

Current Health Studies on the Mediterranean Diet

MEDITERRANEAN DIET LINKED WITH BETTER LUNG FUNCTION IN AGING

Lung function gradually declines with aging, but certain lifestyle changes may be able preserve lung function for a longer period of time. In a study of more than 2,000 adults ages 50+, those most closely following a Mediterranean diet had better lung function (as measured by peak expiratory flow rate) than those not following a Mediterranean diet, even after adjusting for factors like age, smoking history, and physical activity. When looking at specific foods, grains, dairy foods, and fish were all linked with better lung function.

Journal of the American College of Nutrition. 2020 Mar 23:1-6. doi: 10.1080/07315724.2020.1740114. [Epub ahead of print] (Papassotiriou I et al.)

MEDITERRANEAN DIET DURING PREGNANCY LINKED WITH LOWER RISK OF DIABETES DURING PREGNANCY

Gestational diabetes is a form of diabetes that develops in pregnant women, and if left untreated, it can pose risks for birth complications down the road. In this study, researchers randomly assigned participants to either follow a Mediterranean diet (starting at 18-weeks pregnant) or receive their routine care. Those following a Mediterranean diet were 35% less likely to develop gestational diabetes. However, there was no significant relationship detected between the Mediterranean diet and other maternal or child outcomes (such as maternal high blood pressure, still birth, small birth size, or NICU admissions).

PLOS Medicine. 2019 Jul 23;16(7):e1002857. doi: 10.1371/journal.pmed.1002857. (Al Wattar BH et al.)

MEDITERRANEAN DIET LINKED WITH IMPROVEMENTS IN CARDIODIABESITY

“Cardiodiabetes” is an umbrella term which refers to the relationship between obesity, cardiovascular disease, metabolic syndrome, and type 2 diabetes. Researchers analyzed over 50 studies to answer several key questions about the impact of the Mediterranean diet on cardiometabolic health. The researchers found strong evidence that following the Mediterranean diet reduces obesity, blood pressure, and the risk of cardiovascular disease in healthy and at-risk people. They also found moderate evidence that the Mediterranean diet reduces the risk of developing metabolic syndrome and type 2 diabetes, and can reduce the symptoms of type 2 diabetes in diabetics.

Nutrients. 2019 Mar 18;11(3). pii: E655. doi: 10.3390/nu11030655. (Franquesa M. et al)

MEDITERRANEAN DIET LINKED WITH ¼ LOWER HEART DISEASE RISK IN WOMEN

The Mediterranean diet is closely linked with heart health, and researchers want to learn more about the underlying mechanisms behind this connection. In this study researchers analyzed the

diet and health outcomes of 25,994 women for 12 years. Those most closely following a Mediterranean diet were 28% less likely to develop heart disease than those not following a Mediterranean diet. Even those who were only moderately following a Mediterranean diet had a 23% lower risk of heart disease, indicating that even small lifestyle changes can have a meaningful impact on health. The researchers suspect that part of the heart health benefits may be related to lower inflammation, as women most closely following the Mediterranean diet had significantly lower levels of biomarkers of inflammation. Other factors shown to affect the relationship between the Mediterranean diet and heart health are the Mediterranean diet's links to blood sugar management, BMI, blood pressure, and cholesterol.

JAMA Network Open. 2018 Dec 7;1(8):e185708. doi:10.1001/jamanetworkopen.2018.5708 (Ahmad S et al.)

MEDITERRANEAN DIET LINKED WITH BETTER HEALTH IN PEOPLE WITH TYPE 2 DIABETES

The positive effects of the Mediterranean Diet are well-known, but more research is needed on the effects of the diet in people with type 2 diabetes. In this study, researchers looked at the diets of over 2,000 people with type 2 diabetes. Those who more closely followed the Mediterranean Diet had lower BMIs, blood lipids (cholesterol and triglycerides), blood pressure, inflammation, and better blood sugar control than those who did not. Researchers also found that each part of the Mediterranean Diet provided different benefits- eating more fish was associated with lower triglycerides while eating more vegetables was associated with better blood pressure. In other words, the overall Mediterranean Diet pattern is greater than the sum of its parts, and following the Mediterranean Diet may offer big benefits to people with type 2 diabetes.

Nutrients. 2018 Aug 10;10(8). pii: E1067. doi: 10.3390/nu10081067. (Vitale M et al.)

HEALTHY EATING IN MID-ADULTHOOD LINKED WITH HEALTHIER BODY COMPOSITION DOWN THE ROAD

It is never too late to begin the journey to healthy eating. In fact, adopting healthier habits in mid-adulthood may be especially important. To see the effect diet has on body fat distribution, researchers analyzed the eating patterns of approximately 2,000 adults (average age = 48 years), and then assessed their body composition 20 years later. Those with higher-quality diets in mid-adulthood (most closely following a Mediterranean Diet, DASH Diet, or scoring higher on the Healthy Eating Index – all of which prioritize vegetables, fruits, whole grains, and legumes, and limit sweets and processed or red meats) had lower total body fat and a lower BMI, which are critical in chronic disease prevention. Following a high-quality diet, such as the Mediterranean diet, over a period of time is important to maintain a healthy level of body fat and to prevent fat tissue from accumulating in the liver.

Obesity. 2017 Aug;25(8):1442-1450. (Maskarinec G et al.)

MEDITERRANEAN DIET LOWERS BLOOD PRESSURE

The Mediterranean Diet is widely praised for its role in supporting heart health. To see how following a diet rich in fruits, vegetables, nuts, olive oil, and fish, and low in processed foods and red meats, affects blood pressure, researchers randomly assigned 166 elderly Australian adults to either a Mediterranean Diet or their regular habitual diet. After six months, the Mediterranean Diet group had lowered systolic blood pressure (the number on top, representing the pressure your heart uses while beating) and improved functioning of endothelial cells (which line the inside of blood vessels) as compared to the habitual Australian diet group.

American Journal of Clinical Nutrition. 2017 Jun;105(6):1305-1313. (Davis CR et al.)

SCHOOL-BASED MEDITERRANEAN DIET PROGRAM LINKED WITH LESS OBESITY, HEALTHIER BLOOD PRESSURE IN TEENS

Childhood obesity is a growing problem around the world, and in developed countries, it is estimated that 1/3 of children are overweight or obese. In a study of 1,032 Greek teenagers (average age = 14), researchers tested a 6-month school-based nutrition education intervention, based on the principles of the Mediterranean Diet. Following the intervention, the researchers found significant decreases in overweight and obesity, abdominal obesity (specifically waist circumference), and blood pressure.

European Journal of Clinical Investigation. 2017 Apr 13. [Epub ahead of print] (Bacopoulou F et al.)

MED DIET & DIETS WITH WHOLE GRAINS MAY LOWER RISK OF HIGH BLOOD PRESSURE AFTER GESTATIONAL DIABETES

Women who have had gestational diabetes (diabetes during pregnancy) are at an increased risk of developing high blood pressure. To see how diet might relate to this trend, researchers monitored the eating patterns and health records of more than 3,800 women who had previously been diagnosed with gestational diabetes. After adjusting for BMI, age, and other demographic factors, the women most closely following a Mediterranean diet had a 30% lower risk of developing high blood pressure over the 18-year study. Similarly, women following other healthy eating patterns (such as the DASH diet) that emphasized fruits, vegetables, and whole grains, and were low in red and processed meats, had a 24-28% lower risk of developing high blood pressure.

Hypertension. 2016 April 18. [Epub ahead of print.] (Li S et al.)

MEDITERRANEAN DIET MAY PROTECT AGAINST INFLAMMATORY DISEASES

Chronic inflammation (the body's response to stress) is linked with a number of diseases. To see how diet may play a role, Spanish researchers reviewed data on the Mediterranean diet and

inflammatory disease, and found that following a Mediterranean diet is linked with both short and long term benefits for inflammatory diseases. In the short term, Mediterranean diets can help reduce risk factors associated with cardiovascular disease, like blood pressure and cholesterol. But the benefits of following a Med diet persist over time. In the long term, following this eating pattern has an intense, systemic, anti-inflammatory effect. This suggests that adherence to a Mediterranean diet may help protect against diseases like atherosclerosis, cancer, and neurodegenerative diseases, such as Alzheimers disease.

Endocrine, Metabolic & Immune Disorders–Drug Targets. 2014 Nov;14:245–254. (Casas R et al.)

MED DIET MORE EFFECTIVE THAN LOW-FAT DIET

Researchers at University Hospital in Basel, Switzerland systematically identified randomized controlled trials comparing Mediterranean to low-fat diets for overweight or obese subjects. Only those studies with a minimum follow-up of six month, and that included data on cardiovascular risk factors were included. The researchers concluded that, in the six studies examined, people assigned to the Med Diet group showed more weight loss, lower BMI, lower blood pressure, better blood sugar control, reduced cholesterol, and lower C-reactive protein than those following a low-fat diet in these interventions.^{[1][2]}

The American Journal of Medicine. September 2011; 124(9):841-851 e2

METABOLIC SYNDROME FACTORS IMPROVE WITH MED DIET

In a 12-week randomized trial, 89 women with Metabolic Syndrome were divided into two groups, one consuming a Mediterranean-style low-glycemic-load diet and the other receiving the same diet with the addition of a “medical food” containing phytosterols, soy protein, hops and acacia. At the end of the trial, researchers at the University of Connecticut noted that both groups had similar decreases in waist circumference, blood pressure and plasma triglycerides. Cholesterol levels also improved in both groups, though slightly more in the Med Diet + medical food group.^{[1][2]}

Journal of Clinical Lipidology, May-June 2011; 5(3):188-96. Epub 2011 Mar 11.

MED DIET REDUCES RISK OF METABOLIC SYNDROME

To assess the Mediterranean Diet’s effect on metabolic syndrome, scientists in Greece and Italy conducted a meta-analysis of 50 peer-reviewed Med Diet studies (including 35 clinical trials) involving more than half a million people. Metabolic Syndrome is considered to be present if someone has three or more of the following: high blood pressure, high blood sugar, large waist circumference, low HDL cholesterol, and high triglycerides. The researchers found that the Med

Diet improved all five risk factors, and overall reduced the risk of Metabolic Syndrome. They concluded that “this dietary pattern can be easily adopted by all population groups and various cultures, and cost-effectively serve for primary and secondary prevention of Metabolic Syndrome and its individual components.”^[L]_[SEP]

Journal of the American College of Cardiology, 15 March 2011; 57:1299-1313.

MEDITERRANEAN DIET IN YOUNG ADULTHOOD LINKED WITH HEALTHIER BRAIN IN MIDDLE AGE

Eat a nutritious diet while you're young, and your brain may thank you later. Scientists analyzed the diets of 2,621 young adults (average age: 25) and then assessed their brain health 25 & 30 years later (average ages: 50 & 55, respectively). Those most closely following a Mediterranean diet in young adulthood had a significantly lower decline in cognitive function than those not following a Mediterranean diet.

Neurology. 2019 Mar 6. pii: 10.1212/WNL.0000000000007243. doi: 10.1212/WNL.0000000000007243. [Epub ahead of print] (McEvoy CT et al.)

MEDITERRANEAN DIET LINKED WITH BETTER BONE MASS IN WOMEN

A traditional Mediterranean diet includes frequent, but low-to-moderate amounts of dairy products, mostly in the form of artisanal cheeses and yogurts. In this study, researchers analyzed the eating habits and bone density in 442 pre-menopausal women in Spain. Following a Mediterranean diet was linked with significantly better bone mass.

Nutrients. 2019 Mar 5;11(3). pii: E555. doi: 10.3390/nu11030555. (Pérez-Rey J et al.)