

# What is the Mediterranean Diet?

## THE BASICS OF THE MEDITERRANEAN DIET

The Mediterranean diet first became of interest to researchers in the 1950s when certain populations in the Mediterranean Sea basin were observed to be in better overall health with lower rates of cardiovascular and metabolic diseases and greater longevity than wealthier nations of the Western world. Thus, the diet refers to the traditional food cultures of the countries that

surround the Mediterranean Sea, including Greece, Italy, Spain, Morocco, Egypt and Lebanon. Staples of the Mediterranean diet include fruits and vegetables, whole grains, seafood, nuts and legumes, and olive oil. In lesser amounts, poultry, eggs, cheese and dairy are consumed. The Mediterranean diet is highlighted in the Dietary Guidelines for Americans (DGA) as a “healthy dietary pattern.”<sup>1</sup>



But, this diet isn't restrictive like many fad diets; rather, it emphasizes eating nutrient-dense foods without counting calories or completely omitting any one food type.

Moreover, the Mediterranean diet encompasses more than just food; for this reason, it is often described as a way of life. Traditionally, people living in Mediterranean regions have emphasized physical activity, social gatherings and relaxation along with a moderate consumption of wine with meals. In the U.S., drinking alcohol in **moderation** is defined as limiting intake to two drinks or less per day for men—and one drink or less in a day for women. One drink is equivalent to one and a half ounces of 80 proof (or 40%) distilled spirits/liquor, five ounces of 12% alcohol wine or 12 ounces of 5% alcohol beer.



## Guidelines for the MEDITERRANEAN DIET

Unlike some diets, the Mediterranean diet does not have strict requirements. Since its parameters can vary and many people may not be familiar with the Mediterranean diet, here is a quick overview:



**Most meals** feature vegetables, fruits, whole grains— bread, pasta, rice, etc., and extra virgin olive oil.



**Every week** includes, at some point, poultry, seafood, fish, eggs, potatoes and legumes.



**Most days** also include nuts, seeds, dairy (preferably low-fat), and herbs and spices.



Sugar-sweetened beverages, added sugars, processed meat and red meat are consumed sparingly.

## THE MEDITERRANEAN DIET AND HEALTH

### Heart Health

The Mediterranean diet's pattern is associated with beneficial effects on heart health, reductions in blood pressure<sup>2</sup>, and cardiovascular disease (CVD) risk.<sup>3</sup> Greater adherence to this diet is linked with a reduction in CVD risk and mortality, both in the general population that includes those with or without obesity, and those without CVD,<sup>4,5</sup> as well as those with high CVD risk.<sup>6</sup>

The Primary Prevention of Cardiovascular Disease with a Mediterranean Diet (PREDIMED) study is one of the most well-known studies to examine the effects of the Mediterranean diet on health.<sup>7</sup> This study was published in the *New England Journal of Medicine* after tracking more than 7,000 Spanish participants over the age of 55 with no cardiovascular disease, but with a history of health risk factors. The subjects were randomly assigned to one of three groups—two intervention groups and one control group. The intervention groups followed a Mediterranean diet, one of which was provided with free olive oil; the other group was provided with free mixed nuts (walnuts, almonds and hazelnuts). The control group was not given any supplemental foods; instead, this group was advised to reduce their fat intake. Diets for all three groups were not calorie controlled. Over the course of the five-year study period, the Mediterranean diet groups had a 30% lower relative risk of major cardiovascular events compared with the control group.

While the results from the PREDIMED study have been debated, the findings align with decades of observational and intervention-based research showing health benefits from eating a Mediterranean diet.<sup>8</sup> For example, the Lyon Diet Heart Study, a randomized controlled trial, examined the effect of the Mediterranean diet versus a Western-style diet in men who had recently had a heart attack.<sup>9</sup> After four years, those who followed the Mediterranean diet were 72% less likely to have experienced a heart attack or died from heart disease.

### Glucose Management and Type 2 Diabetes

Results from multiple studies have shown a decreased risk of developing diabetes in healthy individuals with high rates of adherence to the Mediterranean diet;<sup>10</sup> however, not all of the research supports this association.<sup>3</sup> Some evidence supports that compliance with the Mediterranean diet may help manage glucose and insulin levels<sup>10</sup> or reduce glycated hemoglobin (HbA1c).<sup>11</sup>

### Overweight and Obesity

A systematic review of controlled clinical trials and prospective studies published in 2019 concluded that a high level of evidence supports that adherence to the Mediterranean diet reduces obesity and abdominal adiposity.<sup>3</sup> Additionally, intervention and observational studies have shown that the Mediterranean diet is associated not only with a greater reduction in body weight, but also in waist circumference and body mass index.<sup>3,12</sup>





## Cancer

Beneficial relationships have been documented between the Mediterranean diet and reduced risk of certain types of cancer, likely due to the high concentrations of antioxidants and anti-inflammatory nutrients in this style of eating.<sup>13</sup> Regular intake of foods that are commonly included in a Mediterranean diet pattern, such as fruits and vegetables, fish, olive oil and whole grains are associated with reduced risk of cancers including breast cancer, ovarian cancer, urinary tract cancer, gastrointestinal cancers and more.<sup>13,14</sup>

## Cognitive Outcomes

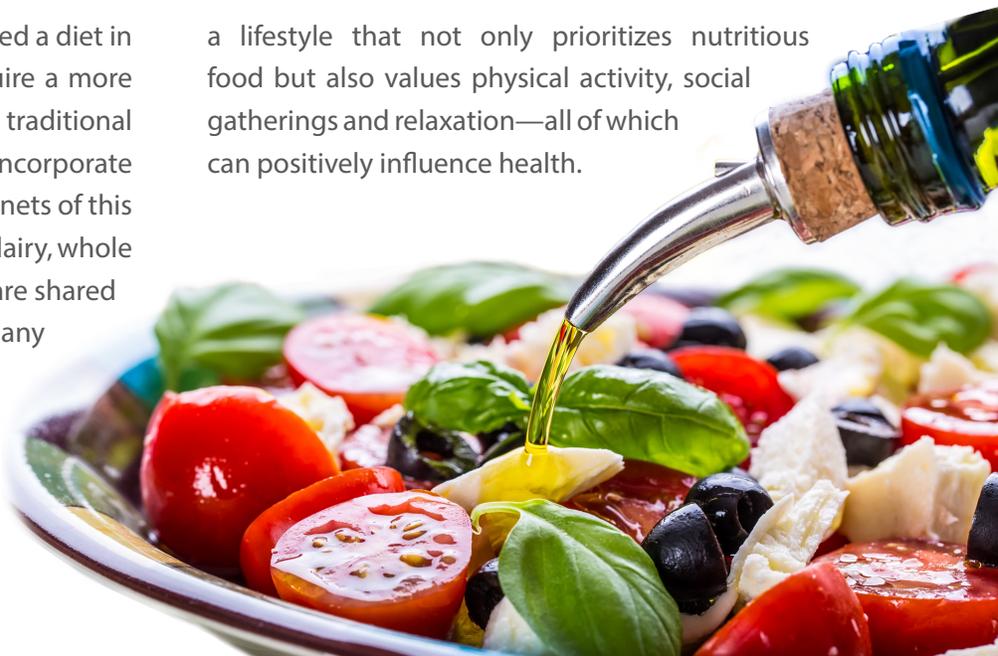
Adherence to the Mediterranean diet is associated with cognitive benefits and evidence suggests that this type of diet may help protect against cognitive decline and dementia. In 2016, researchers conducted a systematic review of five randomized clinical trials and 27 observational studies to investigate the impacts of the Mediterranean diet on cognitive outcomes.<sup>15</sup> Results of this review indicated that this dietary pattern was associated with improved cognitive function, a decreased risk of cognitive impairment, or decreased risk of dementia or Alzheimer's disease.

There is a solid body of evidence that supports a range of positive health effects associated with adopting the Mediterranean diet, specifically on beneficial outcomes in heart health, type 2 diabetes, weight management and weight control, reduced risk of certain types of cancer, improved cognitive function, and more. However, it is important to note that most of the research conducted on the Mediterranean diet has been among people who live in Mediterranean or European countries or white populations living in the U.S.<sup>16</sup> More research is needed to determine if similar beneficial effects from adhering to this diet would be observed in racially diverse populations.

## THE BOTTOM LINE

The Mediterranean diet isn't considered a diet in the same way that some diets require a more rigid approach to food. It is a more traditional eating lifestyle that offers flexibility to incorporate a wide range of nutrient-dense foods. Tenets of this eating pattern—plenty of plants, low-fat dairy, whole grains with meat and sweets sparingly, are shared among and can be adjusted to fit many eating traditions around the world. The Mediterranean region contains examples of the many diverse cultures around the world that emphasize

a lifestyle that not only prioritizes nutritious food but also values physical activity, social gatherings and relaxation—all of which can positively influence health.



# References

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