acids in food, with no balance of other fats, lead to chronic inflammations in the body; these constitute the source of numerous diseases.



## Lunch meats

Don't be fooled by high prices! Unfortunately, more and more often grocery shopping resembles a tactical war between a producer and a consumer. The first one knows very well that the latter is becoming increasingly observant; that they check whatever they are buying, that it is no longer that easy to fool them solely with high prices for them to consider the product's quality as similarly high. That's how a simple strategy emerges. A new type of lunch meat is launched in stores; it has a nice name evoking positive connotations. At the beginning, its ingredient list is limited to meat, salt, and herbs. A month has passed and the same lunch meat, sold at the same price, becomes somewhat different—it has a slimy and shiny surface. Sensitive taste buds will immediately notice a drastic difference, especially if we eat a slice on its own, as this way our taste buds are more sensitive to product modifications. Suddenly, instead of three ingredients, the meat contains eighteen of them, including, as usual, gluten, soy protein, a few preservatives, nitrates, etc.

When buying kabanos sausages (thin, long, dry sausages) and other products that should be smoked, ask the sales assistant whether the product is smoked or painted. Not many people ask this type of questions, yet this differentiation used to be far easier to detect. Currently, the producers have perfected the art of dipping the meat or spraying it with aroma

and colour identical with smoke. They are even able to create visible wrinkling—perfectly resembling that found on the meat that was subjected to the traditional smoking process. If during bacon’s heat treatment the meat shrinks, yet nothing weird leaks from the inside, it means that the product is fine. If the bacon sparkles, is unnaturally large, does not shrink despite grilling or frying, and even floats in suspicious gunk, better don’t eat it at all. Remember that the word “smoked” indicates the taste of a product, not the process used for its manufacturing. It means that the product could be legally smoked synthetically or chemically, or synthetically aromatised.



## Meat

How to buy meat? As always, from a trusted person or a reliable source. Purchasing straight from a farmer might be risky, since farmers are not always eager to have their goods tested. If we do not have the appropriate knowledge, we may encounter parasites without even knowing it.

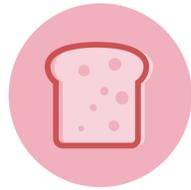
**When buying poultry**, we should try to look for free-range or farm chickens, which are not unnaturally large. Remember—a chicken is not a turkey. Same goes for chicken breasts—the smaller they are, the more likely it is that they are a result of farming processes resembling natural conditions.

**When buying pork**—especially the loin—ensure that the meat is not larger than the bone. This is unnatural and shows that the meat was injected with the use of needles, even if it is not visible to the naked eye.

**When it comes to beef**—if the membranes have a red or orange hue, it means that it was painted to look fresher. Moreover, if it is darker on the outside, it means that the animal killed was so stressed that its muscles were flexed. Do not buy ground meat! If you want to prepare burgers, meat patties or meatballs, mince the meat on your own. Avoid MSM. This abbreviation stands for Mechanically Separated Meat, that is all the scraps, internal organs, skin, claws and fat, which accumulate

the most toxins in the whole body. Do not eat tripe, offal or liver—these operate as natural body filters. You wouldn't eat a car filter, right?

Since the producers have realised that consumers' knowledge and awareness is broadening, they have adopted new methods. There are machines which inject the ground MSM into high-quality pieces of meat, such as loin or sirloin, increasing their volume at a low price. Therefore, the illusion of purchasing premium meat is preserved.

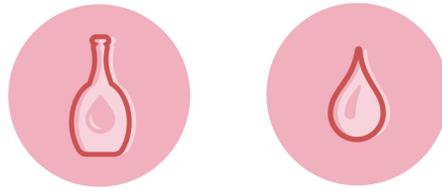


## Bread

The situation with bread is similar to the one with lunch meats. The product undergoes a certain cycle. A bakery receives a 100% rye sourdough bread, baked according to a traditional recipe. Six months later it turns out that it contains 20% of wheat flour. Even the bakers themselves are fooled, as they get the flour from a dishonest mill—and are not aware that it contains wheat. When buying bread, always ask what it is made of. The best way to obtain an honest answer from a shop assistant is informing that we suffer from coeliac disease; the shop calculates the responsibility for potential harm or, in extreme cases, customer's death, and quickly realises that it is better to reveal true information than be sorry later.

Remember—real bread does not turn into a stone within a few hours. When rotting, it is not covered with blue mould. The freshness of sourdough bread might be preserved for as long as a few weeks; later, it will become stale. Avoid any baked goods labelled as protein, fit, or slimming—these breads are usually baked with the use of genetically modified soy and packed with a long list of chemicals that keep it all together. Stay away from bread sprinkled with seeds such as flax, chia and others. Dry seeds, which were not soaked, stick to the intestinal walls and absorb water from the digestive system. Avoid bread

from frozen dough, so popular at the supermarkets. You can never be sure how old this “fresh bread” that you buy actually is. Note that rye flour, even the wholegrain one, is never dark-brown. If the bread is very dark, it had to be coloured with cancerous caramel or barley malt. According to legal provisions, large supermarkets are entitled to a three-time bread recycling. This basically means that whatever goes bad is loaded into a special machine and bread mixes full of aerating agents and other toxic substances are added; later, new bread is baked from this mix again. The bags are additionally sprayed with antifungal substances in order to encourage the customers to buy this “new bread”, thus avoiding the third milling.



## Fats

The fats that we should use in the kitchen include 100%, clarified or ghee butter; rice oil, extra virgin olive oil, unrefined rice oil, coconut oil, nut oil, flaxseed oil, milk thistle oil, lard or goose fat. Don't be fooled by margarines, mixes, plant butters, etc. 100% butter has no additives. Unfortunately, the producers first tried to cheat customers by adding multi-purpose oil—even to butter. This was easy to reveal, however; it was enough to press a butter stick found in the store fridge. If it was suspiciously soft, it meant that it contained oil. The evolution of manufacturing processes resulted in the fact that currently even starch and palm oil are added to the product. These become solid and it is hard to tell it apart from real butter. When it comes to olive oil, the darker it is, the better. High-quality olive oil should have a dark green hue and a non-bitter taste, so that its taste can be appreciated on its own. Most often, all of the yellowish olive oils are “premium” by name only. Read the labels; very often, the front label provides information that it is a high-quality first cold pressed olive oil. The back of the packaging, however, states that it was produced with olive pomace which came from five different European countries...

Don't buy flaxseed oil from China—the seeds originating from China are usually bitter. Avoid all refining processes. Ever since coconut oil has become trendy and popular, its

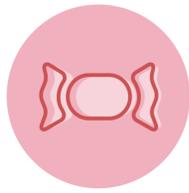
new, refined version appeared, lacking the coconut fragrance. If you don't like this aroma—don't use coconut oil. Beware of all industrial modifications! The same applies to rice oil.

Cold pressed sunflower oil is beneficial to gums and contributes to teeth whitening; it can also be added cold to a salad, but it should never be heated—in high temperatures it transforms into trans fatty acids. Rapeseed oil, on the other hand, is suitable for... nothing! Rapeseed has always been a fodder crop used for animal feeding, recently it was also used in the production of biofuels—and that's how it should remain.

## Why is real butter healthy?

Butter has always been a part of the Mediterranean diet. It has a short fatty acid chain—the butyric acid contains up to four carbon atoms. As a result, it is a stable fat which does not lead to the process of fatty acids oxidation in the body, even at high temperatures (hence it can be used for cooking). Moreover, butyric acid has strong inflammatory properties, it also smoothens and regenerates cell walls (while trans fats, in a wider perspective, lead to the deterioration of cell membranes' condition and their ultimate erosion). For years, the use of butter was linked with an increased level of the “bad” cholesterol—this is not true, however. Nowadays, recent research confirms that it is not the amount of ingested cholesterol that matters, but the ratio of cholesterol's amount to lecithin. Lecithin is

a kind of antidote for cholesterol—if they are ingested together, it turns into the “good” HDL cholesterol. As the ratio between cholesterol in butter and lecithin equals to 15 particles of lecithin to one particle of cholesterol, it is obvious that butter cannot lead to high blood cholesterol levels. Moreover, milk fat (from which butter is produced) contains fatty acids that have perfect antineoplastic properties; it also contains A and E vitamins, which are recognised as antioxidants, and selenium, also a strong antioxidant. Butter and milk fat exhibit the following health-improving properties: they stimulate immunity and body’s defence reactions; regulate allergic reactions; protect the cardiovascular system; prevent osteoporosis. I’d also like to add that recent research shows that butter is responsible for the sense of satiety.



## Sweets

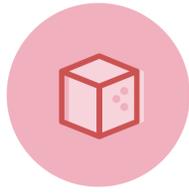
We all crave sugar from time to time; we can also supply it to our body in a variety of ways. It is recommended to choose those sweets that are natural not by name only. How to recognise them? Avoid multi-purpose oils, hydrogenated trans fatty acids, palm oil, glucosefructose syrup, sugar, aspartame, chocolate-like toppings, powdered milk (that it an oxygenated cholesterol), powdered eggs. Try eating less sweets, choosing the highest quality products instead. Choose hand-made chocolate from artisan manufactures, look for dark chocolate with a high cocoa content. Beware of vending machine junk, snack-bar facilities, petrol station promotions. Currently, over ten thousand various chemical substances are added to food; in the European Union alone thousands of tons of aromas are used! You can be sure that these ingredients can be found in mass-produced sweets. The development of fast foods and mass production of food were accompanied by the birth of a new, incredibly profitable branch of industry. It aims to give highly processed food flavours which are identical to the natural flavours, instead of the ones resembling cardboard. Methyl anthranilate is a substance with similar properties; it is also used as a corrosion inhibitor in jet engine lubricants. When added to food, however, it gives it a grape flavour. Amyl acetate, giving food a banana flavour, is

widely used as a paint and varnish solvent. These, however, are simple flavours. To obtain strawberry flavour at a fast-food chain, 46 different chemical substances are used. Their blend imitates the strawberry flavour, even though none of these products is, in fact, a strawberry...



# Sweets

- how not to be fooled  
once buying them.



## Juices / Beverages

If you think that carrot juices are superfresh and superhealthy, you couldn't be more wrong. Very often fresh juices make up a mere 10% of the bottle content. The rest contains a concentrate that comes from across the pond. What is a "fruit drink"? Well, if you see this name on the packaging, it means that the drink inside is not a 100% juice. It is more likely that it contains only trace amounts of fruits. Food colourings, sweeteners and other taste enhancers make up the rest. Sugar and water are among the main fillers. Obviously, it is always worthwhile to place a catchy slogan on the label, such as "rich in vitamin C"—but where these vitamins really come from, whether they are synthetic or natural, does not really matter. Read the label! Don't assume that the product's high price will guarantee its quality. Very often branded products have little to offer apart from fancy packaging, the name and elevated price.

A can of classic and well-known cola contains on average 10 teaspoons of sugar. An adult person participating in an experiment exhibits a gag reflex following the ingestion of water with such an amount of sugar. Young generations' taste buds and the body's natural, selfdefense reactions are so impaired, however, that they are even likely to perceive this beverage as not sweet enough. Moreover, recent research shows that sugar

is more addictive than cocaine. The research was conducted on two groups of rats. The first group was given cocaine, while the second received water with sugar. What did the experiment reveal? The “cocaine” rats left aside their stimulant for sugary water, which provided them with a far better high! Fortunately, there are manufacturers who produce niche beverages of a high quality. An increasing number of energy drinks have a satisfactory ingredient list. Furthermore, supermarket fridges are also stocked with squeezed juices that come solely from fruits—without water, sugar or any additives.

## **Shopping IQ tips**

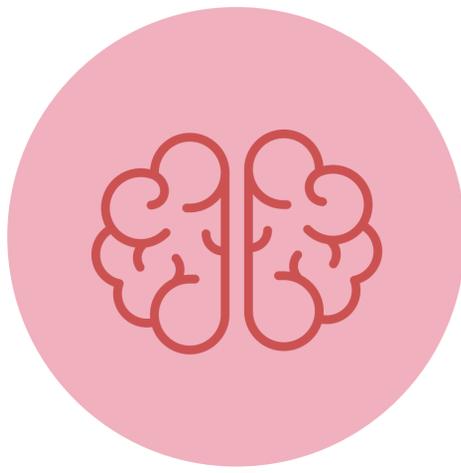
### **—what should you avoid?**

- Buy naturally smoked kabanos sausages instead of those coloured and flavoured with smoked aroma.
- Beware of large pork loin pieces—the cutlet should not be bigger than the bone. If it is, the chances are that it has been “pumped”.
- Powdered milk is nothing else than oxygenated cholesterol. In dairy products it is often concealed under the “milk protein” label.
- Carefully examine the meat—if the membranes have an orange hue, this means that the meat has been soaked in colouring to make it look fresher.

- Try buying water in glass bottles. If you drink water from a plastic bottle and it tastes bitter, it means that the water is toxic. Throw it away!
- Buy products that do not contain multi-purpose oil or highly processed, refined fats and oils.
- Instant coffee is pure chemicals. It contains ca. 1200 chemical compounds! Choose real coffee!
- Don't get attached to brands. Even the most highly esteemed brands might ruin their products after some time.
- Very often, cheese slices as well as grated and processed cheeses are only cheese-like products.
- Read the ingredient list during your first purchase of a product and then every few weeks after. The manufacturers like to change ingredients once they gain customers' loyalty not necessarily for the better.
- Look for regional products with a special marking—it guarantees quality.
- Not all the products whose name contains words like "bio" or "eco" are natural! Don't be fooled by marketing tricks—instead, act like a detective!

Stress, microbiota and civilisation  
are closely interwove.  
Is the gut your first brain ?





## **Brain, stress, microbiota, civilisation**

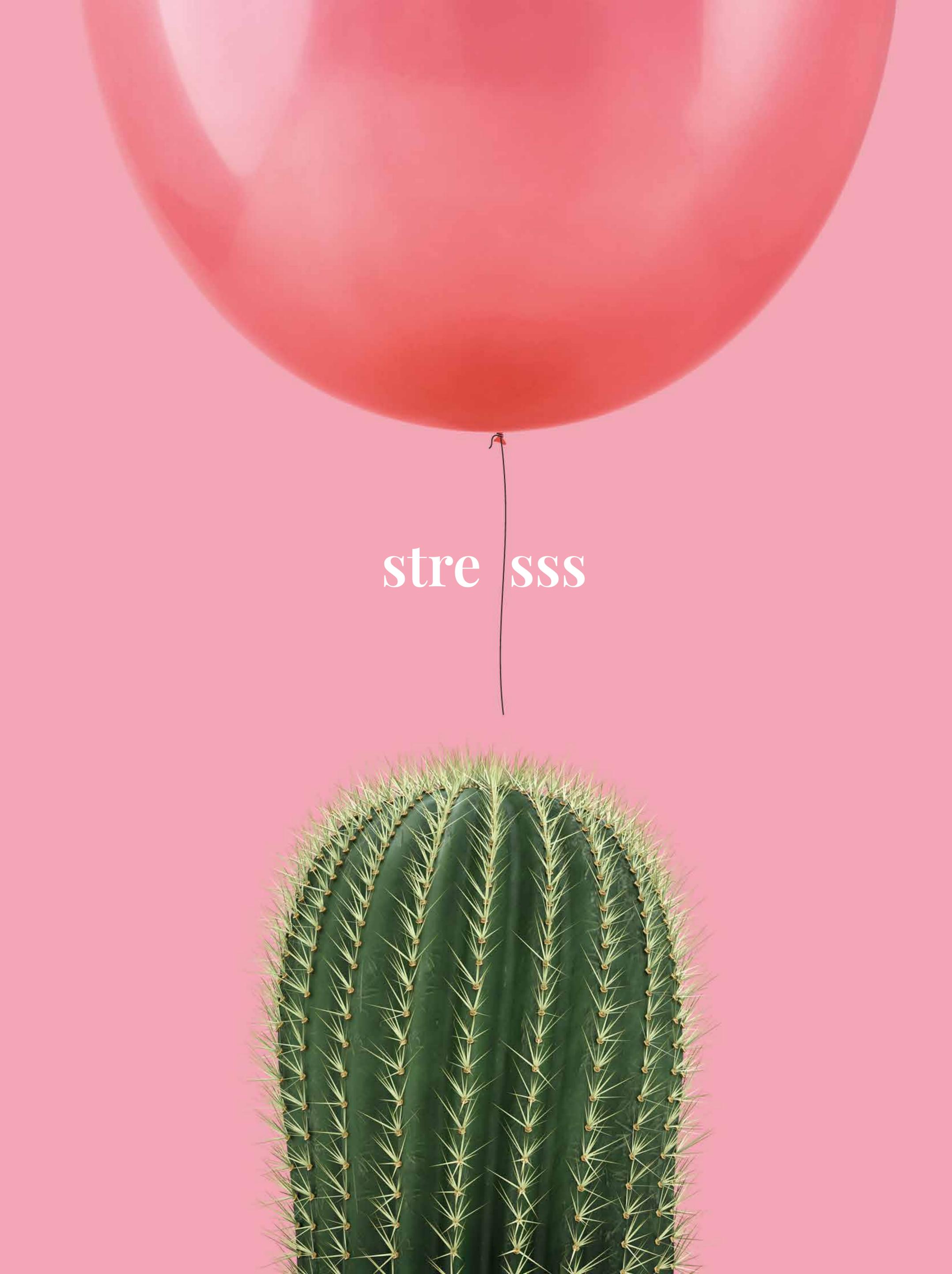
The advancement of civilisation in the 20th century thoroughly transformed our world, and this period was the most effective ever in isolating us from nature. As a result, we spend nearly half of our lifetime under artificial light in air-conditioned, hermetic, soundproof buildings. We are surrounded by various chemical and synthetic products on a daily basis; products that were completely unknown just 60-70 years ago. Increasingly often, our bodies are covered with unnatural materials. Homes are decorated with artificial plants, synthetic wallpapers, flooring and carpets. We are also surrounded by water and sewage systems as well as electromagnetic fields; by interacting with each other, these have an increasingly larger influence on our environment.

The accelerating pace of life results in untold stress; it also forces us to keep up with the achievements of civilisation. To do this, we usually speed around in cars. We cannot imagine a life without mobile phones, computers or TVs. The body's capacity to adapt, however, remains unchanged. Our bodies are built from the same cells as those of our ancestors.

Statistical data from industrialised countries is really worrying: 75% of adults suffer from at least one chronic disease. Bone and joint diseases, hypertension, atherosclerosis, allergies, obesity, and mental disorders constitute just a few of them. Recent research shows that atherosclerosis begins at an early age; diabetes is the most commonly found metabolic disease in the world, even young people suffer from osteoporosis, while over half of the population of developed countries is plagued with mycosis.

Modern medicine might extend our life span, yet contemporary pharmacotherapy very often involves unwanted side effects; the chemicals used are a substantial burden to the organism, while their action is not selective enough. Most often, the effect is momentary—we temporarily remove the symptoms, yet their causes remain. In the 1930s, chronic diseases contributed to 50% of the deaths; currently, it is estimated that this index exceeds 95%. This rapid development of lifestyle diseases has resulted over the last two decades in an increased pace of research on the immunity system. The research conducted by various scientific institutes has confirmed the age-old knowledge that the main factors determining the health in 65-75% continue to be the same: the way of thinking, ability to relieve stress, lifestyle and eating habits.

Stress, microbiota and civilisation are closely interwoven. Very often, they influence our health—or even shape it, regardless of our wishes. Even despite proper nutrition, a stressful situation or negative influence from the outside world might disrupt the functioning of the digestive system; this, in turn, can impact the condition of the whole organism.



stress

# How is it possible?

## Let's start with stress

Stress is an atypical reaction of the body to an event that takes place within a human's environment. It is aimed at maintaining a physiological balance. Stress can be either positive or negative; it is closely linked to emotions, which are accompanied in the body by both biochemical and physiological reactions, fostering the process of adaptation. A human, adjusting to a stressful situation, forces the body to make the effort to return to the natural state.

It might seem that some people are completely resistant to stress. Statistical data, on the other hand, shows that 67% of adults experience intense stress reactions at least once a week. Stressors can include both positive and negative life events. Every person reacts individually to a given situation. The way we perceive it influences our body's reaction; this, in turn, impacts the biochemical body reactions, resulting in all sorts of symptoms. If stress is moderate, it may motivate a person to act and solve a potential problem. Its long-lasting influence, however, leads to a decrease in immunity and disordered functioning of the whole body. Scientific research shows that 50-70% of all diseases are closely related to stress!

It starts with trivial situations, such as the annoyance of a driver who is stuck in traffic. Then there are momentous

events at work or in family life—all these situations, if we do not get over them or solve them, are accumulated in the body, leading to a wide range of physiological symptoms that are also mirrored in the human psyche. All this creates a vicious circle that we cannot escape from. Stress is not limited to annoyance, however. For humans, the environment that they are surrounded by may also constitute a stressor, as well as the climate, noise, the presence of other people, stimulants, injuries or even excessive physical activity. Emotional factors, however, comprise the most important stressors in human life. These may include some serious and unforeseen situations in our life: a family member's illness, the death of a close relative, relationship troubles, problems and misunderstandings at school or the workplace, excessive work responsibilities or tasks, as well as the sense of responsibility for their fulfilment. The research conducted in the USA shows that 60% of all stressful events in our life come from just a few sources.

This table (Based on: C. Corbin, G. Welk, W. Corbin, K. Welk, *Fitness i wellness. Kondycja, sprawność, zdrowie [Concepts of Fitness and Wellness: A Comprehensive Lifestyle Approach]*, Poznań 2006, p. 292.) presents the most common causes of stress among students and middle-aged adults.

Students	Middle-aged adults
Fear of the future	Fears related to being overweight
Sleep deficiency	The health of another family member
Wasting time	A general price increase
Lack of understanding from smokers	Home repairs inside the building
External appearance	Too many things to do
Too many things to do	Forgetting about and losing things
Forgetting about and losing things	Gardening and performing home repairs outside the house
Not enough time to do everything that has to be done	Issues related to property, investments and taxes
Worrying about not being able to live up to exacting standards	Crime
Loneliness	External appearance

Stress types differ by their intensity and duration time. Obviously, long-lasting stress that puts the body in “fighting” mode is the most dangerous. The worst thing that we can do is to lead to the accumulation of stressful events and smothering them without any, even partial relief of the tension. Such a situation is extremely dangerous to both body and mind. Stressors lead to blood acidification, intestinal dysbiosis, hormonal imbalance; combined, all of these symptoms result in a real disaster. Even though the stress may be both positive and negative, the latter influences a human the most, as its consequences are usually long-lasting. For example, stress related to a wedding is short and ends with an outburst of excitement. Job loss is rarely going to transform into a positive situation. Obviously, there are some aspects which we still can control; we can find a new job, very often one that is better and gives more satisfaction than the one we were deprived of. There are, however, situations that we cannot control, that we have no influence on, and due to the lack of possibility to resolve such a situation, we have no capability to eliminate stressful factors, just like in the case of an accident or a disease. An overall reaction to stress is the same for everyone, with the autonomic nervous system being responsible for it.

# Autonomic nervous system

The autonomic nervous system is responsible for all body reactions that are beyond our control. It is divided into the sympathetic nervous system, with a stimulating activity, and the parasympathetic system, with an inhibiting activity. Sympathetic and parasympathetic systems act as opposing forces. When the sympathetic nervous system accelerates the breath and heart rate, contracts the blood vessels and elevates blood pressure or slows down the intestines, the parasympathetic system triggers the opposite reactions, namely: slows down the breath and heart rate, decreases blood pressure, and accelerates peristalsis. The sympathetic system is triggered by stress and it is deactivated following its disappearance. The effects of increased sympathetic nervous system functioning are neutralized by the parasympathetic system, which is responsible for body relaxation. Daytime stimulates the functioning of the sympathetic nervous system; night-time allows the parasympathetic system to act.

## **Sympathetic nervous system causes:**

- pupil dilation,
- the contraction of smooth muscles and blood vessels in skeletal muscles, leading to the elevation in blood pressure level,
- accelerated heart rate, secretion of small amounts of thick saliva,
- more effective breakdown of glycogen in the liver,

- goosebumps,
- palms getting sweaty and cold,
- dilation of bronchial muscles,
- the “fight or flight” response,
- the urge to empty the bladder accompanied at the same time by the contraction of the urethral sphincter,
- peristalsis inhibition,
- the tendency for hypochlorhydria,
- stimulating the adrenal glands to produce adrenaline.

**Parasympathetic system is responsible for:**

- pupil constriction,
- decrease of the strength of heart muscle contraction,
- dilation of blood vessels, therefore, the decrease of the blood pressure level,
- secretion of large amounts of thin saliva,
- an increase in insulin secretion,
- scarce appearance or absence of goosebumps,
- dry, warm hands,
- bronchoconstriction,
- “rest and digest” response,
- bladder contraction and emptying,
- strengthening of digestive system contractions,
- increased secretion of gastric acid, frequent feeling of itchy skin,
- the tendency for hypochlorhydria,
- stimulating the adrenal glands to produce adrenaline.

Diversified reactions to stress and situation assessment are two aspects activated by our individual predispositions. Knowing our reactions is the most effective way of eliminating stressors and overcoming situations that cause the imbalance of general homeostasis. Some people become even more effective while stressed; the others, however, feel paralysed and deprived of any motivation. Moreover, for some people certain events are a source of real pleasure, being at the same time stressful for others. All of the abovementioned issues are closely interwoven with the passion for adrenaline, character, and even the metabolic type.

# Microbiota—gut, your first brain

Recently, it has repeatedly been stated that intestines are our second brain—even though it was the enteric nervous system that actually came first. It was at the second stage that the evolution shaped the brain, to facilitate our improved development. Having only the autonomic nervous system, we would have to spend all our energy on the never-ending digestion process. The taming of the fire by homo ergaster, which happened ca. 1.5 million years ago, was a turning point in evolution. Cooking is a form of initial digestion. Food that is subjected to thermal treatment requires less energy during digestion, with the process itself being far easier. Such food provides 16 times more energy than raw food.

So once our first brain—the autonomic nervous system—was functioning properly, the second brain took the opportunity to develop. Cooking helped in passing the physiological barrier of energy needed for the development of the second brain; thanks to the invention of fire, it could grow. Only 100,000 years later, the Neanderthal brain's volume equalled 1500-1600 cm<sup>3</sup>, while body measurements remained the same.

The brain thinks, the stomach digests—both systems are connected via the vagus nerve and communicate using the same neurotransmitters. Neurotransmission is a language used for communication by nerve cells, while neurotransmitters are words emitted and understood by every neuron. Serotonin is one of such “words”—when it appears in the brain, it means wellbeing; in the stomach, on the other hand, it regulates

bowel transit and the immune system. As much as 95% of body serotonin is produced in the stomach! It affects not only the digestive system; following its secretion into the bloodstream, it also impacts the brain—especially the hypothalamus region which controls our emotions. Our stomach has as many neurons as a cat's or dog's brain, and it is equally smart. Sayings such as „have no stomach for something“, „have a strong stomach“ or „have butterflies in one's stomach“ can probably be tracked back to cellular biology.

What controls us? It is the stomach—our second brain, inhabited by hundreds of billions of bacteria that influence our actions and personality. It is the centre of our life which controls our physical and mental health. As many as 200 million nerve cells cover the entire length of intestinal walls; they enable us to digest food and break it down to microparticles that can be absorbed by the organism. Our two brains are incredibly similar to each other. Evolution moved the central nervous system to the intestines in order to enhance the performance of the whole body. The brain does not have to grow anymore and does not need additional connections.

When both organs are communicating, information is sent via the vagus nerve. Recent research results show that serotonin is transported to the brain with the blood, affecting our emotions in a complex way. Information intended for the stomach causes misunderstandings, which can influence our gut. When everything is fine, the communication between these two systems goes by unnoticed. The entire process can be examined only when there is a problem.

Irritable bowel syndrome is a disorder in information flow between the brain and the intestines. Symptoms include acute stomach pain, changes in the digestive rhythm, bowel transit disorders. These problems affect one in ten people, despite the organic anomalies that could be detected in tests. These people have good test results with an accompanying discomfort. Such problems stem from the disharmonious functioning of the gut-brain axis. The question is: which brain is sending the incorrect information?

Intestinal walls are covered with tissue packed with neurons. In people suffering from such disorders, it can be responsible for improper communication between the mucus and nerve cells. In such cases, the signals sent and received by nerve cells present a far more pronounced activity. An overly sensitive nervous system most often has hyperactive neurons; as a result, stress or psychological trauma lead to the diseases of the intestine. A human subconsciously pushes the problems to the stomach—and in such cases, pharmacotherapy is often ineffective. The intestine sends a signal to the brain, but it considers it impossible to put up with. Our brain is constantly subjected to chemical reactions that take place in our body—and which affect its activity even during sleep.

As we can see, by communicating with our mind, the autonomic nervous system has a direct influence on our well being and brain activity. The digestive tract manifests neurological symptoms, while intestinal cells show the same malformations as brain cells. It turns out that even 20 years before the first visible symptoms of Parkinson's disease, its

visceral symptoms can be observed. Neurodegeneration begins in the intestines.

Chinese medicine perceives the human body as a whole, where chi connects all of the body systems, as well as the human with the universe. Western medicine undertakes local action. Acupuncture has been around for over three thousand years; its part focusing on the stomach states that the organs contained within it are strongly connected with emotions and the brain, thanks to which it is possible to regulate the stomach by unblocking the receptors found directly in the digestive tract area.

The human digestive tract is inhabited by 100 thousand billion bacteria; this means that there are more bacteria in each of us than there are stars in the galaxy—unbelievable, right? They create a kind of a microcosm within a macrocosm, as well as the most densely populated ecosystem on Earth. A human has a hundred times more bacteria in their digestive tract than their own body cells! A huge part of us is composed of microorganisms, with our body being their ecosystem.

Unfortunately, commonly found factors such as antibiotics, excessive hygiene, a feeding bottle or caesarean section significantly diminish a child's contact with these much-needed microbes, therefore killing off their gut flora.

***„We have more bacteria cells than human cells,  
more bacterial DNA than the human one.  
We are passengers in bacteria's vehicle.<sup>6</sup>”***

<sup>6</sup> The Gut: Our Second Brain, a documentary directed by Cécile Denjean, France 2013

# Human microbiota

It turns out that every human carries internally from 1 to 2 kilograms of bacteria. They produce 30% of our energy, as we are not able to digest a large part of the food we ingest—and these microorganisms carry out that process for us. Moreover, they protect us from toxins which could cause the poisoning of the whole organism. As we can see, they play a crucial role in our health.

The majority of immune cells is found in the human digestive tract, namely in the intestinal mucosa. As a result, intestinal bacteria can efficiently alert our body cells about potential dangers.

Prior to birth, a human baby remains completely sterile. As it arrives, it is inhabited by hundreds of billions of bacteria and microbes. Digestive tract bacteria appear first, and it is them that select the next microbes to come, up to the moment of stabilisation of a given microbiome content. It is unique for every human, just like the papillary line.

## Intestinal metagenome—body's visceral IQ

Recent results of long-lasting research show that all people could be divided into three groups solely by determining their gut microbiome, the so-called enterotype. It turns out that not only blood group is characteristic of individual people—so is

their gut bacteria. The enterotype is responsible for turning food into energy; in every one of these three groups this process takes place with a different efficiency. The conducted tests also show that every human produces vitamins in different quantities. It turns out that the intestinal metagenome is not related to race, place of residence, age or gender. If we would try to characterise a person basing on their microbiome, it might turn out that for many Europeans, Asians would actually be closer than their own neighbours. Not only environment and genes, but also food can influence the enterotype, that is a group of microbes forming the gut bacteria. Up until now scientists have classified three million of various gut flora genes. These can be determined with blood tests and urinalysis. During the research, which was aimed at characterizing the intestinal microflora of obese people, scientists have discovered the absence of a bacteria called akkermansia. It turns out that people that have this bacteria in their digestive tract gain weight two times slower than those that lack it. Moreover, adipose tissue of people having this bacterium accumulates far less energy, as it activates the genes capable of burning fat and limiting its accumulation.

To sum up, it is yet another research than confirms that obesity depends in 80% on our lifestyle—that is, our will—and only in 20% of our genes and gut flora.

## **Can we be sure, though, that we can decide about ourselves?**

A mouse that is kept in sterile conditions and deprived of any microbes behaves in an unnatural way—it ignores the dangers and shows an inclination for risky behaviours. When its organism becomes inhabited with microbes, it becomes careful. We can say, therefore, that if we transplant aggressive animals' gut flora into calm animals, they will also start behaving in an aggressive manner. And the other way round—aggressive animals will calm down following the gut bacteria transplant from their temperate friends.

### **How should this research be interpreted?**

Gut flora influences our brain and behaviour. It turns out that it is not only us that decide about who we are—in part, this is a process completed by bacteria that used to inhabit the Earth for years upon the arrival of a human; over the years, we gathered a wide range of genes that allows us to decide, up to a certain point, about who we are.

The research on host behaviour modification caused by parasites was carried out long ago—but the observation of the influence of the microbiome on a human is a novelty.

Gut bacteria can be modified by probiotics, which include live bacteria and yeast, as well as antibiotics. Nowadays, we

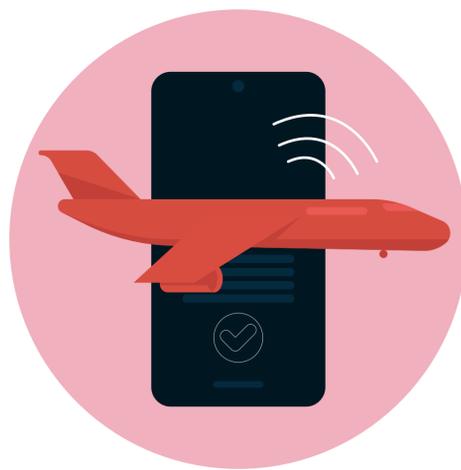
are able to kill harmful microbes with antibiotics; we can also support those beneficial to us with appropriate nutrition and supplements. Still, nobody knows how it actually works—this whole system of microorganisms that affect each other.

## Neurobiology of stress

A research project aimed at determining whether the change of gut flora in women subjected to stressful situations will affect their bodies was conducted in California. The scientists wanted to check whether a reaction to stress changes upon the modification of gut bacteria in humans. Will the brain change its reaction? The answer is “yes”. In the case of people taking probiotics, a lower activity of the brain areas responsible for stress was observed. It turns out that they modify a human’s reaction to unfavourable surroundings. We are still not aware of all dependencies between the microbiome and a human organism; we can be sure, however, that microorganisms influence who we are, how we react to certain situations and the way we behave. The intelligence of bacteria inhabiting our digestive tract constitutes the third brain. A change of external and internal environment influences our personality. Bacteria live both inside and around us, and we are just a part of a biological whole, called an ecosystem. Individuality is just a part of our personality.

In reality, we are made up of thousands of genes, billions of neurons, billiards of bacteria—an advanced system of data

connections that reaches far beyond our body. The existing mode of perceiving the human body is changing; the connections that the human entity is subjected to is formed by thousands of bytes, networks and relationships that we are not even aware of yet.



## Civilisation

We have been indulging so much in the blessings of technological development, that we tend to overlook the risks stemming from such a rapid rate of change—and as we should know, there are always two sides of the same coin. We have accelerated travel and food transport across the world; fruit and vegetables originating from the most distant corners of the world are available on a year-round basis. Everything is smart—phones, TVs, cars. We also have functional clothing and we are reaching the era of sound transmission triggered via facial touch. All this has its consequences, relating not only to the excessive exploitation of the planet, but—what is even more important—to our health. A common metabolic syndrome is a

signature feature of our times. We love flying, as we can travel much faster than when compared to traditional ways of moving around, yet little is being said about the disadvantages of air travel. Did you know that there are about 300 electronic devices working on board during one long-haul flight?

Ever since airlines started to offer Wi-Fi access during flights, tablets, smartphones and laptops are constantly used on board, producing additional electromagnetic radiation. As much as 65 tons of aluminum are used in the construction of the aircraft skin. It serves as a screen which reflects the radiation from all these devices back to the plane's interior—so it acts like a microwave oven, serving as a trap for the radiation. Over 500 km of wires make up the on-board systems. Modern machines use as much energy as 300 working washing machines. Moreover, every plane suitable for long-haul flights has about 400 seat-back screens—each of these emitting electromagnetic radiation. As a result, during our flight we stay in the blend of harmful waves which heat our body cells, destroying the DNA. For example, mobile phones heat up our brains by 200 times, exceeding all norms and leading to neuron degeneration—while the evolution has not managed to develop defense mechanisms or systems alarming us about the danger. Technology has managed to get far ahead of the human body's adaptive capabilities. The problem is, we are not capable of hearing or seeing this whole "electrosmog"—if we could, we would be horrified with the amount of all the emitted waves that overlap each other just in our closest vicinity. Even the slightest alteration in our DNA increases the risk of cancer. It doesn't get much better when we

think about modern cars; nowadays, they contain about 7 km of wires, navigation systems, headrest monitors, heated seats or TVs—all this makes our bodies boil while inside a car. In 2007, a research project was conducted on human cells cultured in a laboratory. They were exposed to Wi-Fi radiation. As many as 221 genes changed their expression following a two-hour exposure; that number increased to 759 genes after six hours. And now let's imagine that we are exposed to Wi-Fi radiation 24 hours a day. Moreover, we have intelligent counters, wireless phones, keyboards, mouse, baby monitors, smartwatches—the microwave oven itself is a mere detail.

A simple experiment is all it takes to notice the tangible effect of microwaves on the organism. Watering any plant with water boiled in a microwave results in the plant's death after just a few days. The same processes take place in our body, albeit at a slower pace, given that a human body has still not lost its phenomenal ability to regenerate and restore. A few years ago, Russians conducted an experiment with the use of 2G mobile phones. They placed an uncooked egg between two such phones which were continuously transmitting data. After 15 minutes nothing happened; after 25, the egg began to warm up; after 45 minutes it was hot, and after 65—completely cooked. If electromagnetic radiation can modify egg protein, just imagine what can it do to the protein in our brain.

# Civilisation



*Faster and faster we enter the era  
of high technology having the structure  
of a primitive man*

Professor U. Warnke „The risk of losing health“



## Health and safety rules concerning The use of electronic devices

The manuals on many new-generation laptops and mobile phones state that it is not advisable to have the device directly on our body. In order to safely talk on the phone, the handset should be kept ca. 2 away metres from the head, using a hands-free phone kit, earphones or other devices of this type. But who even bothers to read the manual?

Before buying a phone, ask the sales assistant about the SAR index (specific absorption rate). Sales assistants are becoming more understanding and they might supply you with a print out of the lists of parameters provided by the producer. If you want to be healthy, use a hands-free kit or a wireless handset which reduces electromagnetic radiation. Under no circumstances should Bluetooth phone kits be used—by placing it in your ear, you transform your head into a receiving station.

When sleeping, turn off your phone—or at least data transfer and Wi-Fi. You don't read notifications while asleep and they are still going to be very much there when you wake up. More and more research proves that blue light emitted by phones

and tablets disrupts the sleeping cycle, as it is ascribed to the morning in a circadian rhythm. Instead of scrolling the screen, it's better to read a book. Do not place your phone under the pillow. Limit the amount of time that children spend with a phone and never put it in the pram to put your baby to sleep. Don't keep it close to your heart or in trouser pockets.

If you work at a desk, using a computer, buy a standard keyboard and mouse (that is, connected with a wire). Keep the equipment as far away from your body as possible—the radiation decreases with distance cube. Don't keep the computer on your legs or stomach. If your job requires long hours in front of a screen, purchase special glasses with lenses protecting the eyes from electromagnetic radiation. They might not be the cheapest, but are surely more economic than eye transplant or cancer treatment.

# Epilogue

If you are reading the epilogue, it means that you have probably read the whole e-book—unless, just like me, you happen to read books backwards:). You also have sufficient information to properly determine your metabolic type. Remember that being aware of your MIQ is purely beneficial—not only for you, but also for your relationships with family and your loved ones—even daily interactions with strangers.

When you thoroughly understand what it's all about, you will see that identification of metabolic types is so much fun. You will start doing it at work, during your travels, daily commute on the tube or on a plane. You can determine the types of people by observing their behaviour. Despite our diversity in the perception of the surrounding world, it is the metabolic type that unites us all—and it can be distinguished with the naked eye, unlike a blood group. No matter where you live, how you live, what you do professionally or what your private life looks like. Whether you are an atheist or follow a certain religion.

It is irrelevant if you are interested in politics or don't care about it at all—you have a MIQ, your unique metabolic code. If you manage to befriend it, you will quickly realise that all the trends and diets really don't matter to the long-term body nutrition process, and that nothing is capable of activating every cell of your body just like the food perfectly matching the needs of your MIQ can.

Even if you are eating bio foods right now, choosing products that are processed the least and avoiding ready meals and fast

food, it doesn't mean that you're doing it right. It might be the case that you suffer from deficiency of one of the macronutrients or you are trying to adjust your eating habits to your partner or best friend; maybe you are trying to feed your whole family in the same way. It's a smooth road to failure. Eating habits that are in accordance with your MIQ will eliminate once and for all the lingering hunger and notorious search for sweet snacks. You will forget about overeating, frequent blood sugar level spikes, feeling hard on the stomach—and even insomnia. Headaches, depression, or irritability will become an infrequent episode or an unpleasant memory. You will eventually feel that you have energy and strong will—because everything you eat will be converted into energy instead of unwanted adipose tissue.

By eating according to your metabolic type, you will maintain your dream figure without gruelling workouts, starvation diets, monodiets or having to follow nutrition trends which rob you of the will to continue living while temporarily improving your appearance. Your immune system will start working at a fast rate, you will be more physically and mentally resilient. You will forget about the ailments that have been bugging you for years. Why? Because nutrition that follows your MIQ satisfies the natural needs of your organism, enhancing its best qualities.

You are what you eat. You are what you drink. You are what you breathe. You are what you think. You are what lives inside you. It's your life—so live consciously. Do whatever you love—and do it often. If you don't like something, change it. If you don't like your job, leave it. If you don't have enough time, stop watching the TV.

If you are looking for the love of your life—stop. It will be waiting for you once you start doing things that you love. Stop overanalysing everything, life is really simple. Open your mind, hands and heart for new things and people. We are united in everything that differentiates us. Some opportunities appear just once, so grab them. Travel often— getting lost will help you find yourself. All emotions are beautiful. When eating, appreciate every bite. Ask the next person you meet about their passion. Share your inspiring dream with them. Life is about the people that you meet and things that you create with them. So, go and start creating. Life is short. Live your dreams and share your passion.

**Angie**



Angie Pajak

**metabolic IQ**  
-Your Code to Health

## About the author

Angie on daily basis is, GreenTECH by AQUAcell CEO & Founder, AQUAcell Company GM for 15 years now, MetropolicIQ Protocol Creator, COSMO HEALTH LTD CEO/owner Health Coach, GreenTECH & Wellness Expert, Member of Emirates Green Building Council, lecturer, creator and editor of the popular portal [slowfoodlife.com](http://slowfoodlife.com), propagator of a healthy lifestyle, The Author of such bestsellers as: "Metabolic IQ -your code to health", "Your health diary," "Shopping IQ - smart shopping." Publicist known from press articles, interviews, TV and radio programs. In last two years, she recorded over 20 broadcast episodes for Polish radio in Chicago about the environment and sustainable actions, well buildings and green architecture.

Together with Dr Grażyna Pająk, for last 15 years they have been consistently building health empire. In April 2018 she received a prestigious award from Paris in the category of Holistic Beauty Awards for passion to acquire knowledge in the field of dietetics and a healthy lifestyle and commitment to modern media education and promotion of pro-health issues.

For last 15 years have been working for AQUAcell Company building awareness of importance of environmental issues. Since 2013 she became the GM of the company building strong relationships with Green Councils worldwide as the expert in green technologies and innovations that she implements with her TEAM in Europe and for last three years in the Middle East and Africa.

Has led workshops for Dubai Real Estate Institute on the Sustainable Solutions in city development. Currently, AQUA cell strongly cooperates with The Sustainable City Dubai and SEE INSTITUTE running pilot projects in the community; furthermore with DEWA, Environmental Agency Abu Dhabi, On greening London, Green Building Council Italia and UNESCO by supporting clean up campaigns to raise awareness and give light to problems such as plastic pollution and sustainable waste management.

Innovative projects in implementation are UFO - Unique Floating Object design to rebuild the oceans, AIR atmosphere intelligent restore system and living water - drinking water with a huge environmental impact and strong sustainable ID.

She has created Metropolic IQ Protocol - SUSTAIN™ City System which has been implemented in several companies to improve internal environment in the building, increase the comfort and productivity of employees, and reduce the maintenance costs of buildings, as well as reduce the environmental footprint of a building on a micro and macro scale.

In recent years, she was a guest of many government summits in the Middle East and Africa, where she held talks with the Uganda Government on the preservation of the Lake Victoria.

Constantly involved in projects aimed at redefining urban tissue and implementing the latest possible solutions in real estate sector.

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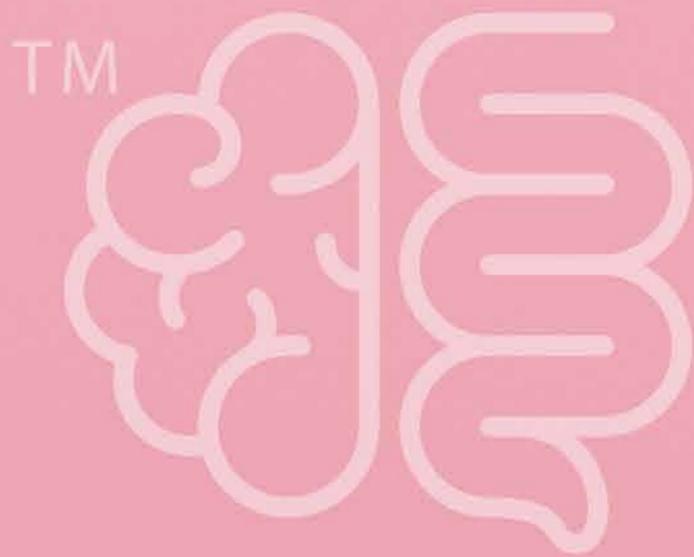
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