

Mediterranean Traditional Medicine: An Overview

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ABSTRACT

Traditional diets are the old ways of eating. They are a delicious and pleasant roadmap to healthy eating and happy living. The Mediterranean diet has been characterized as the gold standard of diets. It refers to eating in the manner that the people in the Mediterranean nations (such as Albania, Greece, Italy, France, Greece, Algeria, Cyprus, Egypt, Italy, Morocco, and Spain) traditionally ate. It is a lifestyle approach to eating rooted in a centuries-old tradition of using fresh, high-quality ingredients. This paper provides an introduction to Mediterranean herbs or diet.

KEYWORDS: *traditional medicine, Mediterranean traditional medicine, Mediterranean diet*

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INTRODUCTION:

The modernization and globalization of the world's diet has resulted in various diseases that now seem linked to the modern age: cardiovascular disease, diabetes, cancer, and obesity. Interest in the diet began in the 1950s when it was noted that heart disease was not as common in Mediterranean countries as it was in the US. Dietary data from the Mediterranean region show that in the recent past the inhabitants of this region enjoy the lowest recorded rates of chronic diseases and the highest adult life expectancy due to their eating pattern.

The ancient Mediterranean region was rich in vibrant colors, flavors, and remedies that helped keep the civilizations of Greece, Rome, and Egypt thriving for thousands of years. The cultivation and use of vegetables, herbs, and spices in the Eastern region of the Mediterranean date back to the ancient Egyptian, Greek, and Roman civilizations.

Traditional Mediterranean diet (MedDiet) is one of the most studied and well-known dietary models worldwide. It features foods grown all around the

Mediterranean Sea. It is a pattern of eating that is modeled after the traditional cuisines of people living in certain regions bordering the Mediterranean Sea, including Greece, Italy, Spain, France, Greece, Albania, Algeria, Cyprus, Egypt, Italy, Morocco, and Spain. Figure 1 shows the Mediterranean sea with the surrounding countries [1]. There are more than 20 nations that border the Mediterranean Sea with very different cultures. Although the diet varies by country and region due to differences in culture, ethnic background, religion, economy, geography, and agricultural production. The Mediterranean approach to eating regards food as a communal, shared experience. It is a way of eating rather than a formal diet plan.

The Mediterranean diet is a healthy-eating plan that incorporates the traditional flavors and cooking methods of the region. Plant-based foods are the foundation of the diet with olive oil serving as the main source of added fat. The traditional Mediterranean diet is characterized by a high intake of vegetables, legumes, fruits and nuts, and cereals

with a high intake of olive oil, a moderately high intake of fish, a low intake of meat and poultry, and a moderate intake of wine [2]. A healthy diet can improve your ability to think, improve heart health, enhance brain health, and lower risk of dementia.

MEDITERRANEAN HERBS

Traditionally, herbs refer to leafy parts of plants, while spices is generally adopted for preparations from roots, seeds, root bark, berries, flower parts, fruits, or other plant parts. There is a wide variety of herbs colors, shapes, sizes, and flowering available. Herbal medicines are culturally accepted and widely used in many nations for treating a variety of disorders. Popular Mediterranean herbs and vegetables include the following [3,4]:

- *Rosemary* is a perennial plant whose extracts are used routinely for cooking, preservation of foods, cosmetics, nervous issues, headaches, digestive troubles, female complaints, and herbal medicine for anti-inflammatory and antimicrobial applications. It is native to warmer climates.
- *Licorice* may be used in treating gastric and duodenal ulcers as it reduces stomach secretions and produces protective mucus for the lining of the digestive tract.
- *Olive oil* has been used for centuries in Greece and other Mediterranean countries for its beneficial health properties. Application of olive oil with honey has been shown to be effective in a number of skin and fungal infections. The Food and Drug Administration in US has recommended that two teaspoonfuls of olive oil (23 g) per day can reduce coronary disease.
- *Helichrysum italicum* is viewed as the sleeping giant of Mediterranean herbal medicine. The use of its essential oil in glamorous perfumes, personal care products, and reducing scars has turned it into a veritable icon of luxury. Today, there is a huge disconnect between demand and availability of the herb. Its flowers are often used to make herbal tea.
- *Basil* is popular known as an Italian spice, shown in Figure 2 [4]. Traditional folk medicine in India hails basil as a stress-relieving herb, helpful for those with asthma, and supportive for those with Type 2 diabetes.
- *Oregano* is a fragrant and aromatic herb, native to the Mediterranean region. Before the age of modern medicine in Europe, oregano was used for digestive, respiratory, nervous, and hormonal complaints.

- *Sage* is practically used for food preservation like rosemary. The herb is reputed as “cure-all,” in that it could heal any illness or disease. Most herbalists observe its effectiveness in cases of cold, flu, fever, female issues, and digestive troubles.
- *Thyme* is a powerful plant that is native to the Mediterranean region. Traditional herbalists claim that thyme has the abilities to heal infections, colds, flu, and women’s complaints. It was also known to support labor, pregnancy, and gestive issues.

MEDITERRANEAN DIET

The Mediterranean diet is based on the traditional foods that people used to eat in nations bordering the Mediterranean Sea including France, Spain, Greece, and Italy. It has been observed that these people were exceptionally healthy and had a low risk of many chronic conditions. With emphasis on plant-based foods such as vegetables, beans, whole grain, fruits, nuts and seeds, and olive oil and fish. These foods make up the base of the Mediterranean food pyramid, shown in Figure 3 [5]. The Mediterranean diet food pyramid reprioritizes the traditional food pyramid. Three factors hold true throughout the Mediterranean region [6]:

1. Food is treated as medicine.
2. Moderation is key.
3. An active physical and social lifestyle is mandatory.

The Mediterranean diet has become popular because of its association in Mediterranean populations with reduced incidence of some chronic diseases including cancer, coronary heart disease, and cardiovascular disease.

There are many types of Mediterranean diets. A typical Mediterranean one is depicted in Figure 4 [7]. The Mediterranean diet does not have preservatives. It is freshly plucked and cooked. The diet encourages fruits, vegetables, whole grains, legumes, nuts, seeds, and heart-healthy fats. So one should base diet on the following healthy Mediterranean foods [8]:

- Vegetables: tomatoes, broccoli, *kale*, spinach, onions, cauliflower, carrots, Brussels sprouts, cucumbers, potatoes, sweet potatoes, turnips
- Fruits: apples, bananas, oranges, pears, strawberries, grapes, *dates*, figs, melons, peaches
- Nuts, seeds, and nut butters: almonds, *walnuts*, macadamia nuts, hazelnuts, cashews, sunflower seeds, pumpkin seeds, almond butter, peanut butter

- Legumes: beans, peas, lentils, pulses, peanuts, chickpeas
- Whole grains: oats, brown rice, rye, barley, corn, buckwheat, whole wheat bread and pasta
- Fish and seafood: *salmon*, sardines, trout, tuna, mackerel, shrimp, oysters, clams, crab, mussels
- Poultry: chicken, duck, turkey
- Eggs: chicken, quail, and duck eggs
- Dairy: cheese, yogurt, milk
- Herbs and spices: *garlic*, basil, mint, rosemary, sage, nutmeg, cinnamon, pepper
- Healthy fats: extra virgin olive oil, olives, *avocados*, and *avocado oil*

The diet discourages processed foods, added sugar, and refined grains. So one should limit the following processed foods and ingredients when following the Mediterranean diet:

- Added sugar: *added sugar* is found in many foods but especially high in soda, candies, ice cream, table sugar, syrup, and baked goods
- Refined grains: white bread, pasta, tortillas, chips, crackers
- Trans fats: found in *margarine*, fried foods, and other processed foods
- Refined oils: soybean oil, *canola oil*, cottonseed oil, grapeseed oil
- Processed meat: processed sausages, hot dogs, deli meats, beef jerky
- Highly processed foods: fast food, convenience meals, microwave popcorn, granola bars

There are many ways of incorporating Mediterranean diet into your daily menu. Below is a typical sample menu for 1 week of meals on the Mediterranean diet [8]:

Monday

- Breakfast: Greek yogurt with strawberries and chia seeds
- Lunch: a *whole grain* sandwich with hummus and vegetables
- Dinner: a tuna salad with greens and olive oil, as well as a fruit salad

Tuesday

- Breakfast: oatmeal with blueberries
- Lunch: caprese zucchini noodles with mozzarella, cherry tomatoes, olive oil, and balsamic vinegar
- Dinner: a salad with tomatoes, olives, cucumbers, farro, grilled chicken, and feta cheese

Wednesday

- Breakfast: an omelet with mushrooms, tomatoes, and onions
- Lunch: a whole grain sandwich with cheese and fresh vegetables
- Dinner: Mediterranean lasagna

Thursday

- Breakfast: *yogurt* with sliced fruit and nuts
- Lunch: a quinoa salad with chickpeas
- Dinner: broiled salmon with brown rice and vegetables

Friday

- Breakfast: eggs and sautéed vegetables with whole wheat toast
- Lunch: stuffed zucchini boats with pesto, turkey sausage, tomatoes, bell peppers, and cheese
- Dinner: grilled lamb with salad and baked potato

Saturday

- Breakfast: oatmeal with raisins, nuts, and apple slices
- Lunch: a whole grain sandwich with vegetables
- Dinner: Mediterranean pizza made with whole wheat pita bread and topped with cheese, vegetables, and olives

Sunday

- Breakfast: an omelet with veggies and olives
- Lunch: falafel bowl with feta, onions, tomatoes, hummus, and rice
- Dinner: grilled chicken with vegetables, sweet potato fries, and fresh fruit

One can adapt the portions and food choices recommended above in a way that works for you.

APPLICATIONS OF MEDITERRANEAN DIET

Mediterranean diet is generally rich in healthy plant foods and relatively lower in animal foods, with a focus on fish and seafood. The diet is healthier than modern ones that have processed foods and sugar. Doctors and dietitians recommend a Mediterranean diet to prevent disease and keep people healthy for longer. Taking a Mediterranean diet may reduce the risk of muscle weakness in older age, Alzheimer's disease, Parkinson's disease, and premature death. Mediterranean diet has an almost limitless ability to provide healing to many diseases, as demonstrated by the following examples.

- *Osteoarthritis*: This is the most common form of arthritis, affecting thousands of people. The condition is often noticed in the knees, hands, hips, or spine. Making changes to your diet can help you with osteoarthritis symptoms, which include pain, stiffness, and swelling. Taking a balanced, nutritious diet will improve

osteoarthritis and give the body the tools it needs to prevent further damage to the joints [9].

- *Longevity*: Following traditional Mediterranean diet promotes longevity. A person who follows the Mediterranean diet will live longer, even if he does not live in the Mediterranean region. The traditional Mediterranean diet features an abundance of vegetables, legumes, fruits, nuts and cereals and regular use of olive oil. Researchers have observed that those who strongly adhere to a Mediterranean diet had improved longevity compared to study participants who did not follow that diet as closely [10]. The Mediterranean diet has been shown to be protective against chronic disease, and increase longevity according to numerous clinical studies.
- *Cancer*: The traditional Mediterranean diet is rich in substances that have protective effects such as selenium, vitamin E and C, omega-3 fatty acids, fiber, antioxidants from herbs such as oregano and garlic. These nutrients are associated with a lower risk of cancer, particularly prostate, breast and colon cancer [11]. Recent studies provide evidence that greater adherence to the Mediterranean diet is inversely associated with cancer mortality in the general population, hence increased longevity.
- *Overweight and Obesity*: Being overweight or obese places extra pressure on the joints. Due to real-life success stories, the Mediterranean diet plan has become one of the most recommended diets for weight loss and disease prevention. It is ideal for weight loss compared to a Westernized diet. The Mediterranean diet is helpful for people who are trying to lose weight. It helps a person to lose weight and keep it off. The Mediterranean diet not only reduces body weight, it also reduces waist circumference and body mass index [12].
- *Cardiovascular Disease*: Several studies have been conducted to evaluate the effects of Mediterranean diet on CVD outcomes, including blood lipids, blood pressure, inflammatory biomarkers, and body weight. Recent studies have shown the benefits of the Mediterranean diet on cardiovascular health, including reduction in the incidence of cardiovascular disease. The Primary Prevention of Cardiovascular Disease with a Mediterranean Diet (PREDIMED) study (published in the New England Journal of Medicine) is the largest intervention study and one of the most well-known studies to examine the effects of the Mediterranean diet on cardiovascular prevention among persons at high risk of CVD [13].

BENEFITS

The benefits of the Mediterranean diet are ever increasing. Mediterranean diet may help protect brain function, promote heart health, and regulate blood sugar levels. The eating plan is flexible, healthy, cheap, easy to follow, and backed by research and experience. It has long been seen as a healthy way of lowering the risk of heart disease and leading a healthier life. It is known as one of the healthiest in the world because it is not just a diet, but a lifestyle that is based on a variety of healthy foods. Adherence to the Mediterranean diet has been associated with a reduction in total mortality. The Mediterranean diet has received much attention as a healthy way of eating. It comes out on top in the US News and World Report ranking of best diets in 2021, 2020, 2019, and 2018. Mediterranean herbs are of great importance as a mechanism to increase access to health care services.

Other benefits of a Mediterranean diet include [14]:

- *Preventing Diseases*: Taking a Mediterranean diet can prevent heart disease and stroke and reduce risk factors such as obesity, diabetes, high cholesterol, and high blood pressure. For example, a Mediterranean diet with olive oil or nuts may reduce the combined risk of stroke, heart attack, and death from heart disease. People who follow the Mediterranean diet experience reductions in bad cholesterol, along with improvements in several other heart disease risk factor.
- *Heart Health*: The Mediterranean diet can reduce the risk of cardiovascular disease and stroke. This is likely due to the fact that following a Mediterranean diet can reduce inflammation in the blood vessels that lead to and from the heart.
- *Brain Health*: The Mediterranean diet might help promote and prolong healthy brain function. It could delay the onset of Alzheimer's by up to 3.5 years when compared to people who follow a Western diet.
- *Improving Sleep Quality*: Research has shown that adhering to a Mediterranean diet may improve sleep quality in older adults. The diet did not seem to affect sleep quality in younger people.
- *Alzheimer's Protection*: Mediterranean diet can reduce the risk of cognitive decline that may appear during the aging process. It can slow some changes in the brain that may point to early Alzheimer's disease.

- **Weight Loss:** A poor diet is a major reason people struggle with weight loss. Adherence to the Mediterranean diet reduces overweight and obesity.
- **Diabetes:** Following a Mediterranean diet can help people with diabetes better control their blood sugar levels. For those with diabetes, the American Diabetes Association recommends eating about less than 20 grams of saturated fat per day.

CHALLENGES

The main drawbacks of MedDiet may involve cooking more than you are accustomed to and it may mean adapting to new foods. Although the health benefits mentioned above are indeed real, they are only for those who can pay. People with higher socioeconomic position (higher income, or greater educational level) demonstrate more favorable eating behaviors. We need to guarantee equal access to Mediterranean diet.

Most Mediterranean Diet meal plans are not authentic. Even health experts do not agree on the detail of the Mediterranean diet. The diet involves a set of skills, knowledge, rituals, and particularly the consumption of food. It is based on a rural lifestyle, which is fast disappearing. Medicinal plants in the Eastern region of the Mediterranean and other regions are becoming increasingly rare due to the ongoing destruction of their natural habitat, overharvesting of wild species, and detrimental climatic and environmental changes. The UN has recognized the diet as an endangered species [15].

CONCLUSION

The nations bordering the Mediterranean Sea have long been known for their simple, relaxed, delicious, and family-oriented approach to mealtime. The Mediterranean diet

nourishes your body, your heart, and your soul. It appears to improve various risk factors for heart disease. It is gaining an increasing importance in the management of various ailments. Following a Mediterranean diet just might be one of the very best things that you can do for your health.

Although the Mediterranean diet was initially studied in nations around the Mediterranean Sea, the benefits of the healthy diet can be generalizable to many nations such the United States, Canada, Australia, and the United Kingdom. Globalization and advances in food industry have transformed the traditional Mediterranean diet of most Mediterranean regions into a more global dietary patterns. Since food systems are a major cause of poor health, global efforts are urgently needed to collectively transform

diets and food production. Public health policies to promote Mediterranean diet at different levels (schools, universities, clinics, hospitals, etc.) should be a cornerstone for the prevention of chronic disease at the national and international levels [16].

Beyond the diet, the Mediterranean lifestyle encourages mindfulness with every meal.

More information about Mediterranean diet can be found in the books in [17-29] and the following related journals:

- Journal of Herbal Medicine
- Journal of Ethnopharmacology.
- Chinese Journal of Integrative Medicine
- The Development of Nutraceuticals and Traditional Medicine
- Journal of Ethnobiology and Ethnomedicine

DISCLAIMER

The information in this paper is for enlightenment purposes only and should not be used as a replacement for professional diagnosis and treatments. No content on this paper should ever be used as a substitute for direct medical advice from your doctor or other qualified clinician. Always consult your healthcare provider before making any health-related decisions.

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Figure 1 The Mediterranean sea and the surrounding countries [1].



Figure 2 Basil is popularly known as an Italian spice [4].

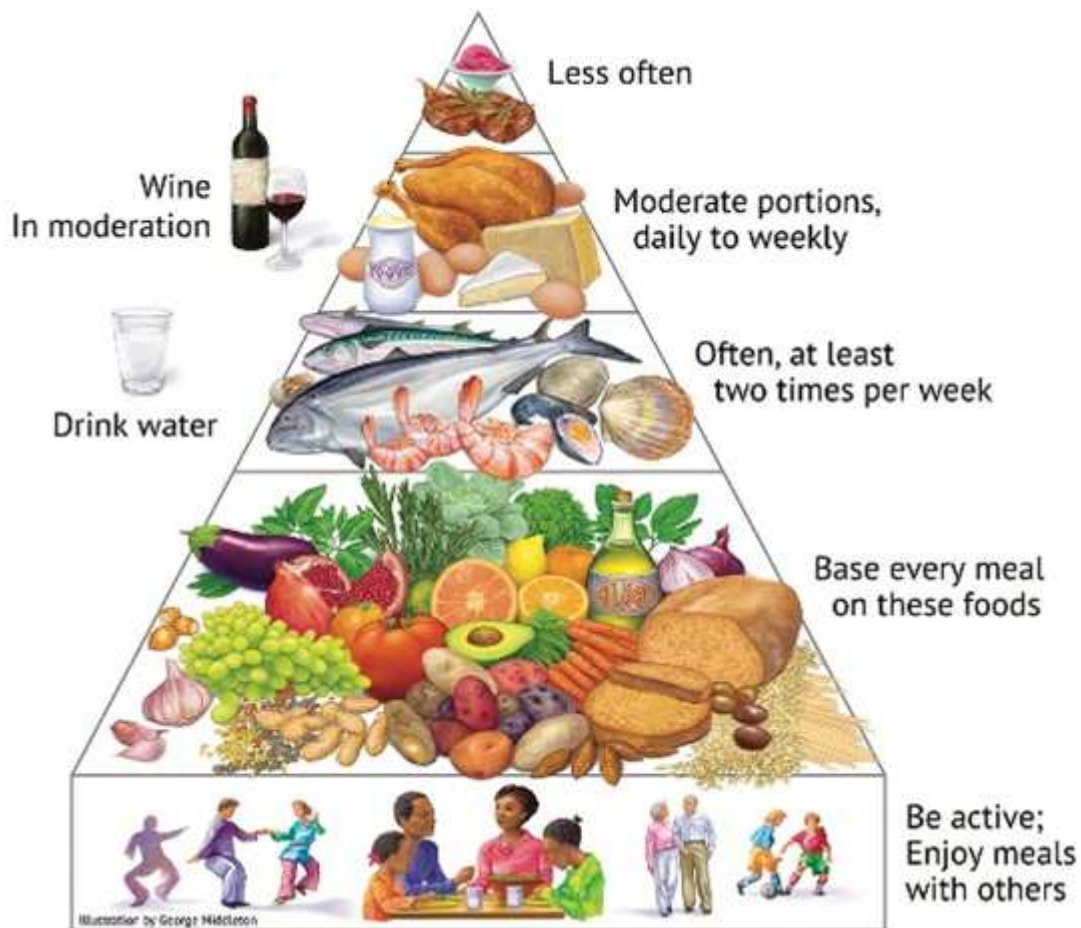


Figure 3 The Mediterranean diet pyramid [5].



Figure 4 A typical Mediterranean diet [7].