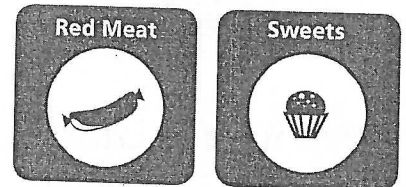


The Mediterranean Diet

Based on how people eat and drink in the 16 countries that border the Mediterranean Sea, this healthy eating plan can reduce your risk of developing heart disease, cancer, high blood pressure, type 2 diabetes, Parkinson's disease, and Alzheimer's disease.

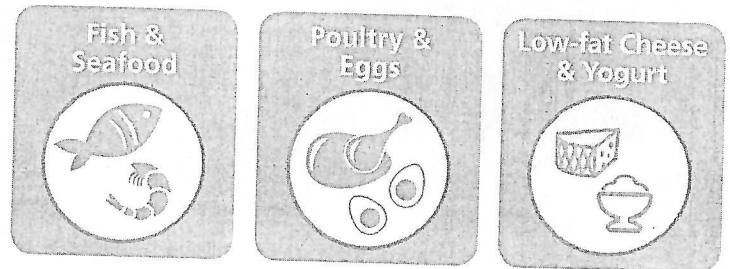
*Once or Twice a Month,
Small Portions ONLY*



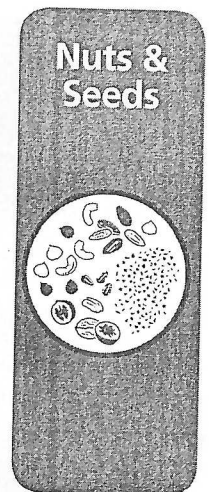
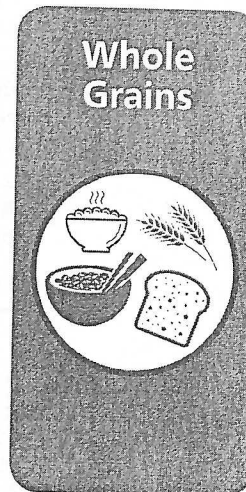
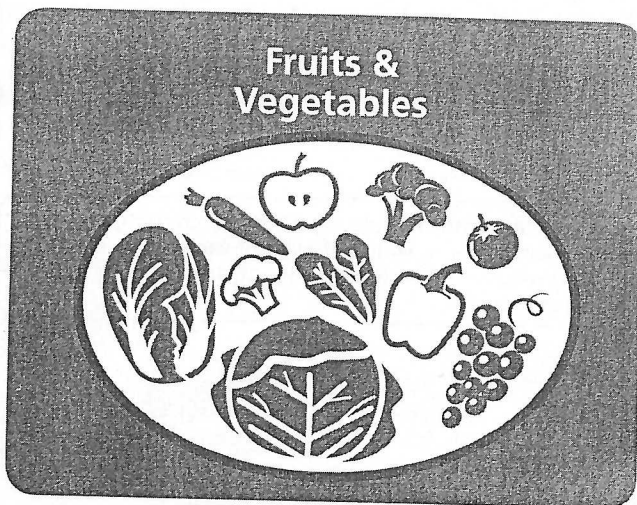
The Mediterranean Diet is:

- **Natural:** Focus on minimally processed foods — less than 5 ingredients in any packaged item.
- **Flexible:** Plan for variety — eat different foods each week to make this diet work for you AND your family.
- **Lower Cost:** Save money at the grocery store by buying less red meat, refined grains, desserts, and fast food each month.
- **A Healthy Lifestyle:** Be fit and energetic; reduce your risk of disease, and have fun!

Throughout the Week, In Moderation



Every Day, No Restrictions



Olive Oil, Herbs, & Spices



Be Active:
Exercise at least 150 minutes a week (walking, swimming, bicycling).



Socialize:
Take time to enjoy meals with your friends and family.



Drink Smart:
Choose water over soda. Limit wine and drink only with a meal. See *Alcohol: Rethink Your Drink* for servings.

What's for Breakfast?

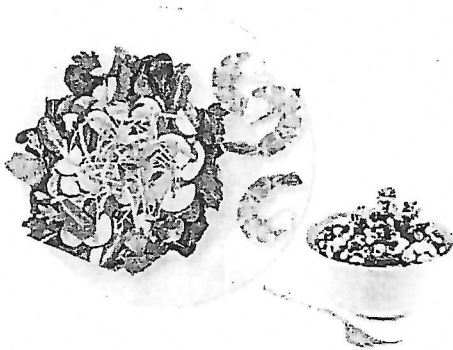


Most mornings, start your day with oatmeal and fruit or whole-grain toast and low-fat yogurt with berries. Choose fresh fruit instead of fruit juice.

Three to four mornings a week, enjoy some eggs. Experiment with poached eggs over whole-wheat toast or maybe a bean and low-fat cheese burrito.

Only a couple times a month, splurge with sausage and whole-grain waffles or bacon and eggs. Try low-fat turkey sausage or bacon, and top your waffle with fruit and sugar-free syrup.

What's for Lunch?

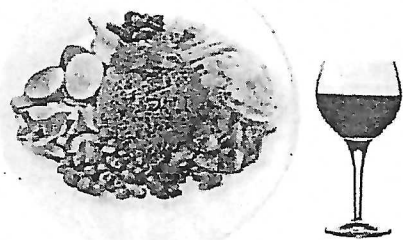


Most days, try different kinds of salads. Add black beans or chickpeas, cooked shrimp or salmon, and olive oil and vinegar dressing. Snack on fruit, nuts, or fresh carrots and snap peas.

A couple times a week, have a piece of grilled chicken or a turkey sandwich on whole-wheat bread. Add tomatoes, lettuce, and avocado to your sandwich. Enjoy some low-fat cottage cheese with fruit.

A couple times a month, order that hamburger you've been craving, but pass on the cheese. Substitute fruit or salad for the fries. For dessert, try angel food cake with fresh fruit or frozen low-fat yogurt.

What's for Dinner?



Most evenings, fill your plate with vegetables that are steamed, roasted, or sautéed in a little olive oil with herbs and spices. Add beans, lentils, brown rice, or whole-grain pasta. If you enjoy red wine, have 1 glass with your meal.

A couple times a week, fill half your plate with vegetables, and add some chicken or fish and brown rice or quinoa. Enjoy some fruit for dessert.

A couple times a month, add roast beef, lamb chop, or pork tenderloin and barley to your half plate of vegetables. For a treat, fix fruit-based desserts like a low-sugar cobbler or berries with low-fat topping.

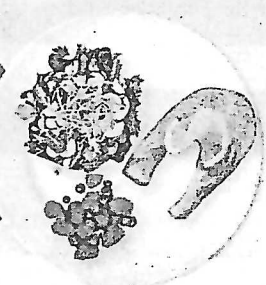
Making the Move to the Mediterranean Diet

Clean out your pantry; throw away highly processed foods.
Reduce red meat; replace with fish and poultry.
Try fruit instead of sweets for dessert.

Slowly add more fruits and vegetables into every meal (see Sample Recipes).
Use olive oil, herbs, and spices for flavor instead of salt and butter.
Drink water for lunch instead of soda.

Start eating plant-based foods 80% of the time.
Grab a handful of nuts or fruit for a snack.

Limit your dairy to low-fat milk, yogurt, and cheese.
Prefer brown rice and whole-grain bread.



Sample Recipes

Ingredients:

- 4 cups salad greens
- 2 medium tomatoes, chopped
- 3 medium cucumbers, chopped
- ½ red or purple onion, sliced
- 8 ounces feta cheese

Vinaigrette:

- ½ cup sun-dried tomatoes, packed in oil
- 2 tablespoons balsamic vinegar

Instructions:

- 1 Layer salad greens, tomatoes, cucumber, onion, and feta cheese onto serving platter or in a bowl.
- 2 Drain the sun-dried tomatoes, reserving ½ cup of the oil.
- 3 Blend tomatoes, reserved oil, and vinegar in a blender, then lightly pour the vinaigrette over the salad before serving.

Makes 4–6 servings

Mediterranean Salad

Ingredients:

- 2 (15 ounce) cans of black beans, rinsed and strained
- 1 shallot, chopped
- 1 garlic clove, minced
- 1–2 teaspoons chili powder
- 1 teaspoon cumin
- ½ teaspoon smoked paprika
- Salt and pepper to taste
- Grated peel and juice of 1 lime
- 2 teaspoons hot sauce of choice
- 1¼ cup cooked quinoa
- 1 egg white
- Gluten-free flour (as needed)

Instructions:

- 1 Reserve ½ cup black beans, and set aside.
- 2 Add the remaining beans, shallot, garlic, spices, grated lime peel, lime juice, and hot sauce into the bowl of a food processor fit with a steel blade. Process until the mixture is the texture of a very chunky puree.
- 3 Transfer mixture to a mixing bowl.
- 4 Add the remaining beans, cooked quinoa, and egg white, and stir together to form your “dough.” If the dough feels too sticky and isn’t holding together as you shape the patties, add some gluten-free flour, 1 tablespoon at a time, until they are easier to shape (but it will still be sticky!).
- 5 Shape mixture into 6 patties, and chill in the refrigerator for at least 1 hour, or longer if you have time.
- 6 Preheat oven to 375°F. Line a baking sheet with tin foil or parchment paper. Transfer burgers to baking sheet.
- 7 Bake for 20–30 minutes, (carefully) flipping halfway through until both sides are browned.
- 8 Let rest for 5 minutes, then serve.

Makes 6–8 patties

Vegetarian Black Bean Quinoa Burgers

Ingredients:

- Grated lemon and/or orange peel
- 2 teaspoons coarse salt (e.g., Kosher salt)
- 2 teaspoons sugar
- 1½ teaspoon white pepper
- 1 teaspoon ground coriander (or fresh cilantro)
- 4–6 Salmon filets (4 ounces each)
- Lemon and orange slices

Instructions:

- 1 Mix grated lemon/orange peel, salt, sugar, pepper, and coriander (or cilantro).
- 2 Rub on fish, and wrap in plastic wrap. Refrigerate for about 2 hours.
- 3 Remove from refrigerator and wipe most of the rub mixture off the fish.
- 4 Make a layer of sliced oranges and lemons in a glass baking dish. Place fish skin-side down on top.
- 5 Roast 8–12 inches from top of oven on broil for about 10 minutes/inch of thickness or until the fish is opaque and flaky, (about 12–15 minutes). Watch closely while under broiler to prevent burning the fish.

Makes 4–6 servings

Roast Salmon

For more recipes and cooking tips, see: oldwayspt.org/recipes

Shopping List: Select at least 1 new food to try this week.

Go! Eat daily — no restrictions

Vegetables

- Artichoke
- Artichoke hearts
- Asparagus
- Baby corn
- Bamboo shoots
- Beans (green, wax, Italian)
- Bean sprouts
- Beets
- Brussels sprouts
- Broccoli
- Cabbage (green, bok choy, Chinese)
- Carrots
- Cauliflower
- Celery
- Chayote
- Coleslaw (packaged, no dressing)
- Cucumber
- Daikon
- Eggplant
- Greens (collard, kale, mustard, turnip)
- Hearts of palm
- Jicama
- Kohlrabi
- Leeks
- Mushrooms
- Okra
- Onions
- Pea pods

- Peppers
- Radishes
- Rutabaga
- Salad greens (chicory, endive, escarole, lettuce, romaine, spinach, arugula, radicchio, watercress)
- Spinach
- Sprouts
- Squash (summer, crookneck, spaghetti, zucchini)
- Sugar snap peas
- Swiss chard
- Tomatoes
- Turnips
- Water chestnuts
- Yard-long beans

Herbs, Spices, and Oils

- Basil
- Chili Powder
- Chillies
- Cinnamon
- Cloves
- Cumin
- Dill
- Garlic
- Ginger
- Fennel seed
- Marjoram
- Mint
- Canola oil
- Oils (canola, extra-virgin olive, sesame, flaxseed, grapeseed, and avocado)
- Oregano
- Parsley
- Pepper
- Rosemary
- Saffron
- Sage
- Tarragon
- Thyme

Fruits

- Apples
- Avocados
- Bananas
- Blackberries
- Blueberries
- Cherries
- Figs
- Grapes
- Kiwis
- Melons
- Nectarines
- Peaches

- Oranges
- Pomegranates
- Plums
- Raspberries
- Strawberries

Whole Grains

- Barley
- Brown rice
- Buckwheat
- Bulgur
- Couscous
- Faro
- Kamut
- Oatmeal
- Polenta
- Quinoa
- Wheatberries
- Whole-grain breads, rolls, tortillas, and pasta

Beans/Legumes, Nuts & Seeds

- Almonds
- Black-eyed peas
- Cashews
- Chickpeas (garbanzos)
- Flax/flaxseed
- Kidney beans
- Lentils
- Lima beans
- Peanuts
- Pine nuts

- Pistachios
- Seeds
- Split peas
- Sunflower seeds
- Walnuts

Slow! Enjoy in moderation throughout the week

Fish & Seafood

- Clams
- Cod
- Crab
- Halibut
- Mussels
- Orange Roughy
- Red Snapper
- Salmon
- Scallops
- Shrimp
- Tilapia
- Tuna

Poultry & Eggs

- Chicken
- Eggs
- Turkey

Dairy

- Cottage cheese
- Greek yogurt
- Kefir
- Low-fat cheese
- Low-fat milk
- Low-fat yogurt

Whoa! Only small portions, once or twice a month

Meat

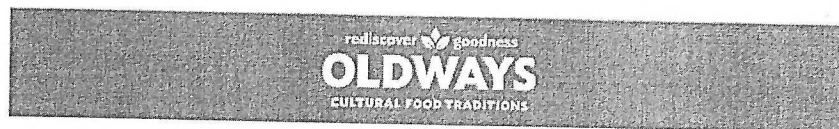
- Beef
- Elk
- Lamb
- Pork
- Veal
- Venison

Sweets

- Cakes
- Candy
- Cookies
- Custards
- Donuts, Pastries
- Pies

Mediterranean Eating Pattern

- A traditional pattern of eating common in the region surrounding the Mediterranean Sea
- Most well-researched example of an anti-inflammatory diet
 - Anti-inflammatory diet is an eating pattern that promotes a reduction or prevention of chronic, low-grade inflammation that is at the root of a variety of chronic illnesses - cardiovascular disease, diabetes, asthma, metabolic syndrome, depression, arthritis, and others
- Although we often use the term “diet” to refer to this pattern of eating, it is not a diet in the traditional sense - there is no restriction on calories, or strict rules to follow
- Broadly applicable across other regions, cultures, and food traditions
- Has been shown to be cost effective



Mediterranean Diet Pyramid

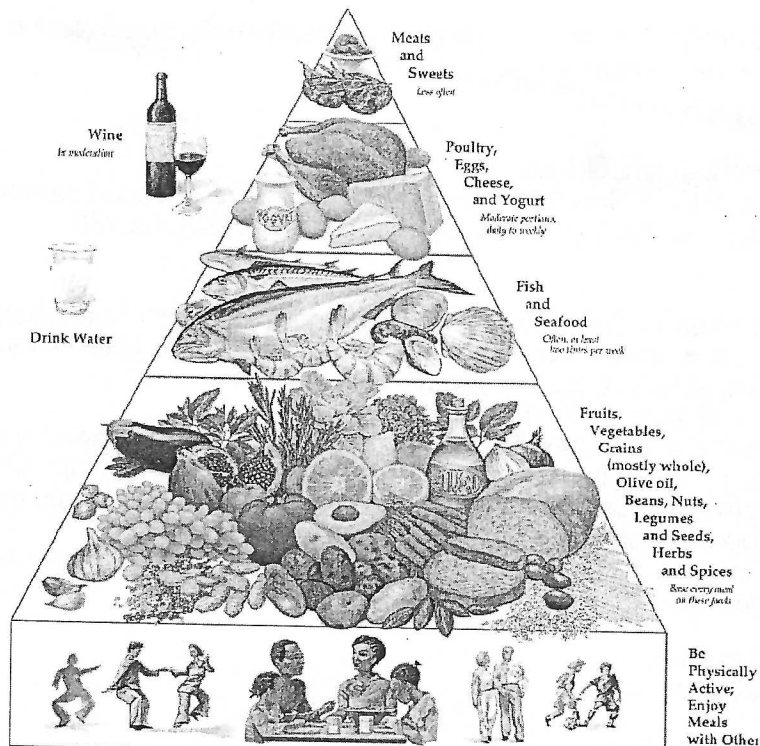


Illustration by George Mikellides

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Components of the Mediterranean Eating Pattern in Research Studies

Important to note: While it is useful to explore in more detail the individual components of the Mediterranean diet, likely the overall benefit of the diet is due to the diet as a whole, rather than any specific component.

1. Original Mediterranean Diet "Score"

From A. Trichopoulou, T. Costacou, C. Bamia, et al.: Adherence to a Mediterranean diet and survival in a Greek population. *N Engl J Med.* 348:2599-2608 2003 12826634

Give yourself 1 point for each "yes" answer and 0 for each "no".

- **Vegetables:** 4 or more servings per day
- **Legumes:** 1 or more servings per week
- **Fruit:** 3 or more servings per day
- **Nuts and seeds:** 1 or more servings per week
- **Whole grains:** 1 or more servings per day
- **Fish:** 4 or more servings per week
- **Fats:** More unsaturated fats (eg, olive oil), rather than saturated fats (eg, butter)
- **Alcohol:** 1/2-1 drink per day for women; 1-2 for men (if habitual drinker of alcohol)
- **Red and processed meat:** Fewer than 2 servings per day for women; fewer than 3 per day for men.

A score of 6 or higher puts in the range of highest benefit. Scores less than 4 mean you are getting little or no protection.

2. From PREDIMED trial

R. Estruch, E. Ros, J. Salas-Salvadó, et al.: Primary prevention of cardiovascular disease with a Mediterranean diet. *N Engl J Med.* 368:1279-1290 2013 23432189

Include:

- Olive oil: abundant use in cooking and dressing dishes (1 L per week was supplied)
- Vegetables: at least 2 servings daily (at least one serving fresh in a salad)
- Fresh fruit: at least 2-3 servings daily
- Legumes: at least 3 servings per week
- Fish and seafood: at least 3 servings per week (at least one serving of fatty fish)
- Nuts and seeds: at least 3 servings per week (walnuts, hazelnuts, almonds)
- Animal protein: Select poultry without skin or rabbit instead of red meats or processed meats (burgers, sausages)
- Sofrito: tomato, garlic, onion, +/- aromatic herbs simmered in olive oil to dress vegetables, pasta, rice, etc - at least 2 times per week

Consume unlimited:

- Nuts (raw and unsalted)
- Eggs
- Fish (recommend daily intake)
- Seafood
- Low fat cheese
- Whole-grain cereals

Consume less than 1 serving per week:

- Cured ham
- Red meat (after removing all visible fat)
- Chocolate (only dark chocolate with at least 50% cocoa)
- Cured or fatty cheese

Greatly limit or Eliminate:

- Cream, butter, margarine
- Cold meat, pate, duck
- Carbonated or sugared beverages
- Industrial desserts (pudding, custard)
- French fries or potato chips
- Out of home pre-cooked cakes and sweets

Lifestyle:

- Two main meals per day are eaten seated at a table, lasting more than 20 minutes
- For usual drinkers, the main source of alcohol should be wine maximum 3 glasses (300 ml) per day.
- If wine intake is usual, drink 1 glass of wine per day during a meal (150 ml for men, 100 ml for women).

Resources

<https://www.eatingwell.com/recipes/18314/cuisines-regions/mediterranean/>

<https://www.mondaycampaigns.org/meatless-monday>

Books by Yotam Ottolenghi

The Complete Mediterranean Cookbook: 500 Vibrant, Kitchen-Tested Recipes for Living and Eating Well Every Day (The Complete ATK Cookbook Series) by America's Test Kitchen

Mediterranean Diet Cookbook for Two: 100 Perfectly Portioned Recipes for Healthy Eating Kindle Edition by Anne Danahy RD

Mediterranean Paleo Cooking: Over 150 Fresh Coastal Recipes for a Relaxed, Gluten-Free Lifestyle - by Caitlin Weeks NC, Chef Nabil Boumrar, Diane Sanfilippo BS NC

Compiled by Michelle Davila, ND
Beaumont Integrative Medicine
248-964-9200

Anti-inflammatory / Mediterranean Eating Pattern

Inflammation in the body is known to contribute to chronic disease such as diabetes, heart disease, asthma, inflammatory gut disorders, arthritis, cancer, and dementia. Eating in an anti-inflammatory way may reduce inflammation and decrease chronic disease. Food as medicine is powerful!

Here are some simple guidelines:

1. Choose healthy fats
 - Substitute extra virgin olive oil for other vegetable oils, trans-fats, or butter in your cooking for health benefits.
 - Eat 2-3 servings (4 ounces each) of fatty fish per week (salmon, sardines, herring, spanish mackerel, anchovy)
 - Reduce use of omega-6 fats (hydrogenated/ vegetable oils) to keep a ratio of omega-6:omega-3 in range of 2:1 to 4:1.
2. Increase vegetable and fruit intake (especially vegetables)
 - Eat at least 5 servings of vegetables and fruit per day, with more than half as vegetables.
 - Choose colorful foods! - deeply-colored fruits and veggies contain higher amounts of protective phytochemicals
 - Use the plate method - the biggest portion (half the plate) is where the vegetables go (excluding potatoes and corn).
3. Choose whole grain carbohydrates and limit the portion sizes
 - Choose carbs that are whole grain (requires chewing), and aim for at least 25 grams of fiber per day.
 - Prescription: Double your vegetable intake, and halve your intake of refined carbohydrates (anything with flour or added sugar).
4. Get your protein from plant sources such as legumes, nuts and seeds, and/or choose lean, natural animal sources of protein in moderate amounts.
5. Spice it up - Include anti-inflammatory herbs and spices such as garlic, turmeric, rosemary, ginger, oregano, cumin, and cayenne in your diet.
6. Eat mindfully
 - Be mindful of your food portions.
 - Chew slowly and savor your food.
 - Adopt the Okinawan philosophy of "hara hachi bu" - stopping when nearly 8/10 full and paying attention to your signals for hunger and fullness.
 - Focus on the whole diet pattern, not just the components. Choose food that is closest to its natural form (i.e., less processed).
7. Best dietary advice in 7 words: "Eat food. Not too much. Mostly plants." (from Michael Pollan)
8. Adopt an anti-inflammatory LIFESTYLE
 - Incorporate regular physical activity that you enjoy
 - Be aware of, and find healthy way to reduce stress
9. Enjoy 1-2 ounces of dark chocolate (at least 70%) as an occasional treat.

Eat more:

- Foods high in omega-3 fats
 - Cold water fish (salmon, sardines, herring, Spanish mackerel, anchovy)
 - Flax seeds, flax oil, chia seeds, hemp seeds
 - Walnuts
- Vegetables
 - Yellow, orange, and red veggies (peppers, carrots, beets)
 - Dark leafy greens (spinach, kale, arugula, broccoli)
- Deeply-colored fruit
 - Berries, citrus, pomegranate
- Whole grains
 - Steel cut or rolled oats, quinoa, brown rice, wild rice, amaranth, buckwheat
 - Sprouted-grain breads
- Anti-inflammatory spices
 - Turmeric
 - Ginger
 - Rosemary
 - Oregano
 - Cayenne

Eat less:

- Foods high in trans- and saturated fats
 - Processed and red meats
 - Dairy products
 - Partially hydrogenated vegetable oils
- Foods high in omega-6 fats (in order to get a better omega 6:3 ratio).
 - Corn, cottonseed, grapeseed, peanut, soy oils
- Refined carbohydrates (with a high glycemic load)
 - White breads or bagels
 - English muffins
 - Instant or white rice
 - Rice and corn cereals
 - Crackers, cookies, cakes
- Sodas and juices
 - Including “diet” drinks

Adapted from Drs Kohatsu, Karpowicz, Integrative Medicine

Medical Conditions That May Improve With An Anti-inflammatory Diet

From Integrative Medicine by Rakel, Table 88.3

Arthritis	Two randomized controlled trials found turmeric extracts to be as good or better than nonsteroidal antiinflammatory drugs (NSAIDs) at controlling symptoms of knee osteoarthritis ¹³² and rheumatoid arthritis. ¹³³ Doses ranged from 500 mg to 1500 mg daily in these trials. Daily administration of a probiotic for 8 weeks was shown in a randomized controlled trial to reduce symptom severity and inflammatory status in patients with rheumatoid arthritis. ¹⁶⁵
Hypertension	Randomized controlled trials found significant reductions in blood pressure in patients who adopted the traditional Mediterranean diet ¹⁶⁶ and the New Nordic Diet, a Mediterranean diet regional variant. ²⁷ Apart from its inclusion in the Mediterranean diet, daily consumption of olive oil results in a clinically significant reduction in blood pressure ¹⁶⁸ —olive oil rich in polyphenols, such as extra virgin olive oil, may be more effective at decreasing blood pressure than regular olive oil. ¹⁶⁹ Olive oil dosing ranged from 30 mL–60 mL (2–4 tablespoons) daily in these trials.
Asthma	A recent small trial found improvement in spirometry and quality of life scores in patients with asthma who adopted a Mediterranean diet. ¹⁷⁰
COPD	In one randomized controlled trial, patients with COPD showed significant improvement in lung function [increased forced expiratory volume in 1 second (FEV ₁)] with greater intake of antioxidant-rich fruits and vegetables. ¹⁷¹
Diabetes	Data from the PREDIMED trial indicate reduced onset of diabetes with increased adherence to an energy-unrestricted Mediterranean diet. ^{53,173} In patients with existing diabetes, adherence to an energy-unrestricted Mediterranean diet resulted in a reduction in hemoglobin A1c equivalent to that from mono-drug therapy. ¹⁷⁴ A low-carbohydrate Mediterranean diet has also been shown to reduce the need for antihyperglycemic medications in patients with newly diagnosed diabetes. ¹⁷⁵
Cardiovascular Disease	Large randomized controlled trials have demonstrated the Mediterranean diet as an effective means of both primary ²³ and secondary ^{26,177} prevention of cardiovascular events, including myocardial infarction and stroke. Supplementation with olive oil ¹⁵⁵ and nuts ⁶⁶ likely provides even greater benefit. The effect size of dietary change should not be underestimated—secondary prevention trials indicated risk reductions of nearly two-thirds in those adhering to a Mediterranean-style diet.
Peripheral Artery Disease	The PREDIMED trial suggests that adherence to a Mediterranean diet significantly decreases the rate of new-onset symptomatic peripheral artery disease. ¹⁸¹ In a randomized controlled trial of patients with existing peripheral artery disease, daily administration of 40 g of dark chocolate resulted in a significant improvement in walking autonomy. ¹⁵⁶

Obesity	<p>Adherence to a Mediterranean diet was associated with 51% lower odds of being obese and 59% lower odds of central obesity.¹⁸³ A high amount of olive oil consumption was not associated with higher weight gain or a significantly higher risk of becoming overweight or obese.¹⁸⁴ Despite a higher fat content (35% compared to 20%), participants eating a Mediterranean-based diet lost 4.1 kg compared with controls who gained 2.9 kg over 18 months.¹⁸⁵</p>
Inflammatory Bowel Disease	<p>A randomized controlled trial found that turmeric (<i>Curcumin</i>) at daily doses of 2 g given in conjunction with standard therapy significantly reduced rates of relapse and improved endoscopic and symptom-based disease severity scores.¹³⁴ A recent case series demonstrated that patients who adhered to a modified antiinflammatory diet showed significant improvement in disease-related symptom scores.¹⁸⁷</p>
Nonalcoholic Fatty Liver Disease	<p>In adults with nonalcoholic fatty liver disease, data from a randomized controlled trial indicate that patients whose diets are supplemented with olive oil or canola oil at doses up to 20 mg daily showed a reduction in liver span and severity of fatty liver at 6 months.¹⁸⁸ A recent meta-analysis found that daily supplementation with omega-3 fatty acids reduced hepatic steatosis.¹⁸⁹ Daily doses above 800 mg are effective, although the ideal dose is not yet known.</p>
Cancer	<p>A recent meta-analysis found that higher adherence to the Mediterranean diet was associated with a 10% reduction in overall cancer incidence and mortality.¹⁹⁰ This data indicate the effect may be most pronounced in colorectal and prostate cancer, with reductions in incidence of 14% and 4%, respectively, with increased adherence to the Mediterranean diet.</p>
Alzheimer's Disease and Dementia	<p>Adherence to a Mediterranean diet supplemented with olive oil or nuts has been shown to improve cognition and slow age-related cognitive decline.^{191,192} In an observational study, higher adherence to a Mediterranean diet was associated with slower cognitive decline as measured by the Mini Mental State Evaluation.¹⁹³ A recent small pilot study found that daily supplementation with omega-3 fatty acids and alpha lipoic acid (ALA) reduced the progression of cognitive and functional decline in patients with Alzheimer's disease.¹⁹⁴ Doses used in this study were 1.6 g of omega-3 fatty acids and 600 mg of ALA daily.</p>
Depression	<p>A recent meta-analysis of 19 randomized controlled trials found omega-3 fatty acid supplementation effective in treating patients with both major depressive disorder (MDD) and depressive symptoms without a clear MDD diagnosis.¹⁹⁵ Dosing varied widely across trials but averaged 1.4 g of combined EPA and DHA daily. Additionally, another recent trial found that initiating omega-3 supplementation with a selective serotonin reuptake inhibitor (SSRI) resulted in better reduction in depressive symptoms than the SSRI alone.¹⁹⁶</p>
Psoriasis	<p>In patients being treated for psoriasis, a randomized controlled trial demonstrated that a hypocaloric, omega-3 rich diet significantly reduced symptom severity at 3 and 6 months.¹⁹⁷</p>