



The Mediterranean Diet - Scientific Rationale, Proven Health Benefits, Advantages and Disadvantages

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Abstract. Mediterranean diet is a nutritional system that allows you to improve your health, and get a slim figure as a bonus to protection against cancer and cardiovascular diseases. It's tasty, balanced and varied. Dishes in this diet are rich in carbohydrates, a large amount of fish and seafood, all seasoned with aromatic spices and olive oil, complemented by a glass of red wine. Let's take a closer look at this method of weight loss from a scientific point of view and analyze its effectiveness.

Key words: Mediterranean diet, benefits, harms, beneficial properties, contraindications

Diet for a long life

The term "Mediterranean diet" first saw the world thanks to the American nutritionists Ansel and Margaret Case, who have been eating according to the principles of the mediterranean diet since the 1940s and have lived no less than 97 and 100 years each. ^[1] It is the only diet in the world to receive UNESCO Intangible Cultural Heritage status in 2013. Today, the Mediterranean diet is especially popular with celebrities Victoria Beckham, Cameron Diaz, Eva Langoria, Jennifer Aniston.

There is only one minus - this approach to healthy eating should be followed all your life, but, nevertheless, since the mid-1990s, the diet has more and more fans.

Why "Mediterranean"? Studies have shown that attractive figures, longevity and good health of the inhabitants of Greece, northeast Spain, Italy, Portugal, southern France and other countries of the Mediterranean region directly depend on their approach to healthy eating. ^[2]

Diet Basics

The content of carbohydrates, proteins and fats in the diet is, respectively, 60%, 10% and 30% ^[2]. But the main secret is that the fats and carbohydrates in the diet for weight loss must be correct. Namely - durum wheat pasta, legumes, many types of whole grain bread ^[3]. Also olive oil, avocado, oily fish. Add to this a salad of fresh vegetables and greens - and a healthy lunch is on the table.

At the same time, there are no strict restrictions or methods, because the main principle of the system is that the products are divided into:

- included in the daily diet;
- consumed 1-4 times a week;
- allowed no more than 1-2 times a month.

Greens

Each country has its own preferences for greens, but there are a lot of them on the tables.

So, the Greeks use lettuce leaves as “green pita bread”, wrapping vegetables, meat and cereals in them. Horta is popular as a snack - a mixture of herbs with butter or lightly fried.

The love for [spinach](#) comes from France, its neutral taste allows you to use greens both as a main dish and as all kinds of toppings in culinary delights.

And Italians love broccoli, and its most useful part is the leaves, which are eaten raw, balancing the spicy taste with tomatoes and cheese, and fried, seasoned with balsamic vinegar.

Dairy

Dairy products are always popular in Mediterranean countries. When used properly, animal milk is a source of calcium, vitamin D, protein and amino acids. And, if France is an adherent of mature and aged cheeses, then Greece is a real lover of yogurts. There they are served with salads, and with meat, and with bread products, and as independent dishes, with or without fruits, herbs.

In the forefront of benefits among cheeses ^[4] we meet:

- Dietary goat cheese, which is low in calories, but high in B vitamins and trace elements, and easily digestible proteins.
- Feta made from sheep or goat milk helps control blood pressure, calms the nervous system, and gives strength to bones.
- Spicy parmesan is a leader in the content of proteins, vitamins and amino acids.
- Silky provolone is additionally enriched with enzymes that are beneficial to humans, giving it an unusual taste.

Vegetables

It is quite expected in the Mediterranean countries a variety of salads on the menu. Nutritionists have always emphasized the need for an abundance of vegetables in the daily diet. This will help improve digestion and heart function ^[5]. Fresh vegetables with minimal processing, olive oil, piquancy of herbs... And on your table there is a source of vitamins, organic acids, carbohydrates, proteins and fats - everything the body needs. Add a couple of slices of feta - this is what an authentic Greek salad looks like, a hallmark of Mediterranean cuisine.

Meat and fish

If we analyze the ratio of meat and fish dishes, then, despite such delicacies as Parma ham from Italy or jamon from Spain, fish and seafood still dominate. Red meat is rarely found on the menu, because it is from seafood that you can get the maximum amount of saturated fatty acids, vitamins and trace elements.

Fats

An important feature of the Mediterranean diet is the reduction in the proportion of saturated animal fats in favor of healthier vegetable oils and unsaturated fats ^[2]. Vegetable oils are olive oil, nuts, seeds. Unsaturated fats predominate in fatty fish varieties with a maximum content of omega-3 polyunsaturated fatty acid. It helps to maintain the balance of vitamins and trace elements in the body, and elastic skin and shiny hair will become a bonus. ^[6]

Olive oil

Olive oil occupies a special place in the menu of the Mediterranean diet. A few tablespoons of oil daily is a must for this unique approach to healthy eating. Do not be afraid - some nutritionists recommend daily consumption of 60 grams for breakfast. bread moistened with 40 gr. olive oil. No wonder, because the fats of olive oil are similar to the fats of breast milk, so it is recommended to start introducing vegetable oils into complementary foods with it ^[7]. For an adult gourmet, olive oil improves bone mineralization, improves digestion, and stabilizes blood pressure. Olive oil contains oleic acid (up to 70% by volume). It belongs to Omega-9 unsaturated fatty acids and acts as a powerful natural antioxidant. As a result, the metabolism improves and the aging process slows down. Also, olive oil contains a lot of vitamins E and K, which help to establish immunity and regulate the energy processes of the body.

It should also be understood that not all olive oil is made according to the rules. Many unscrupulous manufacturers fill the market with substandard and fake products. These oils can be extracted and processed by improper methods that destroy delicate nutrients, and some fatty acids can even become rancid or toxic. Therefore, it is worth choosing only high-quality oil, labeled as *extra virgin* and, ideally, cold pressed ^[8]. After all, the uniqueness of olive oil is that it can be consumed raw without any processing. People who are lucky enough to grow olives on their territory can press olives by hand and enjoy the most valuable natural oil.

Spices, seasonings, aromatic oils

Mediterranean cuisine is especially adorned with aromatic oils infused with herbs and spices. They can be easily made at home - garlic oil will harmoniously decorate pasta and sauces, mint oil will emphasize the freshness of salads, and lemon oil will add sophistication to fish dishes. At the same time, salt intake is significantly reduced, which also explains the healing effect on the cardiovascular system in particular, and the entire body as a whole. Feel free to use spices and seasonings in your recipes, experiment with combinations and dosage ^[9].

Red wine

There is also a piquant feature of the diet - red wine is welcome, however, moderate alcohol consumption is emphasized. It is enough from 10 to 50 ml per day to improve the functioning of the heart, cleanse blood vessels, and just have a good mood ^[10].

Benefits of the Mediterranean Diet

Foods for this diet are minimally processed and without the addition of refined sugar

These are olive oil, vegetables and fruits, legumes, nuts, durum whole grains and small portions of animal products that are necessarily "organic" and not shelf-stable. Virtually no GMOs, artificial ingredients, preservatives, flavor enhancers and very little sugar. For desserts, Mediterranean people use fruits or light homemade desserts with natural sweeteners such as honey.

The animal component of the diet is represented by a moderate consumption of cow, goat or sheep cheese and yoghurts and a lot of locally caught fish. It is a source of omega-3 fatty acids and other healthy fats, "correct" cholesterol, which strengthens the walls of blood vessels ^[11].

- Improvement of the cardiovascular system

High levels of monounsaturated fats and omega-3 foods have been associated with significant reductions in all-cause mortality, especially heart disease. Many studies have shown the positive effects of a Mediterranean diet rich in alpha-linolenic acid (ALA) from olive oil, such as a 30 percent reduction in the risk of death due to cardiovascular disease, as well as a 45 percent reduction in acute heart failure. ^[12,13]

Also at Warwick Medical School, it was found that people who regularly consume extra virgin olive oil have higher blood pressure lowering values compared to people who consume predominantly sunflower oil. ^[eleven]

It is also extremely rare for Mediterraneans to have a problem with low levels of "good" cholesterol, as they habitually get a lot of healthy fats from their natural diet.

- Slimming in a healthy way

On this diet, you can eat very varied and tasty food without feeling hungry. Therefore, you can follow this diet for a long time without disruption, regulating weight and reducing fat intake in an easy and natural way. There is room for variation in the Mediterranean diet, whether you prefer to increase your carbohydrate intake or focus on high-quality animal and especially plant-based protein. In any case, this style of eating will help manage weight gain, control blood sugar levels, improve mood and consistently high energy levels.

- Cancer prevention

According to researchers from the Department of Surgery at the University of Genoa, Italy, a balanced ratio of omega-6 and omega-3 essential fatty acids, a high content of fiber, antioxidants and polyphenols found in fruits, vegetables, olive oil and wine, protects DNA from damage, stops cell mutation, reduces inflammation and delays the growth of tumors. Olive oil also reduces the risk of colon and bowel cancer. ^[fourteen]

- Treatment and prevention of diabetes

The Mediterranean diet controls excess insulin, a hormone that controls blood sugar levels, makes us gain weight and maintains weight at our level, despite the fact that we are on a diet.

There is a lot of evidence that the Mediterranean diet can serve as an anti-inflammatory diet that can help fight diseases associated with chronic inflammation, including metabolic syndrome.

A low-sugar diet with lots of fresh foods and fats is part of the natural lifestyle for diabetics.

A Mediterranean style of eating helps prevent peaks and troughs in blood sugar levels. Carbohydrates – in the form of whole grain breads or durum wheat pasta, often paired with olive oil or cheeses, plenty of greens and vegetables – are a great source of energy for several hours without large spikes in sugar levels and early hunger. ^[fifteen]

- Protecting Cognitive Health and Good Mood

Healthy fats like olive oil and nuts are known to help fight age-related cognitive decline. They are able to counteract the harmful effects of toxicity, free radicals, inflammation-causing poor nutrition, or food allergies that can contribute to brain damage. ^[16] Cognitive impairment can occur when the brain does not get enough dopamine, an important chemical needed for proper body movement, mood regulation, and mental activity.

Probiotic foods such as yogurt and kefir promote healthy gastrointestinal function, which has also been linked to cognitive function.

Thus, the Mediterranean style of eating can be a natural treatment and prevention of Parkinson's disease, Alzheimer's disease and age-related dementia. ^[6,17]

- Promotes longevity

Back in 1988 in Lyon, a study was conducted in which patients after heart attacks were asked to follow a Mediterranean diet with an abundance of monounsaturated fats, or a standard dietary recommendation with a significant reduction in saturated fats. At 4 years after the start of the study, the results of the follow-up examination showed that patients in the first group had 70% less heart disease and a 45% lower risk of death from any cause than in the group with a standard diet. At the same time, there was no big difference in the level of total cholesterol, which proved the absence of its direct relationship with heart disease. The results were so impressive and groundbreaking that, for ethical reasons, the study was terminated at an early stage so that all participants could continue to adhere to the Mediterranean diet for the greatest possible health and longevity. ^[eighteen]

- Helps relieve stress and relax

Chronic stress significantly reduces the quality of life and negatively affects weight and overall health. The Mediterranean diet encourages you to spend more time in nature and get good sleep. This is a great way to relieve stress and therefore prevent inflammation. And also - there is more time to laugh, dance, relax and engage in hobbies. ^[19]

- Fights depression

A study published in the journal Molecular Psychiatry in 2018 found that choosing a Mediterranean diet reduced the likelihood of depression. Inflammation is often cited as the root cause of many disorders and psychiatric conditions, including schizophrenia, obsessive-compulsive disorder, depression, anxiety, fatigue, and social withdrawal ^[16]. A diet high in nutrients, on the other hand, helps protect the brain from organic and functional changes. Other dietary and lifestyle changes, such as getting enough sleep, mindful eating, pre-planning menus, and limiting stress, lead to mental health stability. ^[6,19,20]

What can and how often

If you decide to try this popular and in many ways unique nutrition system, then from now on your table should have the following products on a daily basis:

- Fresh fruits (apples, bananas, pears, citruses, figs, peaches, apricots, berries, melons, watermelons);
- Vegetables (primarily non-starchy, such as tomatoes, eggplant, artichoke, all kinds of cabbage), greens (especially leafy - spinach, lettuce);
- Whole grain products (brown rice, rye, barley, [corn](#), buckwheat, whole oats, wheat and products from them - bread and pasta);
- Legumes and beans (lentils, chickpeas, beans, peas, peanuts);
- Root vegetables (yam - sweet potatoes, turnips, yams, parsnips, Jerusalem artichoke);
- Nuts and seeds (walnuts, almonds, hazelnuts - hazelnuts, macadamia, cashews, sesame seeds, sunflower seeds, pumpkin seeds);
- Spices and herbs (garlic, nutmeg, cinnamon, pepper, basil, mint, rosemary, sage) - will minimize the amount of salt in the diet;
- Vegetable fats (olive oil, pure avocado and oil from it);
- Clean water about 2 liters per day, tea or coffee is allowed, but sweetened drinks and fruit juices should be avoided;
- Dairy products - cheeses, yogurt or kefir - in moderation;
- Red wine in moderation (but this is completely optional).

Every week you need:

- Fish and seafood, give preference to wild varieties of fish over artificially grown ones, shrimps, oysters, clams, mussels, crabs - at least 4 times a week;
- Eggs - in moderation, 2-4 times a week;
- Potatoes - in moderation; ^[3]
- Some sweets.

Eat monthly:

- red meat;
- Poultry (chicken, duck, turkey) and lean meat (rabbit, ham, pork fillet).

To avoid in your diet:

- Refined sugar and products containing it (ice cream, sweets, drinks, table sugar);
- Grains with a high degree of processing (white bread, pasta from soft wheat varieties, polished grain);
- Trans fats (margarines and products containing them);
- Refined oils (all types, including soybean, rapeseed, cottonseed);
- Processed meat products (sausages, sausages, semi-finished products);
- Products with additional processing or enrichment (marked on the label as "fat-free", "enriched", "refined"). ^[21,22]

Disadvantages and harms of the diet

The disadvantage of this food system can be called, first of all, the need to change your eating habits - to abandon many processed and refined products in favor of high-quality and often expensive products in our region. Moreover, it is not yet known which factor will be more significant - the high cost or the habit of the old diet.

Also, this diet may not be suitable for people with individual intolerance and allergies to seafood. Caution should be taken when choosing a menu for people with stomach and intestinal ulcers, given the high fiber content in the daily menu. It is also worth abandoning the red wine allowed by the diet for pregnant women and other people to whom alcohol, even in small quantities, can be harmful. [24,25]

Lose weight on the mediterranean diet

Many ordinary people doubt whether it is possible to lose weight on such a diet? Indeed, this sparing diet does not give instant results, so it is not suitable for the correction of severe obesity. If the main goal of the diet is weight loss, then you definitely need to connect physical activity. Not every diet associated with dietary restriction allows you to fully train. And here there is a nice bonus - it is the Mediterranean diet that gives strength for sports. This improves the results of weight loss, models a beautiful and fit figure and improves health.

For those who nevertheless decided to lose weight using this technique, the absence of a rigid menu may not seem convenient. You will have to calculate how many calories you need in order not to experience hunger, but at the same time lose weight, independently correlate physical activity and the amount of food consumed. But still, most dieters find it convenient, because severe restrictions are harder to come by.

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Abstract: The Mediterranean diet is not a diet in the usual sense, rather it is a certain nutrition system that a person can adhere to all his life. It is important to provide three full meals and two snacks throughout the day. It is thanks to the unique diet - high consumption of olive oil, fruits, nuts, vegetables and cereals; moderate consumption of fish and poultry; low consumption of dairy products, red meat and sweets; and red wine in moderation - reduced rates of chronic disease on the road to longevity.