Your DNA.
Your Diet.

MetaCheck
Gene Diet

Analysis results

COGAP

Analysis from 21.03.2025

Thank you very much!

Thank you for choosing our MetaCheck! A sustainable and healthy diet is the basis for health, performance and quality of life. By taking this test, you have taken the first important step towards this. Whether it's weight loss or maintaining a healthy diet, this test will provide you with information about yourself that can help you achieve your desired goal. Before you start implementing your results, please read our notice below.

We wish you much success!

Notice:

Your MetaCheck is a computer-assisted gene metabolism analysis based exclusively on your genetic sample. Other findings already known to you are not included. For the evaluation, only your metabolic genes are analyzed - with the exception of the genes mentioned below. The analyzed genes show different constellations, which are assigned to the individual Meta-types. They do not allow any conclusions to be drawn about relationships. Nor do they allow any conclusions to be drawn about disease risks. The sample material is destroyed after analysis!

Since an increased intake of foods containing gluten and/or lactose may occur in the course of the dietary change, the genes that may be responsible for gluten/lactose intolerance are also analyzed. However, a genetic predisposition unfavorable to gluten/lactose intolerance does not allow the conclusion that such gluten/lactose intolerance does not exist or cannot occur, and a genetic predisposition favorable to gluten/lactose intolerance does not allow the conclusion that gluten/lactose intolerance actually exists or will occur. If the result of your genetic analysis shows a disposition in favor of gluten/lactose intolerance, this was taken into account purely as a precautionary measure in the context of risk minimization in the dietary recommendation with the avoidance or reduction of gluten- and/or lactose-containing food(s).

Also, the gene analysis in this regard and the information provided by CoGAP GmbH for this purpose do not replace medical advice, treatment and/or diagnosis, but only serve to minimize risks when recommending nutrition within the framework of the MetaCheck concept. Please consult a specially trained physician for medical advice, diagnosis and/or treatment, especially nutrition-related health problems, and also for the inclusion of previous findings. When drawing up the respective individual diet plan, attention must be paid to the diet target, taking into account person-specific characteristics (e.g. gender, age, weight, state of health, etc.).

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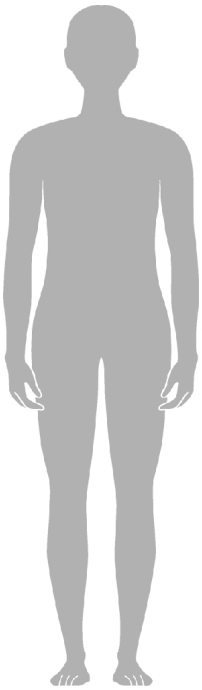
That's me!

MetaCheck Summary



Meta-type: Delta

Sport-type: E

Weight: 125 kg

Size: 174 cm

Age: 33

Gender: female

BMI: 41.3

Macronutrients

Carbohydrates
55 %

Proteins
15 %

Fats
30 %

Your average daily total energy requirement with light physical activities: 2469 kcal

The total energy requirement always consists of your basal and active metabolic rate! The optimal amount of calories for you depends on your calorie consumption at rest (basic metabolic rate) and physical activity (active metabolic rate). Your CoGAP® consultant will be happy to help you determine your exact calorie requirements.

Your different tendencies:

Yo-Yo effect
no higher tendency

Saturation
no weaker satiety

Loss of muscle mass during a diet
no higher tendency

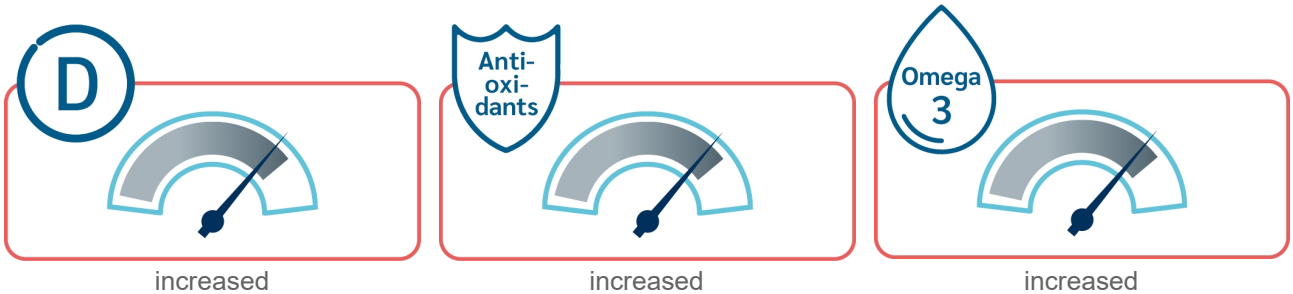
Hunger
no stronger feeling

Visceral adipose tissue
no higher tendency

Micronutrient need

(normal - increased)

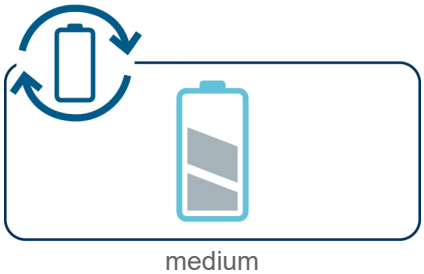
normal | increased | normal



increased | increased | increased

Regenerative capacity

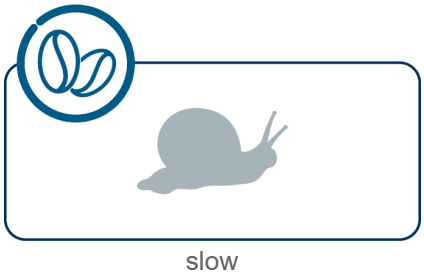
(weak - medium - strong)



medium

Caffeine breakdown

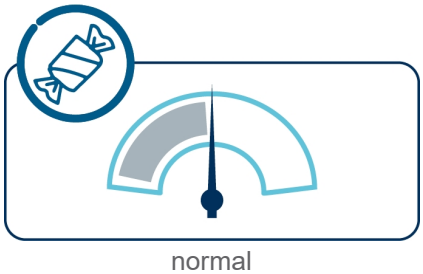
(fast - slow)



slow

Sweet cravings

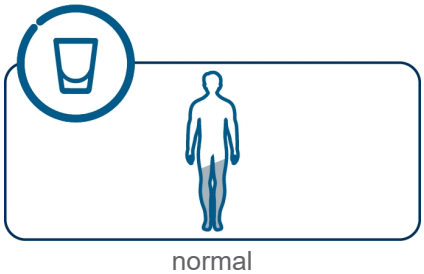
(normal - increased)



normal

Alcohol breakdown

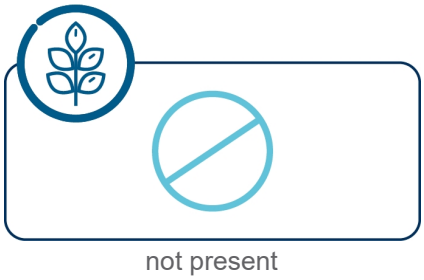
(normal - limited)



normal

Predisposition to gluten intolerance

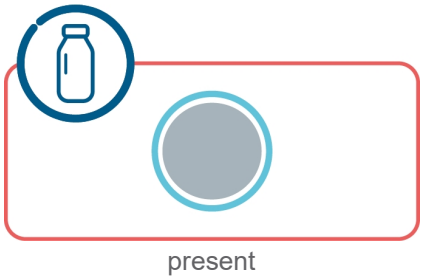
(not present - present)



not present

Predisposition to lactose intolerance

(not present - present)



present

Introduction

The secret lies in your genes

Are you struggling with being overweight and the associated inconveniences in everyday life? Then you are not alone, because obesity has become one of the greatest challenges facing humankind in the world today. Although many people want to lose weight quickly and healthily, it is very difficult for them to lose weight successfully and, above all, in a sustainable way. Given the overload of dieting solutions, it is not surprising that many people cannot find the right diet for themselves. Should I go low carb? Or reduced fat? How do I know which diet is right for me and, above all, what is good for me? The answer to these questions is as simple as it is ingenious. It is in our genes, and therefore in ourselves!

In addition to a positive energy balance, genetics plays the most important role in the development of obesity. Family studies, including studies of twins and adopted children, have shown that obesity is mainly due to hereditary factors. In other words: **every body functions biologically differently, and there is no patent recipe for losing weight!**

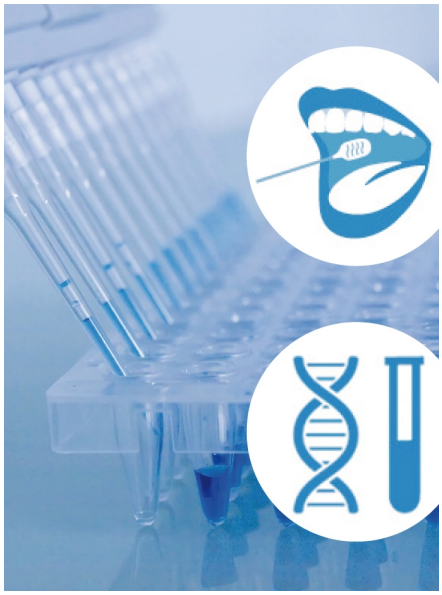
The role of evolution

In the course of evolution, the human body had to adapt to new living conditions time and time again. As hunters and collectors, our early food consisted mainly of protein- and fat-rich foods. For hunting, humans had to be particularly fast and skilfull. Our metabolism at the genetic level adapted to this way of life.

When people began farming and livestock breeding a few thousand years ago, their dietary habits and physical requirements changed. Endurance was now important for the agricultural activity, and our diet consisted increasingly of carbohydrates derived from the crops we grew.

Since the change in our respective ways of life was not carried out by all humans at the same time (even today there are still isolated nomads), the adaptation of genes did not take place at the same speed. As different populations mixed with each other (e. g. within the framework of migration), different genetic metabolism types developed. These are the so-called meta-types, as well as the sport variants.

Test procedure of the MetaCheck



Your MetaCheck helps you identify your personal meta-type and allows you to adapt your nutritional and exercise behavior to your genes. In addition to the factors relevant to weight management, we have analyzed 13 other important elements to help you optimize your diet. We looked at whether you tend to have vitamin deficiencies, whether it is advisable to avoid foods containing lactose and gluten, and how your body reacts to alcohol. Your genes also provide the answer to how you design your exercise plan to burn more calories and build more muscle mass. For this purpose, the genetic material (DNA) of your cheek swab will be isolated and purified in the laboratory. Your DNA will then examined in the laboratory using state-of-the-art sequencing technologies. CoGAP uses a scientific study database which has been created especially for this purpose. It is constantly updated to evaluate the information obtained from this data and analyze it with regard to your meta-type. Since your entire genome (complete DNA) does not have an influence on your metabolism, CoGAP only examines the genes (DNA sections) that are relevant for the determination of your meta-type. These genes include those:

- which are involved in the weight control system
- whose effect on the body can be positively influenced by dietary or behavioural changes
- which are expressed differently in different people

Since the genes investigated have many different constellations that are attributed to individual meta-types, the latter do not allow conclusions to be drawn about family relationships. Similarly, genes that allow disease-related statements were excluded from the examination.

Quality assurance

The genetic analysis of the MetaCheck samples is carried out by the DNA analytical laboratory of humatrix AG in Pfungstadt, Germany. Since its inception in 2001, humatrix has specialized in human DNA research and has set qualitative standards in the field of private genetic parentage testing. Meanwhile, the company's focus is on personalized medicine. Here, humatrix offers nationwide test systems for the prevention of inefficiencies and side effects in drug therapies in cooperation with physicians and pharmacists.

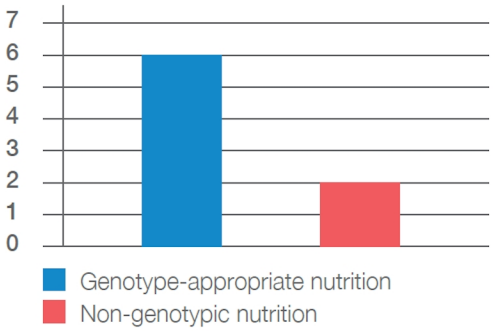
For humatrix, the highest priority is the quality of the analysis, the certainty of results and the protection of data privacy. The company operates a quality management system according to DIN EN ISO-IEC 17025. The humatrix AG laboratory is accredited for genetic parentage testing (DAkkS D-PL-17498 01-00) and undergoes biannual external quality monitoring by independent institutions. Continuous certifications by the GEDNAP and DGAB (forensics) as well as the INSTAND e.V. (diagnostics) show that humatrix also lives up to its high-quality promises.

The MetaCheck has proven itself!

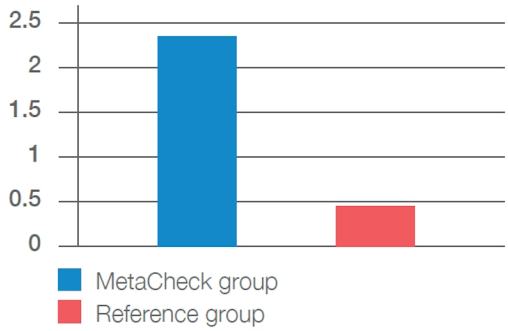
Retrospective studies from the USA show that a gene-based diet that matches the genetic characteristics of the person seeking advice can achieve better results in weight loss than a diet that ignores these physiological properties 1. In order to test the effectiveness of the MetaCheck, a comparative study was carried out at the German Sport University Cologne. A group of subjects adapted their diet and athletic activities to the MetaCheck. The comparative group followed traditional recommendations on weight loss. After 6 – 9 months, the MetaCheck group was significantly more successful than the comparative group. The study participants who were allocated to the MetaCheck group were able to reduce their body mass index by an average of 2.33 points, while the comparative group of subjects showed an improvement of only about 0.43 points 2.

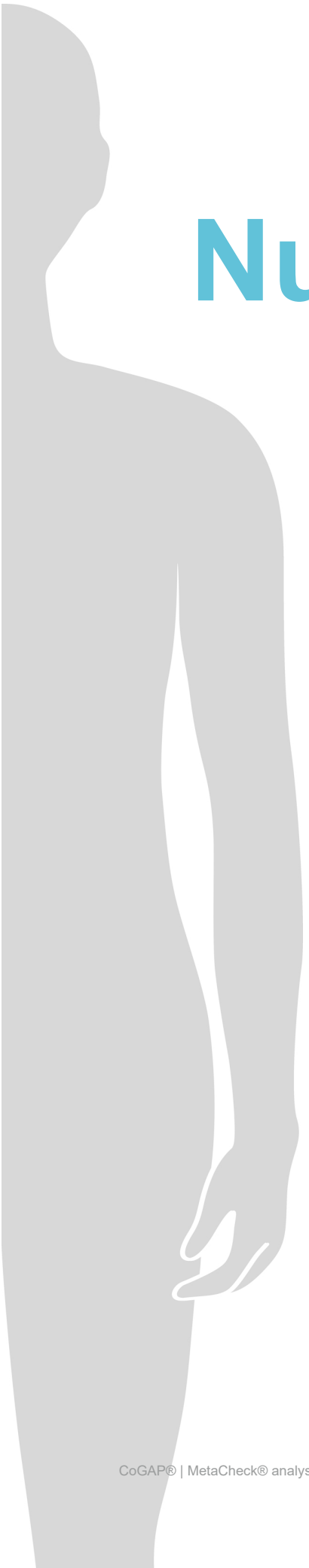
These and other studies have shown that a diet adapted to specific genes is much more successful and sustainable than an arbitrarily selected diet!

[1] Weight reduction (kg) in 12 months



[2] BMI reduction in 6 – 9 months





Nutritional part

Lose weight effectively and sustainably!

Results

A brief summary of your results

Energy Source	Effect	− Magnitude of effect +
Carbohydrates	positive	
Proteins	negative	
Fats	positive	

Factor	Effect	Speed	Endurance
Exercise	Endurance		

You have the Meta-type Delta and the **Sport-type E**.

Delta

The meta-type Delta is characterised by the fact that it processes both carbohydrate-containing and fatty foods very well and therefore converts them less strongly into body fat. In this case, the proportion of protein-rich foods should be reduced within the scope of a diet for rapid weight loss, as they are less well metabolized and more strongly stored in the form of body fat.

The optimal diet plan for your meta-type can be found on page 21.

Endurance

Your sport type E means that you will have a more effective and therefore higher calorie consumption in all endurance-based sports (such as jogging, Nordic walking, swimming and rowing) than in high-speed sports.

Detailed information about your sport type can be found on page 33.

Optimal macronutrient distribution

Phase 1: The first 4 weeks

The following figure shows your macronutrient distribution for the first 4 weeks.

At the beginning of a meta-type dietary change for weight loss, you can use these values to adjust the distribution of energy requirements in the form of macronutrients. We have put together a nutrition plan for you on page 21 so that you can start right away.

Carbohydrates

As a meta-type Delta you more easily metabolize carbohydrate-containing foods compared to the average population. This means that these foods are stored more slowly in the form of fatty tissue in your body. Therefore, a reduction in the amount of carbohydrates (potatoes, pasta, rice, sugar, white flour) is hardly necessary for your diet.

Note that in order to lose weight, you should not only adjust the proportion of carbohydrates in your diet, but also the amount of carbohydrates. However, longer fasting is not recommended, as this can lead to the aforementioned yo-yo effect in addition to hunger attacks due to the dynamics of the metabolism.

Since you metabolise carbohydrates very well, an average increase in the carbohydrate intake above the recommended level is advantageous. For this reason, we recommend that you consume energy from carbohydrate-containing food as follows:

What are carbohydrates?

Apart from proteins and fats, carbohydrates – also known as saccharides – are an essential component of our diet. They are found in foods such as potatoes, pasta, and bread and they provide the human body with important energy.

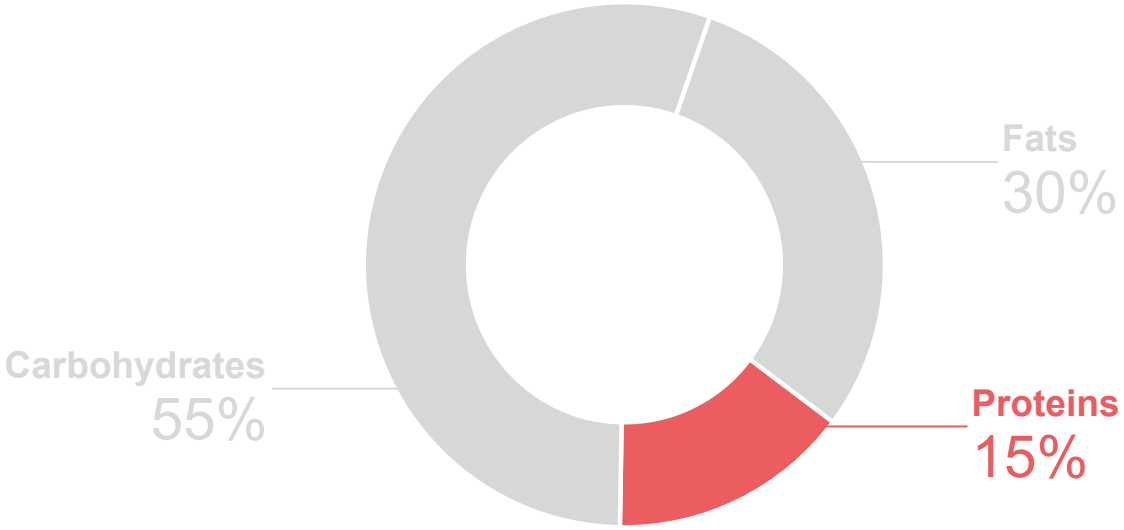
In contrast to fats, they are used quickly and can thus supply the body with energy in the shortest possible time.Carbohydrates are subdivided into simple and complex carbohydrates. Simple carbohydrates (e. g. in confectionery) provide energy quickly but at short notice, whereas complex carbohydrates (e. g. whole grain products and other starchy foods) release energy more slowly over a longer period of time.

Proteins

The metabolism of protein-rich foods works less well for you as a meta-type Delta, i. e. they are more strongly converted into body fat than carbohydrate-rich foods. The optimal diet for your meta-type should tend not to consist of protein-rich or protein-containing foods (e. g. eggs, legumes, fish, meat, tofu and dairy products).

Please note that if you wish to lose weight, you must first reduce the total amount of food before you adjust the protein content accordingly. However, despite your genetic predisposition, you should not completely go without proteins, as the protein deficiency triggered by this process can have serious consequences in the form of the loss of important cell components and muscle mass.

Because you metabolize proteins less effectively, a medium reduction of the protein intake below the recommended level is advantageous. Therefore, we recommend that you take energy from protein-containing food as follows:



What are proteins?

Proteins are considered to be the most valuable macronutrients in the diet. They consist of amino acids and serve as basic building blocks for all cells in the body. Not only muscle tissue, but also organs, hormones, and messenger substances consist of proteins.

Adequate daily protein intake should be ensured, otherwise the body will break down important muscle tissue. On the other hand, too much protein can lead to health problems. The exact amount of protein required for the human body has remained a mystery for many years. For decades, nutritionists recommended eating only a small amount of protein in food. Today, however, a per day amount of about 0.8 g protein per kilogram of body weight is recommended. On average, however, protein intake in Germany is already above the recommendation, at more than 1 g per kilogram of body weight per day.

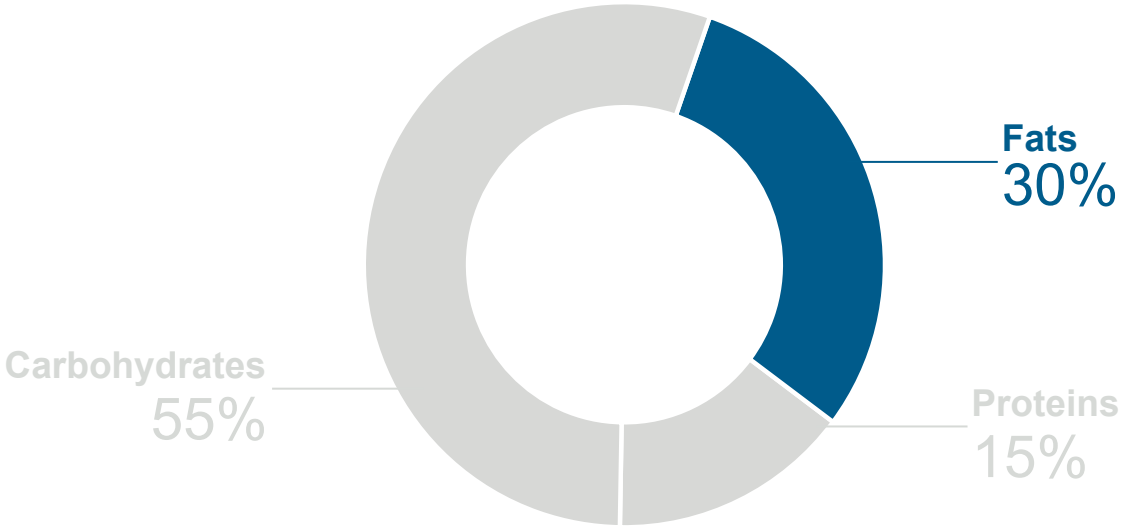
Fats

As a meta-type Delta the metabolism of fats works very well for you. This means that when you ingest fats with food, a below-average amount of that fat is converted into body fat. This means that you do not have to go without fatty foods or reduce their share of the diet.

Please note, however, that a very high-fat diet with predominantly saturated fatty acids (animal fats, such as butter) can generally have harmful effects on health. For example, cholesterol, which is mainly derived from animal fats, can accumulate in the arteries and increase the risk of stroke or heart attack.

Therefore, you should avoid saturated fatty acids (animal fats, such as butter) as far as possible and instead eat unsaturated fatty acids (vegetable oils, fish oils) in a ratio of 1:5 (omega 3 to omega 6). Omega 3 fatty acids are found in linseed oil and hemp oil as well as in cold-water fish such as herring, mackerel and salmon. Omega 6 fatty acids are mainly found in animal products and in sunflower, corn and safflower oils.

Because you are able to metabolize fats very well, a medium increase in fat intake is recommended. For this reason, we recommend that you consume energy from fatty foods as follows:



What are fats?

Apart from carbohydrates, fats are the body's most important source of energy. The physiological calorific value of fat is more than double that of carbohydrates and proteins. Fats are also carriers of fat-soluble vitamins, such as A, D, E and K.

As part of a balanced diet, a fat intake of about 60 – 80 g per day is recommended. However, these reference values are guidelines for the maximum absorption of fats. It is quite possible to manage with much less fat in the food. If you want to lose weight, it is precisely through fat that you can save unnecessary calories. Your MetaCheck consultant will be happy to help you determine your individual calorie requirements.

Weight loss factors

Your CoGAP MetaCheck® not only determines your meta- and sports type, but also your tendencies towards the yo-yo effect, loss of muscle mass during a diet, hunger, satiety and visceral adipose tissue. Your analysis revealed the following:

Trend towards yo-yo effect

The onset of new, undesirable and rapid weight gain after a successful diet is called the yo-yo effect. One of the main reasons for this effect, which is partly due to genetic factors, is that over the course of time certain biological mechanisms are activated in the body of overweight people, which aim to regain the highest body weight to date. These mechanisms are also referred to as "anti-weight loss mechanisms".

Compared to the average population, you have no increased tendency to experience the yo-yo effect.

Therefore, you should aim for a weight reduction of up to 1 kg per week. In order to reduce your weight in a sustainable way, we recommend that you change your diet to suit your meta-type in the long term.

Loss of muscle mass during a diet

In addition to the desired loss of fat mass, a diet can also lead to a loss of muscle mass. A one-sided diet, for example an unhealthy crash diet, can lead to a much greater loss of muscle mass. For this reason, it is particularly important in the context of a diet or long-term nutrional change to pay attention to a meta-type adjusted diet, which is nutritionally meaningful and balanced. In addition, the loss of muscle mass can be counteracted by appropriate exercise.

Compared to the average population, you have no increased tendency to lose muscle mass during a diet.

That's why we recommend that you not only take your meta-type diet into account , but also include sports activities so that you can counteract the general loss of muscle mass. The sports variant determined for you in the MetaCheck analysis will help you with this.

Feeling of hunger

The human body develops a feeling of hunger to ensure an adequate supply of energy and all necessary nutrients. The feeling of hunger varies from person to person, and can also be perceived as subjective physical sensation. In addition to subjective perception, the genetic component also plays a role.

Compared to the average population, you have no stronger feeling of hunger.

However, if you feel hungry, we recommend that you take care of sufficient hydration between meals.

Feeling of satiety

In contrast to the feeling of hunger, the body signals that sufficient food has been ingested with a feeling of satiety, and the meal can be ended accordingly. Through the interaction of hunger and saturation, the body regulates food intake and thus ensures an adequate supply of energy and nutrients. Like the feeling of hunger, the feeling of satiety is also determined by genetic components. Depending on the genetic predisposition, the feeling of satiety can also occur much more slowly, which in turn leads to increased food intake.

You have no weaker feeling of satiety compared to the average population.

However, we recommend that you eat your Meta-Type meals slowly, as slow eating usually enhances the satiety.

Visceral adipose tissue

In humans, and all vertebrates in general, the fat that is stored in the free abdominal cavity and envelops the internal organs is called visceral adipose tissue. Primarily, it provides mechanical protection for the internal organs and serves as an energy reserve in the event of a lack of food. Unlike subcutaneous fatty tissue, visceral fat is not visible in normal amounts. However, in larger quantities it is noticeable by a clear increase in the abdominal volume. Since visceral adipose tissue is more active in metabolic physiology than fatty tissue in other regions of the body, it is disadvantaged against other fatty tissue.

Compared to the average population, you have no higher tendency to visceral adipose tissue.

However, in the context of weight loss, we recommend that you follow a meta-type diet and moderate physical activity that is appropriate for your sport type, so that your metabolism remains active and that you reduce fat in the long term.

Micronutrients - vitamins, antioxidants and omega 3 fatty acids

Vitamins belong to the group of micronutrients. They strengthen the immune system, ensure growth and development (e.g. blood formation, cells, bones and teeth), and are involved in almost all metabolic processes. Basically, they are divided into fat-soluble and water-soluble vitamins. Fat-soluble vitamins can be stored in the body. These include vitamins A, D, E and K. All other vitamins are water-soluble. The body cannot store these. The excess amounts are excreted in the urine.

With a few exceptions, such as vitamin D, vitamins are considered essential because the body cannot produce them itself. They must therefore be ingested with food. With a healthy and varied diet, the body is usually also well supplied with vitamins. Nevertheless, special life situations and eating habits can lead to an increased vitamin requirement. Examples include pregnancy and breastfeeding period, increased nicotine and alcohol consumption, increasing age, stressful daily life, regular sports activities and genetic dispositions that are associated with lower vitamin levels. Therefore, it is always important to pay attention to the micronutrient supply for the optimization of the diet plan. Below we show you the results of the genetic test and what you should pay special attention to in your diet.

Vitamin A

Vitamin A, also called retinol, is a fat-soluble vitamin and is mainly found in animal products such as liver, milk, eggs and fish oil. It is particularly important for the protection and function of the skin, eyes and mucous membranes. While retinol is the active form of vitamin A, provitamin A beta-carotene is a precursor of vitamin A that can be converted to the active form in the body. Provitamin A carotenoids are found mainly in plant foods such as carrots, sweet potatoes, spinach, kale, peppers, pumpkin and apricots. The recommended daily intake of vitamin A is 900 micrograms for men and 700 micrograms for women.

You have a genetic variant associated with normal vitamin A levels. Therefore, for vitamin A, we recommend that you follow the common recommendations for vitamin and micronutrient intake. Foods rich in vitamin A such as the above examples are particularly suitable for this purpose.

Vitamin B9 (folate)

Vitamin B9, also called folate, is a water-soluble vitamin from the vitamin B complex that is important for healthy cell division and growth as well as for the immune system. It is involved in a variety of metabolic processes and is especially important during pregnancy to support the development of the fetal brain and spinal cord. The industrially produced form of the vitamin is called folic acid. Good sources of vitamin B9 include green leafy vegetables such as spinach and kale, legumes such as lentils and beans, and avocados, asparagus, broccoli, beets, citrus fruits and wheat germ. The recommended daily allowance for vitamin B9 for adults is 400-600 micrograms per day. For pregnant women and during breastfeeding period, the daily requirement increases significantly and should always be discussed with the attending physician.

You have a genetic variant which, according to current studies, is associated with lower vitamin B9 levels. This does not mean that you also currently have a too low vitamin B9 level. In any case, we recommend that you optimize your intake of vitamin B9 as a preventive measure by paying attention to your diet and eating foods that are rich in vitamin B9. The above-mentioned examples and corresponding dietary supplements are particularly suitable for this purpose.

Vitamin B12

Vitamin B12 is a water-soluble vitamin from the vitamin B complex. It is important for the function of the nervous system and is involved in the formation of DNA as well as red blood cells. Natural sources of vitamin B12 are of animal origin, such as meat, fish, eggs and dairy products. It is not found in plant foods, or only in very small amounts that are insufficient for a reliable supply. Vegans in particular should therefore cover their requirements with suitable dietary supplements. Alternatively, there are also cereal products enriched with vitamin B12 and soy milk. The recommended daily allowance for vitamin B12 for adults is 2.4 micrograms per day.

You have a genetic variant associated with normal vitamin B12 levels. Therefore, for vitamin B12, we recommend that you follow the common recommendations for vitamin and micronutrient intake. Foods rich in vitamin B12 such as the above examples are particularly suitable for this purpose.

Vitamin D

Vitamin D is a fat-soluble vitamin that plays an important role in bone health by promoting the absorption of calcium and phosphate in the body. In addition, it is involved in many metabolic processes and is therefore also important for the immune system, nervous system and muscle health. Vitamin D can be obtained from food and can also be produced in the body with the help of sunlight. Foods that contain vitamin D are mainly fatty fish such as salmon, mackerel and herring, as well as eggs, milk and dairy products such as cheese and yogurt. However, the amounts absorbed with food are rather small, so sunlight is the most important source of vitamin D. The recommended daily dose is 20 micrograms and applies only in the absence of self-production.

You have a genetic variant which, according to current studies, is associated with lower vitamin D levels. This does not mean that you also currently have a too low vitamin D level. In any case, we recommend that you optimize your intake of vitamin D as a preventive measure by paying attention to your diet and eating foods that are rich in vitamin D. Since sunlight is the most important source of vitamin D, we recommend that you take special care to spend 5-25 minutes a day outdoors, depending on your skin type.

Antioxidants

During physical activities in general and especially during intense stress, such as regular sports, more free radicals are produced in the body. More precisely, oxygen radicals are produced in the mitochondria as a by-product of energy production (cell respiration). They are highly reactive and can damage a wide variety of biological structures. Normally, the body can counteract the free radicals with naturally occurring antioxidants and antioxidant enzymes. However, if the free radicals predominate because the load is too high or the antioxidant enzymes do not work properly, this leads to damage to the cell and is referred to as oxidative stress. The body's own repair and detoxification functions of the cells can be supported by the supply of suitable antioxidants. These include vitamins C, E, β-carotene, zinc and selenium, as well as secondary plant compounds such as anthocyanins, flavonoids, and catechins. Foods rich in antioxidants include berries, green leafy vegetables, tomatoes, carrots, nuts and seeds.

You have a genetic variant which, according to current studies, is associated with reduced activity of antioxidant enzymes. This does not suggest that you also currently have an increased need for antioxidants. In any case, we recommend that you preventively optimize your intake of antioxidants by paying attention to your diet and eating foods rich in antioxidants. Also with regard to an effective regeneration and recovery after sports activities or strong everyday stress, we recommend you to pay special attention to a sufficient antioxidant intake.

Omega 3

The polyunsaturated omega-3 fatty acids are essential for us humans and must be ingested regularly, as our body cannot produce them itself. However, there is not one omega-3 fatty acid, but different types. α-Linoleic acid, for example, is found primarily in linseed, rapeseed, soybean and walnut oil. Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) are two other important omega-3 fatty acids, which are mainly found in marine fish oils. In the body, α-linoleic acid is metabolized to EPA and DHA. In addition to numerous health benefits, such as the regulation of blood pressure and blood clotting, the additional intake of EPA and DHA helps to reduce inflammatory processes and thus ensures faster regeneration. It is therefore very important, especially for athletes, to ensure a sufficient supply of omega-3 fatty acids. In addition to fish oil capsules, regular consumption of fish or algae is particularly suitable for this purpose.

With respect to your genetic predisposition, we recommend that you preventively optimize your intake of omega-3 fatty acids by paying attention to your diet and eating foods rich in omega-3 fatty acids. Also, with regard to effective regeneration and recovery after sports activities, we recommend that you pay special attention to an adequate intake of omega-3 fatty acids.

Caffeine metabolism

Caffeine is one of the most common stimulants and is contained in a wide variety of beverages. While coffee and black tea, for example, have a natural caffeine content, there are more and more soft drinks or energy drinks to which caffeine is added. In everyday life, caffeine is primarily consumed to temporarily dispel fatigue and increase the ability to concentrate. In addition, it also has a performance-enhancing effect for people during sports. The effect of caffeine is not only broad, but also dependent on one's own genetic predisposition and can therefore vary greatly from person to person. For example, some people can break down caffeine quickly, whereas others metabolize caffeine rather slowly, which can lead to increased inner restlessness, irritability and insomnia. Therefore, caffeine for performance enhancement in sports should always be taken with caution.

You metabolize caffeine slowly compared to the average. We therefore recommend that you do not take caffeine to enhance performance before training, as the stimulating effect of caffeine can last significantly longer than desired.

Sweet tooth

People with a weakness for sweet foods are often describes as having a “sweet tooth”. Sweet foods can include both healthy foods such as fruit and unhealthy foods such as candy and sweet drinks. A, compared to the average, stronger desire for sweet foods can have different reasons. One of these reasons may be a genetic disposition, in which individuals may develop an increased likelihood of eating more sweets and sugary foods. Particularly in the context of a diet and healthy dietary change, it is therefore especially valuable to find out whether there may be a disposition for an increased craving for sweet foods.

You do not have an increased tendency to eat more sweets and sugary foods compared to the average population. As part of a healthy dietary change, we recommend that you pay particular attention to sugary foods, choosing fruit, for example, as a healthy sweet alternative to sweets and sweetened beverages.

Alcohol

For many, drinking alcoholic beverages is a relaxing or social activity, but for some it can also be unpleasant because of their body's reaction to alcohol. The metabolization, or breakdown, of alcohol in the body is largely carried out by the liver. If the metabolization of alcohol is impaired, it is called alcohol intolerance. This can manifest itself in symptoms such as muscle weakness, palpitations or facial flushing. This intolerance can have various causes, including a genetic predisposition. What is also underestimated in addition to tolerance is the fact that alcohol also contains many calories. For example, a glass of red wine contains about 170 kcal and a pint of beer about 430 kcal. This should always be considered in the context of a diet or a healthy change of diet.

Your genetic analysis has shown that there is no genetic predisposition in favor of alcohol intolerance. However, if you observe any problems after consuming alcoholic beverages, please consult your physician.

Lactose

Lactose, which is for example ingested with milk and dairy products, must be broken down in the intestine with the help of the digestive enzyme lactase. In the case of lactose intolerance, not enough lactase is available to the body due to missing or reduced production, which means that the lactose cannot be digested or can only be digested incompletely. This enzyme deficiency can then lead to symptoms such as diarrhea, bloating, abdominal pain or nausea. The majority of the world's population cannot fully digest lactose after infancy. In Asia and Africa, lactose intolerance affects the majority of the adult population (90% or more), while in Central Europe it affects approximately one in 5 to 10 people. However, the degree of intolerance and the time of onset after birth can vary greatly. Lactose intolerance is not a disease, but it can limit the quality of life and should therefore always be included as part of a healthy dietary change.

Your genetic analysis has shown that there is a genetic predisposition in favor of lactose intolerance. This does not allow the conclusion that a lactose intolerance actually exists or will occur. Nevertheless, we recommend that you change to a low-lactose diet as a precaution. Should you nevertheless consume foods containing lactose and subsequently observe problems, please consult your doctor.

Gluten

Gluten is a protein found in many types of cereals. These include, for example, wheat, rye, oats and barley. In recent years, intolerance to this protein has become increasingly common, and is called celiac disease. Thus, approximately every 600-4000th person in Germany is affected by a gluten intolerance, in children, however, this is estimated to be every 100-400th person. With the gluten intolerance it comes to an overreaction of the immune system and in the consequence to a chronic inflammation of the small intestine. Abdominal pain, diarrhea, vomiting, loss of appetite and lack of weight gain are common symptoms in children, which may appear at the earliest about 3-4 months after the first feeding with gluten-containing foods (e.g. porridge mixtures). Depending on the diet, symptoms are usually first noticed between 6 months and 2 years of age.

The mechanisms by which celiac disease develops are not yet fully understood. However, it is certain that there is a genetic predisposition that contributes in part to the development. >99% of all celiac patients have a specific genetic constellation in the HLA-DQ gene. However, this gene constellation also occurs in >25% healthy individuals, so the presence of this gene constellation does not necessarily predict the onset of celiac disease. Nevertheless, the knowledge of the presence of the genetic prerequisite is useful to optimize one's own diet plan.

Your genetic analysis has shown that there is no genetic disposition in favor of gluten intolerance. You can continue to include gluten-containing foods in your diet. However, if you observe any problems after consuming gluten-containing foods, please consult your doctor.

Let's start! - 4 Week Plan

On the following pages you will find your nutrition plans for the next 4 weeks. Please read the following instructions carefully before starting.

- Each of the four following plans is your personal nutrition plan for an entire week. After consulting with your MetaCheck consultant, stick exactly to these guidelines and discuss any special features (e.g. diabetes, pregnancy or uncertainties) with them.
- For successful, rapid weight loss, it is necessary that you eat only the three meals listed in the diet plans every day and completely avoid snacks in between.
- In your plans, you will find general food names such as "vegetables," "fruits," or "meat/fish/seafood." To achieve the most varied diet possible, you can vary your choices daily. To see which foods you can choose, see the "Food choices for your weekly nutrition plans" listing.
- Alternatively, you can replace up to two meals a day with one serving of MetaShake each.
- Please note that the gram specifications refer to the respective "full" unit and should be adjusted accordingly depending on the quantity specification. Example: 1 cup of low-fat quark equals 250 g and 0.5 cup of low-fat quark equals 125 g.
- You may season the meals as you like with pepper, herbs, garlic, ginger, vinegar or similar. Vegetable broth may also be used to cook the ingredients. Salt should only be used in small quantities.
- The listed foods can also be interchanged as long as the macronutrient energy has a similar composition. Please ask your MetaCheck consultant if you need help.

Important!

Your result shows that you have a genetic predisposition in favor of lactose intolerance. As a precaution, we recommend that you either replace dairy products with vegan alternatives such as soy yogurt, etc., or use a dairy product that is commercially available and labeled "lactose-free". Semi-hard cheeses such as Appenzeller, old Gouda, Emmental, and Edam are considered "lactose-free" because during the long ripening process, the lactose contained in the milk is gradually converted almost completely into lactic acid.

Your result shows that you do not have a genetic disposition in favor of gluten intolerance. When eating bread and pasta, you should choose whole grain varieties if possible. With whole grain products, the whole grain is processed. They therefore contain more fiber, vitamins and minerals than white flour products. If you still experience discomfort after eating foods containing gluten, please consult a doctor.

Food selection for your weekly nutrition plans

We recommend that you include as many different of the foods listed below as possible in your meals over the next 4 weeks to ensure a varied diet.

Vegetables: artichoke, aubergine, cauliflower, broccoli, chicory, chicory, chinese cabbage, iceberg lettuce, endive, fennel, green cabbage, cucumber, ginger, kohlrabi, lettuce, pumpkin, mangold, carrots, paprika fruits, parsnip, leek, radish, rhubarb, Brussels sprouts, beetroot, red cabbage, red cabbage, rocket, sauerkraut, chives, celery, celery, soya sprouts, asparagus, spinach, tomatoes, Jerusalem artichoke, cabbage, savoy cabbage, zucchini, onion

Legumes: white beans, peas, chickpeas, lentils, kidney beans, soybeans

Vegetable protein: (Smoked) tofu, seitan, dried products made from pea or soy protein, lupino made from lupine flour, tempeh

Fruit: pineapple, apple, orange, apricot, banana, pear, blackberry, strawberry, pomegranate, grapefruit, rosehip, blueberry, raspberry, elderberry, honeydew melon, redcurrants (red and black), kaki, prickly pear, cherries (sour and sweet), kiwi, lime, litchi, tangerines, mango, melon, mirabelle plums, nectarines, oranges, papaya, passion fruit, peach, plums, cranberries, quince, sea buckthorn berries, gooseberries, watermelon, grapes, lemon

Raw vegetables: chicory, Chinese cabbage, iceberg lettuce, endive, lamb's lettuce, fennel, pickled cucumber, cucumber, kohlrabi, lettuce, carrots, pepper, radicchio, radish, rhubarb, red cabbage, rocket, celery, bean sprouts, asparagus, spinach, tomatoes, cabbage, onion

Examples for implementation in daily life

Meal: Lunch, Ingredients: Whole grain pasta, vegetables, legumes, seeds, nuts

	Whole grain penne ratatouille with beans, as topping seeds, nuts • Whole grain pasta • Tomato • Bell pepper • Zucchini • Eggplant • Peas • Seasonings: Vegetable broth, pepper, italian herbs e.g. basil • Walnuts
	Spinach lentil lasagna (whole grain), as a snack seeds, nuts • Whole grain lasagna plates • Plate lentils • Chopped frozen spinach or fresh spinach • Onion, garlic • Seasonings: Pepper and vegetable broth • Sunflower seeds
	Whole grain spaghetti with lentil nut Bolognese • Whole grain spaghetti • Boiled tomatoes • Red lentils • Sunflower seeds • Carrot • Onion • Parsley • Seasonings: Pepper, vegetable broth, Italian herbs

Nutritional plan

Your starting weight:	Your body fat content:	Your muscle percentage:

Your meta-type optimized nutrition plan for week 1:

meal	amount	unit	ingredient
Breakfast	6	tablespoon	oats
or MetaShake	1	piece or handful (130 g)	fruit
	1	small cup (150 g)	plain yogurt (3.5 % fat)
Lunch	60	gram	whole grain pasta (uncooked)
or MetaShake	4	handful (60 g)	vegetables
	50	gram	legumes
	30	gram	seeds
Dinner	2	slice (50 g)	Whole grain bread
or MetaShake	2	handful (60 g)	raw vegetables
	2	teaspoon	vegetable oil
	1	tablespoon	vinegar or lemon juice

Your weight after week 1:	Your body fat content after week 1:	Your muscle percentage after week 1:

Your meta-type optimized nutrition plan for week 2:

meal	amount	unit	ingredient
Breakfast	1	slice (50 g)	Whole grain bread
or MetaShake	10	gram	Vegetable spread
	50	gram	seeds
	3	tablespoon	oats
	1	piece or handful (130 g)	fruit
	1	small cup (150 g)	plain yogurt (3.5 % fat)
Lunch	0.5	small cup (125 g)	whole grain rice (uncooked)
or MetaShake	4	handful (60 g)	vegetables
	50	gram	Vegetable protein
Dinner	1	slice (50 g)	Whole grain bread
or MetaShake	25	gram	low-fat cottage cheese (< 10% FDM)
	2	handful (60 g)	raw vegetables

Your weight after week 2:	Your body fat content after week 2:	Your muscle percentage after week 2:

Your meta-type optimized nutrition plan for week 3:

meal	amount	unit	ingredient
Breakfast	50	gram	fruit muesli without added sugar
or MetaShake	0.5	piece or handful (130 g)	fruit
	1	glass	milk (3.5% fat)
Lunch	240	gram	potato
or MetaShake	4	handful (60 g)	vegetables
	1	Piece size S	chicken egg
Dinner	2	slice (50 g)	Whole grain bread
or MetaShake	1	slice (30 g)	cheese (< 10 % FDM)
	1	small cup (150 g)	plain yogurt (3.5 % fat)
	1	piece or handful (130 g)	fruit
	25	gram	seeds

Your weight after week 3:	Your body fat content after week 3:	Your muscle percentage after week 3:

Your meta-type optimized nutrition plan for week 4:

meal	amount	unit	ingredient
Breakfast	1	slice (50 g)	Whole grain bread
or MetaShake	20	gram	Vegetable spread
	1	piece or handful (130 g)	fruit
	1	small cup (150 g)	plain yogurt (3.5 % fat)
Lunch	60	gram	quinoa
or MetaShake	4	handful (60 g)	vegetables
	100	gram	Sprouts
Dinner	2	slice (50 g)	Whole grain bread
or MetaShake	50	gram	low-fat cream cheese (10 % fat) ...
	2	handful (60 g)	raw vegetables
	40	gram	seeds

Your weight after week 4:	Your body fat content after week 4:	Your muscle percentage after week 4:

Meta-Type specific food-list

Based on your meta type Delta you will find in the following tables different foods, which are color-coded according to their potential for weight loss.

Most suitable
Suitable
Poorly suitable

Cereal(-products) and pseudocereals

Baked goods

- Baguette
- Black bread (whole grain)/"Pumpernickel"
- Bread, whole grain (all types of cereals)
- Crispbread
  - Crispbread, whole grain
- Croissant
- Flatbread
  - Flatbread, whole grain
- Multi-grain bread
- Prezel
- Roll, wheat
  - Roll, whole grain
  - Breadcrumbs
  - Breadcrumbs, whole grain
- Rusk, without egg
  - Rusk, without egg, whole grain
- Rye bread, sourdough
- Toast, wheat
  - Toast, whole grain
- White bread

Breakfast cereals

Flakes

- Buckwheat flakes
- Millet flakes
- Oat flakes
  - Oat flakes, instant
- Quinoa flakes
- Rye flakes
- Whole grain flakes (e. g. "6-Korn-Flocken")
- Whole wheat flakes

Other

- Amaranth, puffed, unsweetend
- Breakfast bisciuts, with added sugar
- Breakfast cereals, with added sugar
- Chia seed pudding, with milk (1.5 % fat)
- Cornflakes, no added sugar
- Crunchy granola, with added sugar
- Muesli bar/granola bar, with added sugar
- Muesli with dark chocolate
- Muesli with dried fruits, no added sugar
- Muesli with nuts, no added sugar
- Overnight oats, with milk (1.5 % fat)
- Porridge, dry product, no added sugar
- Quinoa, puffed, no added sugar
- Smoothie bowl, with fresh fruit and cottage cheese

Doughs and mixes

- Flammkuchen dough, ready to bake
- Pancake mix (dry product)
- Pizza dough, ready to bake
- Puff Pastry, ready to bake

Grains, flours, grinding products (containing gluten)

- Barley, seed
  - Pearl barley
- Oats, seed
  - Oat bran
- Rye, seed
- Spelt, seed
  - Spelt bran
  - Green spelt (unripe spelt grain)
- Wheat, seed
  - Bulgur
  - Couscous
  - Wheat semolina
  - Wheat germs
  - Wheat bran
  - Tender wheat ("Ebly")

Flours (all sorts containing gluten)

- Pastry flour (US)/soft flour (UK)/Type 405 (D)
- All-purpose flour (US)/plain flour (UK)/Type 550 (D)
- First clear flour (US)/ hard flour (UK)/Type 1050 (D)
- Flour, whole wheat/wholemeal

Ancient grains

- Einkorn, seed
- Emmer, seed
- Kamut, seed
- Triticale, seed
- Flour, wholemeal (from ancient grains)

(Pseudo)Cereals, flours, grinding products (gluten free)

- Amaranth, seed
- Buckweed, seed
- Corn, seed
  - Cornmeal/Polenta (maize semolina)
  - Corn, Popcorn (pure)
  - Corn, Popcorn, with sugar (cinema popcorn)
- Flour, wholemeal (gluten free grains)
- Millet, seed
- Quinoa, seed
- Rice, Basmati
  - Rice, whole grain (Parboiled)
  - Rice, wild rice

Thickeners and starch

- Agar
- Arrowroot, powder
- Corn starch
- Gelatine, clear, unflavoured
- Guar gum, powder
- Inulin
- Locust bean gum, powder
- Pectin
- Potato starch
- Rice starch
- Sago (Pearl tapioca)
- Wheat starch
- Xanthan gum, powder

Pasta products	
Glass noodles/Chinese noodles, uncooked	
Instant noodles (dry product)	
Kritharaki (Greece pasta), uncooked	
Legume-pasta (from lentils etc.), uncooked	
Pasta, egg free, uncooked	
Pasta, egg free, wholemeal, uncooked	
Pasta, egg pasta, uncooked	
Rice noodles, uncooked	
Shirataki noodles, uncooked	

Milk and dairy products, cheese and eggs

Cheese	
Cream cheese	
Cream cheese preparations	
3 % fat absolute, low fat	
17 % fat absolute, medium fat	
25 % fat absolute, full fat	
Cottage cheese, 3.9 % fat absolute	
Fruit quark, 0.2 % fat absolute	
Fruit quark, 3.5 % fat absolute	
Mascarpone, 80 % FDM	
Mozzarella, buffalo milk	
Mozzarella, cow's milk	
Mozzarella, cow's milk, low fat	
Quark, low fat, < 10 % FDM (0.2 % fat absolute)	
20 % FDM, semifat	
40 % FDM, full fat	
Ricotta, 45 % FDM	
Schichtkäse, 10 % FDM	
Soft cheese	
Brie, 50 % FMD	
Camembert, 45 % FMD	
Camembert, 30 % FMD	
Feta (sheep's milk), 45 % FMD	
Feta (sheep's milk), light, 9 % fat absolute	
Gorgonzola, 50 % FMD	
Brined cheese/"Feta" (cow's milk), 45 % FMD	
Brined cheese (cow's milk), 12 % absolute	
Limburger, 40 % FMD	
Processed cheese, 45 % FMD	
Processed cheese, slices	
Romadur, 30 % FMD	
Roquefort, 52 % FMD	
Saint Albray, 62 % FMD	
Sliced cheese	
Buttercheese, 60 % FMD	
Buttercheese, 30 % FMD	
Gouda, 48 % FMD (29 % fat absolute)	
Gouda, 30 % FMD (18 % fat absolute)	
Edamer, 45 % FMD	
Edamer, 30 % FMD	
Tilsiter, 45 % FMD	
Tilsiter, 30 % FMD	
Leerdammer, 45 % FMD	
Hard cheese	
Appenzeller, 50 % FMD	
Cheddar (Chester), 50 % FMD	
Emmentaler, 45 % FMD	
Greyerzer/Gruyère, 45 % FMD	
Manchego, 50 % FMD	
Mountain cheese, 45 % FMD	
Parmesan, 37 % FMD	
Pecorino, 40 % FMD	
Provolone, 45 % FMD	
Sour milk cheese	
Bauernhandkäse	
Harzer cheese ("Mainzerkäse")	
Plant-based cheese, vegan	
Vegan cheese, made from coconut oil and starch	
Vegan cheese, made from nuts	

Dairy products	
Buttermilk, max 1 % fat	
Buttermilk, with fruit	
Condensed milk, 7.5 % fat	
Crème fraîche, 30 % fat	
Crème double, 42 % fat	
Crème légère, 15 % fat	
Cream, soured, 10 % fat	
Cream, soured, 20 % fat	
Fruit yoghurt 0.1 % fat	
Fruit yoghurt, 3.5 % fat	
Hot Chocolate with skim milk	
Kefir, low fat, 1.5 % fat	
Schmand, 24 % fat	
Sour Cream, 11 % fat	
Sour milk, 3.5 % fat	
Whey, 0.1 % fat	
Whipping cream, 30 % fat	
Cooking cream, 15 % fat	
Plant-based alternative to cream, 7 % fat	
Heavy (whipping) cream, 35 % fat	
Spray cream, 30 % fat	
Yoghurt, natural (plain), non fat, max. 0.1 % fat	
Yoghurt, natural (plain), low fat, 1.5 % fat	
Yoghurt, natural (plain), whole milk, 3.5 % fat	
Yoghurt, natural (plain), greek style, 10 % fat	
Plant-based alternatives to dairy products, vegan	
Plant-based cooking creams	
Coconutmilk, canned	
Creme Vega (soy)	
Cuisine Almond	
Cuisine Coconut	
Cuisine Rice	
Soya alternative to single cream	
Soya alternative to single cream, light	
Plant-based yoghurt	
Coconut yoghurt, sweetened	
Lupine yoghurt, sweetened	
Soy yoghurt, plain, sweetened	
Soy yoghurt, plain, unsweetened	
Soy yoghurt, Vanilla	
Soy-almond-yoghurt, unsweetened	
Soy-coconut-yoghurt, unsweetened	
Plant-based quark	
Quark, from soybeans, sweetened	
Quark, from soybeans, unsweetened	
Silken tofu	
Plant-based spreads	
Alternative to cream cheese (soy), herbs	
Alternative to cream cheese (soy), tomato	
Lard, plant-based, with apples and onion	
Spread, curry and lentil	
Spread, tomatoe and basil	

Eggs	
1 hen's egg (whole), size M	
1 egg white, size M	
1 egg yolk, size M	
Egg replacer, vegan	
Aquafaba (Chickpea Brine)	
Egg replacer with corn starch, dry product)	
Kala Namak (salt with natural egg flavour)	
Soy flour, full-fat	
Soy flour, defatted	

Milk
Milk (cow's milk), 3.5 % fat
Milk (cow's milk), 1.5 % fat
Milk (cow's milk), skimmed, 0.1 % fat
Goat milk
Sheep's milk
Plant-based drinks ("vegan milk")
Almond drink, unsweetened
Caswhewmilk, unsweetend
Coconut drink, unsweetened
Hazelnut drink, unsweetened
Hemp seed drink, unsweetend
Lupine milk, unsweetened
Macadamia milk, unsweetened
Oat milk, unsweetend
Rice & Quinoa drink, unsweetened
Rice milk, unsweetened
Soy milk, unsweetened
Soy milk, banana, sweetened
Soy milk, light, sweetened
Soy milk, chocolate, sweetened
Soy milk, vanilla, sweetened
Spelt drink, unsweetend

Spreadable fats & Oils

Oils suited for the cold kitchen
Avocado oil, cold pressed
Chia seed oil, cold pressed
Hemp seed oil, cold pressed
Pumpkin seed oil, cold pressed
Linseed oil, cold pressed
Rapeseed oil, cold pressed
Sesame seed oil, dark, roasted, cold pressed
Grape seed oil, cold pressed
Walnut oil, cold pressed
Wheat germ oil, cold pressed
Oils suited for the warm kitchen (e.g. for frying vegetables)
Albaöl (Rapeseed oil with butter flavor)
Safflower oil, refined
Peanut oil, refined
Corn oil, refined
Olive oil, native
Plant-based fat for frying (e. g. Rama Culinesse)
Rapeseed oil, refined
Sesame seed oil, not roasted, unrefined
Oils & fats suited for the warm kitchen (for very high temperatures, e. g. searing; deep frying)
Goose fat
Ghee (clarified butter)
Coconut oil, cold pressed
Beef fat (grazer)
Red palm oil , unrefined and cold pressed
Lard
Sunflower oil, refined
Spreadable fats
Aioli
Alsan (plant-based "butter"), vegan
Butter (sweet or cultured)
Salad dressing (mayonnaise and yoghurt), 25 % fat
Mayonnaise, 80 % fat
Mayonnaise, légère 4.8 % fat
Vegetable margarine
Vegetable margarine, light
Remoulade, 60 % fat
Mayonnaise, 50 % fat
Onion lard

Spices, Dips, Sauces & Seasonings

Dips & Sauces (Convenience products)
Aioli
Ajvar (Paprika paste)
Barbecue sauce
Béchamel sauce
Bernaise sauce
Bouillon, powder, without flavour enhancers
Burger sauce
Chutney
Cocktail sauce
Cream sauce
Frankfurt green sauce
Garlic sauce
Gravy, dry product
Guacamole
Hollandaise sauce
Hot dog sauce
Hummus
Ketchup
Mushroom sauce ("Jägersauce")
Olive tapenade
Paprika sauce ("Zigeunersauce")
Peanut sauce
Pesto
Salad dressing "Sylt style", convenience product
Salad dressing, dry product
Salad dressing, oil & vinegar, convenience product
Salad dressing, oil & vinegar, home-made
Salsa sauce
Sweet & sour sauce
Teriyaki sauce
Thousand island dressing, convenience product
Tomato sauce (arrabiata)
Tomato sauce (bolognese)
Tomato sauce, convenience product, jarred
Tsatziki
Yoghurt dressing, convenience product
Seasonings
Curry paste, green
Curry paste, red
Fish sauce
Horseradish sauce
Liquid seasonings (e. g. Maggi)
Miso (japanese spice paste)
Mustard, medium hot
Mustard, sweet
Oyster Sauce
Oyster Sauce, vegetarian
Sambal Oelek
Sesame paste (tahini)
Soy sauce
Tabasco
Tomato puree
Vinegar
Balsamic vinegar (balsamic reduction)
Wasabi
Worcester sauce
Yeast flakes

Spices	
Caraway	
Cardamom	
Chilli paste (harissa)	
Chillies	
Cinnamon	
Coriander	
Cumin	
Curry powder	
Ginger	
Herbs, dried (e. g. oregano, basil, etc.)	
Nutmeg	
Paprika powder	
Pepper	
Spice mixes, with additives (sugar, fat, etc.)	
Spices, pure, without additives	
Turmeric	
Vegetables and vegetable products	
Artichokes, raw	
Artichokes, jarred, preserved in oil	
Asparagus, raw	
Asparagus, jarred	
Aubergine/eggplant, raw	
Bamboo shoots, jarred	
Beetroot, raw	
Beetroot, chips, diep fried	
Beetroot, jarred	
Beetroot, vacuum-treated and sealed	
Broccoli, raw	
Brussel sprouts, raw	
Carrots, raw	
Carrots, canned	
Cauliflower, raw	
Celeriac, raw	
Celeriac, jarred	
Celery, raw	
Chestnuts, raw	
Chinese cabbage, raw	
Fermented Chinese cabbage (Kimchi), jarred	
Cucumber, raw	
Sandwich gherkins, jarred	
Dill pickles, jarred	
Fennel, raw	
Frozen vegetables, without additives	
Garlic, raw	
Ginger, raw	
Ginger, jarred	
Horseradish, Root, raw	
Jerusalem artichoke, raw	
Kale (green cabbage), raw	
Kale, jarred	
Kohlrabi, raw	
Leek, raw	
Lettuce, raw	
Chicory, raw	
Endive, raw	
Head lettuce, raw	
Iceberg lettuce, raw	
Lamb's lettuce, raw	
Radicchio, raw	
Rocket, raw	
Mung bean sprouts, raw	
Mung bean sprouts, jarred	
Mushrooms, raw	
Oyster mushroom, raw	
Butter fungus, raw	
Butter fungus, jarred	
White mushrooms, raw	
White mushrooms, jarred	
Morel, raw	
Morel, dried	
Chanterelles, raw	
Chanterelles, jarred	
Porcini, raw	
Porcini, dried	
Truffles, raw	
Onion, raw	
Parsley root, raw	
Parsnip, raw	
Parsnip, chips, deep fried	
Peas, green, raw	
Pepper fruit , raw	
Pepper fruit, jarred, preserved in oil	
Pointed cabbage, raw	
Potatoes, raw, with peel	
Potato chips	
Potato, jarred	
French fries, ready-to-eat, salted	
Potato flakes (puree, dry product)	
Pumpkin, raw	
Radish, raw	
Red cabbage, raw	
Red cabbage, jarred	
Red radish, raw	
Rhubarb, raw	
Romanesco, raw	
Salsify, raw	
Savoy, raw	
Soy bean sprouts, raw	
Soy bean sprouts, jarred	
Spinach, raw	
Baby spinach, raw	
Creamed spinach, deep frozen	
Spring onion, raw	
String beans, raw	
String beans, canned	
Sugar snaps, raw	
Sweetcorn (cob), raw	
Popcorn, with sugar ("cinema popcorn")	
Corn, puffed, (corn crackers)	
Sweetcorn, canned	
Sweet potato (Batate), raw	
Sweet potato, chips, deep fried	
Swiss chard, raw	
Tomatoes, raw	
Tomatoes, paste, canned	
Tomatoes, dried	
Tomatoes, preserved in oil	
Tomato ketchup, with added sugar	
Tomato puree, salted	
Turnips, raw	
White cabbage, raw	
Sauerkraut, jarred	
Zucchini, raw	
Zucchini, chips, deep fried	
Fresh herbs	
Basil, fresh	
Chive, fresh	
Coriander, fresh	
Dill, fresh	
Garden cress, fresh	
Mint, fresh	
Parsley, fresh	
Watercress, fresh	

Fruits and fruit products

NAS = no added sugar/ AS = with added sugar
Apple, unpeeled, raw
Apple, dried (NAS, non-sulphurized)
Apple, dried (sulphurized)
Applesauce, jarred (NAS)
Apricot, raw
Apricot, canned, sugared
Apricot, dried (NAS, non-sulphurized)
Avocado, raw
Guacamole, jarred
Banana, raw
Banana chips (AS and fat, sulphurized)
Banana, dried (NAS, non-sulphurized)
Blackberry, raw
Blood orange, raw
Blueberries, raw
Blueberries, freeze-dried
Cherries, sour, raw
Morello cherries, jarred, sugared
Cherries, sweet, raw
Cranberries, dried, sugared
Currants, raw, red
Currants, raw, black
Currants, raw, white
Dates, dried (NAS, non-sulphurized)
Elderberries, raw, black
Fig, dried (NAS, non-sulphurized)
Fig, raw
Galia melon, raw
Goji berries, dried (NAS, non-sulphurized)
Gooseberries, raw
Grapefruit, red, raw
Grapefruit, white, raw
Grapes, raw
Black Corinths, dried (NAS, non-sulphurized)
Raisins, dried (NAS, non-sulphurized)
Sultanas, dried (NAS, non-sulphurized)
Honeydew, raw
Kiwi, raw
Lemon, raw
Lemon juice, freshly-squeezed
Lime, raw
Lingonberry, raw
Litchi, raw
Litchi, canned, sugared
Mandarin, raw
Mandarin, canned, sugared
Mango, raw
Mango, canned, sugared
Mango, dried (NAS, non-sulphurized)
Mirabelles, raw
Mirabelles, canned, sugared
Mulberries, dried (NAS, non-sulphurized)
Nectarines, raw
Olives, black, marinated (Greek style)
Olives, green, marinated
Orange, raw
Papaya, raw
Passion fruit, raw
Peach, raw
Peach, canned, sugared
Peach, dried (NAS, non-sulphurized)
Pear, raw
Pear sauce, jarred (NAS)
Pear, canned, sugared
Persimmon, raw
Physalis, raw
Pineapple, raw
Pineapple, canned, sugared
Pineapple, dried NAS, non-sulphurized)
Plum, raw
Plum, dried (NAS, non-sulphurized)
Pomegranate, raw
Pomelo, raw
Quince, raw
Raspberries, raw
Raspberries, freeze-dried
Sea buckthorn berries, raw
Strawberries, raw
Strawberries, freeze-dried
Watermelon, raw

Legumes, kernels, seeds and nuts

Legumes

Beans, white, dried
Beans, white, canned
Chickpeas, dried
Chickpeas, canned
Kidney beans, dried
Kidney beans, canned
Lentils, dried
Lentils, canned
Peas, dried
Peas, canned
Soy beans, dried
Soy beans, canned

Kernels & Seeds

Chia seeds
Hemp seeds, peeled
Linseeds
Pine nuts
Pistachio kernels
Poppy seeds
Psyllium husks
Pumpkin seeds
Sesame seeds, white, unpeeled
Sesame seeds, black, unpeeled
Gomasio
Sunflower seeds

Nuts

Almonds
Brazil nuts
Cashews
Chestnuts
Coconut milk
Coconut paste, 100 % coconut
Coconut, ripe
Hazelnuts
Macadamia nuts
Nut paste (100 % nut)
Peanuts, unroasted
Peanut butter, 100 % peanuts
Peanuts, rosted
Pecan nuts
Tigernuts (nut alternative)
Trail mix
Walnuts

Meat and poultry

Beef

Beef, canned
Beef, fillet
Beef, lean meat without fat
Beef, leg
Beef, liver
Beef, minced (maximum 20 % fat)
Beef, steak tartare (maximum 7 % fat)
Beef, tongue

Game (Quarry)
Hare
Venison (deer, stag)
Venison (roe deer)
Wild boar
Lamb
Lamb, escalope
Lamb, fillet
Lamb, leg
Lamb, meat chop
Lamb, minced
Meat products & sausages
Bierschinken
Blood sausage
Bologna sausage (Fleischwurst)
Bratwurst (pork)
Ham, salted and cooked
Ham, saltet and smoked
Jagdwurst
Liverwurst
Meat loaf (Leberkäse)
Mettwurst (Braunschweiger)
Minced meat (pork and beef, maximum 30 % fat)
Mortadella
Poultry sausage, lean
Salami
Saveloy
Vienna sausage
Meat substitutes
Quorn
Seitan
Soy cutlets
Tempeh
Tofu
Almond-nut-tofu
Silken tofu
Smoked tofu
Vegetarian liverwurst
Vegetarian salami
Vegetarian sausage
Vegetarian schnitzel
Other
Goat
Horse
Rabbit
Pork
Bacon
Pork, belly
Pork, cured, lean
Pork, diced ham (lean)
Pork, escalope (from the topside)
Pork, fillet
Pork, ground ("Mett")
Pork, lean meat without fat
Pork, meat chop
Pork, minced (maximal 30 % fat)
Pork, neck
Poultry
Chicken, roast chicken, whole
Chicken breast, with skin
Chicken breast, without skin
Chicken, boiler
Chicken, heart
Chicken, leg with skin
Chicken, liver
Duck, breast with skin
Duck, leg
Goose, breast with skin
Goose, leg with skin
Turkey, with skin
Turkey hen, breast, without skin
Turkey hen, leg, without skin
Veal
Veal, escalope (no breadcrumb coating)
Veal, fillet
Veal, meat chop
Veal, Wiener Schnitzel (breaded, fried)

Fish and fish products

Brathering, jarred
Brown trout, fresh
Carp, fresh
Caviar (sturgeon), jarred
Caviar (other fish), jarred
Cod, fresh
Common sole, fresh
Crab, fresh
Crustacea (crayfish), fresh
European flounder, fresh
Hake (Merlucciidae), fresh
Halibut, fresh
Lobster, fresh
Northern pike, fresh
Oysters, fresh
Perch, fresh
Plaice, fresh
Pollock (saithe), fresh
Pollock, preseved in oil, canned
Pollock, smoked
Rose fish (red perch), fresh
Scampi, fresh
Sea eel (Seeaal), smoked
Shrimp, fresh
(Skipjack) Tuna, fresh (Katsuwonus pelamis)
Tuna, in oil, canned
Tuna, in water, canned
Zander, fresh
Cuttlefish
Octopus (Pulpo), fresh
Sepia, fresh
Squid, fresh
Cold water fish, high in omega-3 fatty acids
Anchovy, fresh
Anchovy, in oil, canned
Eel, freshwater eel, fresh
Eel, smoked
Herring, fresh
Herring, fillet (Matjesfilet)
Herring, fillet, in cream sauce
Herring, fillet, in tomato sauce, canned
Herring, in jelly
Herring, marinated ("Bismarckhering")
Mackerel, fresh
Mackerel, smoked
Salmon, fresh
Salmon, smoked
Sardine, fresh
Sardine, in oil, canned
Tuna (Thunnus), fresh

Sweets, pastry and sweeteners

Desserts (Ready-to-eat product)
Jelly
Pudding, chocolate
Pudding, vanilla
Rice pudding
Rote Grütze (red fruit dessert)
Semolina pudding
Tiramisu

Ice cream	
Fruit ice (Italian ice)	
Ice cream (with cream)	
Ice cream (with milk)	
Sorbet	
Water ice	
Salty snacks	
Bamba (German: "Erdnussflips")	
Breadstick (Grissini)	
Cheese breadsticks	
Nachos/Tortilla chips	
Potato chips, deep fried	
Salt sticks/Pretzel sticks	
Sweets	
Candy	
Chocolate, with nuts	
Chocolate, dark (= 90 % Cocoa)	
Chocolate, milk	
Chocolate, white	
Gummi candy	
Liquorice (confectionery)	
Marzipan	
Nougat	
Sweeteners	
Agave nectar	
Coconut sugar	
Concentrated apple/pear juice	
Date syrup	
Erythritol, no calories	
Golden syrup	
Honey	
Maple syrup	
Rice syrup	
Stevia (100 %)	
Sugar, brown	
Sugar, white	
Xylitol, 40 % less calories than sugar	
Yacón syrup	
Sweet pastries (Ready-to-eat)	
Apple strudel	
Cake, curd-oil-dough	
Cake, sponge cake	
Cake, yeast dough	
Cookies/Biscuits	
Cream cake	
Fruit tart	
Waffels	
Sweet spreads	
Chocolate-hazelnut spread	
Fruit jelly, all kinds	
Jam, all kinds	
Pear & apple spread, no added sugar	

Beverages

Alcoholic beverages	
Beer (5 %)	
Brandy (32 %)	
Cider (5 %)	
Kölsch beer (5 %)	
Pale lager (5 %)	
Sparkling wine (11-12 %)	
Table wine, white (9-10 %)	
Wine, red (10-12 %)	
Wine, white (10-12 %)	
Non-alcoholic beverages/softdrinks	
Coke	
Coke, no sugar (light)	
Energy drink	
Fanta	
Fermented softdrinks (e. g. Bionade)	
Ice tea	
Ice tea, light	
Malt beer (0.04 - 0.6 %)	
Sprite	
Fruit juices and smoothies	
Apple juice, freshly-squeezed	
Banana juice, direct juice	
Beetroot juice, direct juice	
Blood orange juice, freshly-squeezed	
Buckthorn berry juice, freshly-squeezed	
Carrot juice, direct juice	
Elderflower syrup	
Grape juice, direct juice	
Grapefruit juice, freshly-squeezed	
Juice spritzer, home-made, 3(water):1(juice)	
Orange juice, freshly-squeezed	
Pineapple juice, direct juice	
Tomato juice, direct juice	
Hot beverages	
Cappuccino (without sugar)	
Coffee (no milk, no sugar)	
Coffee (with a little milk, no sugar)	
Coffee, sugared	
Coffee substitute	
Cereal-based coffee	
Malt coffee	
Chicory-based coffee	
Latte Macchiato (no sugar)	
Tea (no sugar)	
Meal replacements	
MetaShake, Type Alpha	
MetaShake, Type Beta	
MetaShake, Type Gamma	
MetaShake, Type Delta	
Smoothies	
Fruit smoothie, freshly made	
Green smoothie, freshly made	
Other beverages	
Beer, alcohol-free	
Brottrunk	
Kombucha (fermented tea)	
Sparkling wine, alcohol-free	

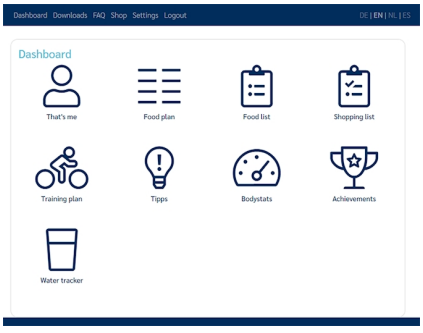
The CoGAP® Nutrition Portal

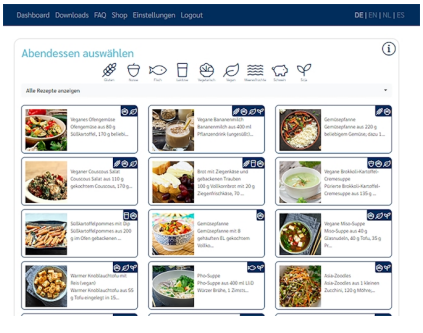
The nutrition portal of CoGAP® (http://healthy-eating.cogap.eu) offers the possibility of receiving recipe suggestions as well as diet and nutritional programmes that are adapted to the calorie requirements in accordance with the meta-type. These take into account not only the meta-types but also other personal characteristics such as gender, age, height, weight and physical activity.

Individualized
Recipe suggestions

Individualized
Nutritional suggestions

BMI calculator, Calorie requirement, Sports and Nutrition tips





Sports section

Burn calories effectively!

E

Many people pursue the goal of building their muscles through sporting activities. The basis for a successful training plan to build muscle is the composition of your own muscle fibre. There are basically two types of muscle fibers: red muscle fiber (slowly twitching) and white muscle fiber (fast twitching). The composition of the muscle fibre is determined primarily by genetics and is therefore highly individual and differs from person to person. So if you know your own muscle fibre composition, you can perfectly adapt your training plan to build muscle.

In addition to effective muscle building, any form of exercise can generally have a positive impact on your fitness, health and well-being. Due to the increased energy consumption, weight loss is thus favoured. However, your genetic predisposition has an influence on which activities help you burn more calories. While the endurance version E (like "Endurance") is characterized by a high calorie consumption during endurance training, the (fast) power version S (like "Speed" or "Speed-Power") shows a significantly higher calorie consumption for both speed and muscle strength-based training types.

In a successful weight reduction plan, it is also important to regularly observe the development of the body by means of a profound body analysis. An extensive analysis includes the measurement of the individual relevant body compartments such as body water (TBW), fat-free mass (FFM), lean mass (LBM), fat mass (FM), body cell mass (BCM) and extracellular mass (ECM).

Your sport variant

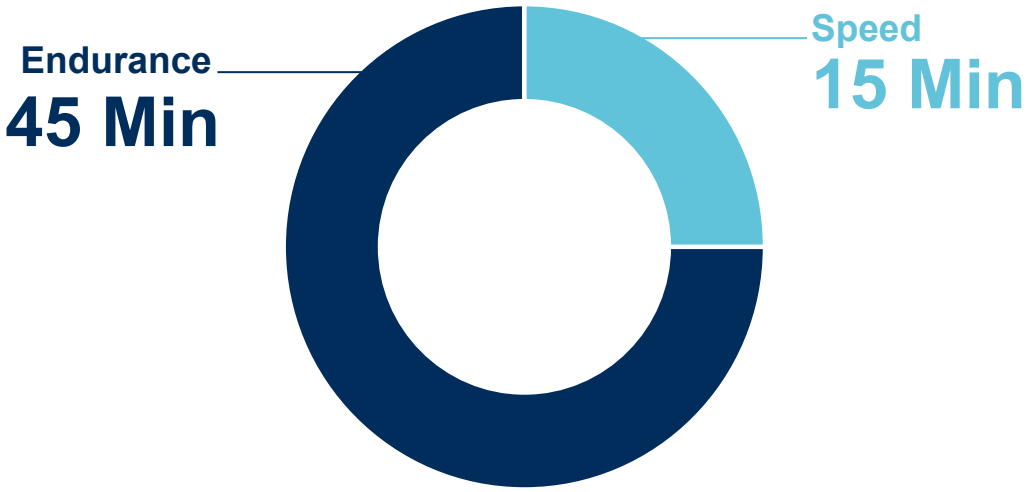
Factor	Effect	Speed	Endurance
Exercise	**Endurance**		

You have the **Sport-type E**. This means that you will have a more effective and therefore higher calorie consumption in all endurance-based sports (such as jogging, Nordic walking, swimming and rowing) than in speed strength-based sports.

Make the most of your genetic disposition and prioritize your training with endurance-based sports. For a 60-minute training plan, we recommend a distribution of endurance sports to speed and strength-based sports as depicted in the diagram below.

Nevertheless, any form of regular exercise is suitable for increasing your basal metabolic rate in the long term. If you are able to cope better with speed-strength training, it is advisable for you to integrate this more strongly into your training plan, instead of doing without sport altogether.

In addition, you should always ensure that the training is appropriate for your circumstances and does not lead to health issues, such as joint problems caused by excessive strain. Therefore, your training plan will be developed together with your trainer according to your personal needs, wishes and goals.



Further individual recommendations

For your sport variant E (Endurance), sports such as jogging, swimming, inline skating, cycling or walking are suitable. First of all, general stamina or basic endurance should be trained. The training can be structured as follows:

Training method

Focus on strength endurance training and (strength) enduring courses

Strength training

Strength endurance (approx. 15 – 20 repeats)

In addition and especially useful

Continuous method for cardiovascular equipment (basic stamina 50 – 70% max HF)

Training frequency

At least twice a week

Regeneration

While trainers and athletes put a lot of thought into designing a perfect training plan so that the body changes positively as quickly as possible, the regenerative measures are unfortunately often neglected. However, it is during this regeneration phase that the desired anabolic processes take place. A smart athlete will therefore give as much thought to suitable regeneration measures as to the training itself. If the ratio of load (training) and recovery time (rest) between units is correct, the supercompensation effect (the body builds up an energy buffer in order to be able to perform better) can be optimally exploited. If the ratio is not right, if training is done too often and possibly additionally too hard over a longer period of time, overtraining with overload of tendons, fasciae and joints can occur. Here oxidative stress in the individual cells and inflammatory reactions play a special role and can have a considerable negative influence on regeneration after strenuous training sessions. The muscles do not grow, they stagnate and the own performance can no longer be improved.

Your individual genetic evaluation has shown that your recovery ability is within the normal range. To ensure that you recover sufficiently, we recommend that you train your different muscle groups twice a week for optimal muscle growth. Please keep this in mind when creating a training plan so that you can prevent long-term muscle injuries.

Your sport type and EMS training

Electro-Myo Stimulation Training (EMS) enables you to effectively train all the muscles of your body. In addition, you can define various parameters of the EMS training, for example, you can adjust the frequency, duration of contraction and duration of use to suit your personal sport type, resulting in effective calorie consumption.

According to your sport type **Sport-type E**, we recommend that you adjust the parameters of the EMS training with the help of your trainer as follows, so that it corresponds to your genetic predisposition so that you effectively burn calories:

Training method	EMS-Training
Training frequency	Once a week (or at least 4 days break)
Training time	15 - 20 min
Intensity	low to medium
Supplementary training	1 - 2 times a week metabolic program or endurance training

Further suitable course offerings

If you are interested in attending sports courses, please refer to the following list. This offers you a large selection of courses, which are suitable for your sport variant.

We wish you much fun and success!

Cardio Courses

Aqua jogging, AquaFit, Basic Aerobic, Basic Cycling, Dance Moves, Energy Aerobic, Energy Step, Fatburner Cycling, Simple Power Aerobic, Step &Tone

Health Courses

Back & FlexiFit, FitBall, Pilates, Stretch & Relax

50+ Courses

Back & Flexifit, Dynamic Pilates, Start up Cycling, Start up Moves

Strengthening Courses

Belly X-Press, BTB (Butt, Thighs and Belly), Iron Back

Other courses

Aerobic, Aqua Fitness, Belly intensive, BodyBalance, BodyCombat, BodyPump, Body Workout, BOP, Bosu-Cardio, Bosu-Workout, Fatburner, Fit 40+, Fitmix, Flexibar, Hip Hop, Kinesis Gym, Latin Moves, Pilates, SH`BAM, Spine, Step, Step workout, Zumba Fitness

What's next?

Phase 2: The long-term weight loss and stabilization phase

This distribution is adapted to your individual strength of expression and is intended for the long-term weight loss phase or weight stabilization after the first 4 weeks. In order to ensure a balanced diet, you should adhere to the macronutrient distribution specified by us for the long term. With this distribution, you can continue to lose weight in a sustainable way and at a healthy pace after the first 4 weeks, or you can use it to maintain your target weight.

MetaCheck and Social Media

share your success in the social media and use the opportunity to exchange ideas with other MetaCheckers! Visit our social media channels and look forward to exciting information about nutrition, meta-type recipe ideas and interesting sport tips!
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