

Combining the Mediterranean Diet and the Gluten-Free Diet

What are the major principles of the Mediterranean Diet?

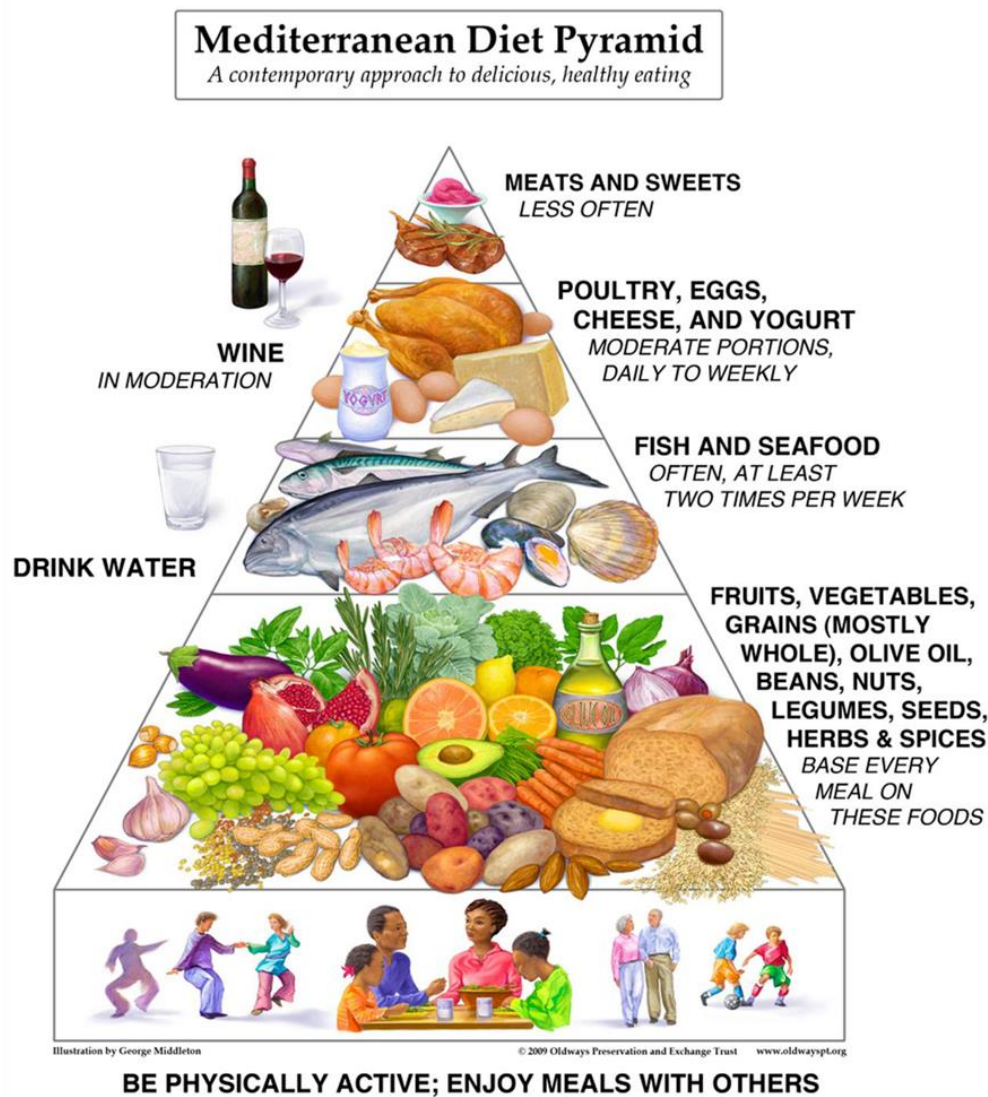
- The Mediterranean Diet (Med. Diet) is a commonly recommended diet that is based on the eating pattern of people in the Mediterranean region. It suggests the high intake of vegetables, fruits, whole grains, legumes, healthy fats, and water; a moderate consumption of seafood, poultry, and dairy, and a low intake of sweets and processed or red meat. The Med. Diet is associated with many positive health benefits. For patients with celiac disease, the Med Diet can help provide important nutrients that a typical gluten-free diet may lack—without the significant risk of undesired weight gain that can lead to overweight or obesity.^{1,2} The diet can easily be made gluten-free.
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Health Benefits of the Mediterranean Diet

Research has shown that the Med. Diet offers a wide range of health benefits.

- Lowers blood pressure³
- Reduces the number of pre-cancerous colorectal polyps⁴
- Lowers risk of early menopause⁵
- Decreases risk for developing Alzheimer's disease^{6,7} and other forms of dementia.
- May improve cognitive performance⁸
- Decreases obesity risk^{9,10}
- Reduces risk for chronic diseases¹¹
- Increases life expectancy¹²
- Increases chances of healthy aging¹³
- Reduces risk of cholecystectomy (removal of gall bladder)¹⁴
- Decreases risk of developing breast cancer¹⁵
- Reduces risk of cardiovascular disease and type 2 diabetes¹⁶
- For more information on the health benefits of the Med. Diet, check out: <https://oldwayspt.org/health-studies> or <http://www.health.harvard.edu/blog/adopt-a-mediterranean-diet-now-for-better-health-later-201311066846>
- The Med. Diet first became popular following the creation of the Med. Diet Pyramid by Oldways in conjunction with the Harvard School of Public Health and the World Health Organization in 1993. The Med. Diet has continued to grow in popularity, and the 2020-2025 U.S. Dietary

guidelines recommend a Mediterranean-Style Eating Pattern.¹⁷ The Med. Diet Pyramid, shown below, outlines the basic principles of the diet.



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- **Base of pyramid:** physical activity and social interaction (dancing, sports, sharing meals)
- **Second Level:** foods that should be eaten every day (whole grains, fruits, vegetables, legumes (lentils, dried peas, and beans), seeds, herbs, nuts, spices, and healthy fats such as olive oil and avocado)
- **Third level:** Fish and seafood should be eaten twice a week.
- **Fourth level:** Dairy, (particularly fermented dairy including yogurt or kefir), eggs, and poultry should be eaten in moderate servings daily to weekly.
- **Fifth level:** Red meat and sweets should only be eaten on rare occasions.
- Drinking water is encouraged.

- Wine, in moderation, is also part of the Med. Diet* (no more than one 5 oz. glass of wine per day for women, and 2 per day for men).
- You should not start drinking alcohol if you do not already do so. Alcohol is not recommended with some medications and conditions, such as pregnancy, breast feeding, liver disease, and kidney disease, among others. Please consult your physician and dietitian before adding alcohol to your diet.

<https://oldwayspt.org/traditional-diets/mediterranean-diet>

How does the Mediterranean Diet differ for those on a gluten-free diet?

- Those on a gluten-free diet, such as those with celiac disease, will only need to make some minor modifications to maintain their dietary needs. The most significant change is substituting gluten-free whole grains for any gluten-containing grains, such as whole wheat, typically included in the Med. Diet.¹ Some suitable gluten-free whole grain substitutes can be found in the chart below.

<u>AVOID</u> Gluten-Containing Whole Grains	<u>CHOOSE</u> Some Gluten-Free Whole Grains, Nut Flours
❖ Wheat flour	❖ Millet
❖ Bulgur	❖ Brown Rice
❖ Couscous	❖ Quinoa
❖ Barley	❖ Buckwheat
❖ Farro	❖ Whole Grain Cornmeal
❖ Commercial Oats (high risk of cross-contact with gluten)	❖ Nut flours (almond, hazelnut)

- Make sure that all gluten-free grain and flour substitutes are labeled gluten-free. Remember to check other foods you eat while on the Med. Diet, such as nuts, seeds, and spices for gluten. Contact the manufacturer when necessary to ensure that they are gluten-free.
- Make these dietary changes slowly and start with small steps. It is important to add fiber slowly, and increase water intake with added fiber, to help the gut adjust to these changes in diet.
- Iron deficient anemia is common in celiac disease. Since iron can be challenging to obtain from the Med. Diet, women, in particular, should pay close attention to choosing iron-rich foods, such as lentils, spinach, almonds, lean red meat and dark meat poultry.
- Visit with a registered dietitian skilled in celiac disease/gluten-free diet to ensure that you are getting all of your vitamins and minerals, in particular, calcium, vitamin D, iron, B vitamins, and zinc. No one food or food group is better than another. However, you can get more nutrition in each bite by choosing “nutrient-dense” foods most of the time. Here are some general ideas to remember.

**Sample Menu: Gluten-Free Mediterranean Diet
(~2000 Calories) GF = gluten-free**

Breakfast	-1 cup cooked GF whole grain (*quinoa, amaranth, and/or buckwheat) with 1 cup mixed berries and 8 almonds or cashews -5 oz. plain low-fat Greek yogurt -12 oz. water or tea
Lunch	-1 cup baby spinach leaves -1/4 medium avocado -8 cherry tomatoes -1/2 cup sliced cucumber -1/4 cup feta cheese -1 hard-boiled egg -1/3 cup chickpeas -2 tbsp. dressing for salad (olive oil, balsamic vinegar or lemon juice, and herbs of choice)
Snack	-1 baked sweet potato with tbsp. olive oil and salt and pepper to taste -8 oz. water
Dinner	-3 oz. grilled salmon -1/2 cooked brown rice -1 cup broccoli sautéed in 2 tsp. olive oil -12 oz. water
Snack	-1 medium banana -1 tbsp. natural peanut butter -8 oz. water or tea

*Gluten-free grains must be labeled gluten-free.

Gluten-Free/Med. Diet Recipe Ideas

<u>Sorghum Pasta Salad with Oregano, Feta Cheese, and Cucumbers</u>	<u>Spicy Cumin Scented Carrot Ginger Soup</u> Use labeled gluten-free stock or broth.
<u>Spinach Pasta Chickpea Salad with Salmon</u> Use gluten-free whole-grain or lentil/chickpea based pasta.	<u>Spicy Salmon</u> Serve with a side of gluten-free labeled buckwheat or lentils.

<u>Baked Snapper with Tomatoes and Olives</u>	<u>Lemon Garlic Shrimp and Vegetables</u> Serve with a side of brown rice or gluten-free labeled quinoa.
<u>Split Pea and Melted Eggplant Soup</u> Use labeled gluten-free chicken or vegetable broth.	<u>Apple-Cinnamon Oatmeal with an Egg Boost</u> Use uncontaminated, labeled gluten-free oats.
<u>Maple Candied Walnuts</u>	<u>Chocolate Walnut Macaroons</u>

- Remember to check recipes for gluten-containing ingredients and make the necessary gluten-free substitutions.
- While the vast majority of fruits and vegetables are naturally gluten-free, check the labels of vegetables served in sauces, gravy, and seasonings. Check the labels of fruits in sauces or pie fillings, as well as dried fruit, such as dates that are sometimes rolled in oat flour.

<u>Gluten-Free “Have on Hand” Items for the Mediterranean Diet</u>	
<ul style="list-style-type: none"> • Fruit – any and all <ul style="list-style-type: none"> ○ Lemons, Limes 	<ul style="list-style-type: none"> • Nuts and Peanuts • Almonds, Walnuts
<ul style="list-style-type: none"> • Healthy Fats <ul style="list-style-type: none"> ○ Olive oil ○ Olives ○ Avocado 	<ul style="list-style-type: none"> • Veggies – any and all <ul style="list-style-type: none"> ○ Sundried tomatoes ○ Garlic
<ul style="list-style-type: none"> • Yogurt and cheese (feta, goat) 	<ul style="list-style-type: none"> • Fish
<ul style="list-style-type: none"> • Seeds <ul style="list-style-type: none"> ○ Sunflower seeds 	<ul style="list-style-type: none"> • Eggs and Poultry
<ul style="list-style-type: none"> • Rice, Gluten-free grains listed above 	<ul style="list-style-type: none"> • Meat (in small amounts)
<ul style="list-style-type: none"> • Chick peas, Lentils, Dried Beans (regardless of being labeled gluten-free) Pour dried chick peas, lentils, and dried beans onto a cookie sheet, sort through them for rocks or gluten-containing grains, then rinse and drain. Rinse canned chick peas, lentils, and dried beans and drain well. 	

References

1. Jones, A. "Follow the Mediterranean Example: A Diet Rich in Grains, Veggies and Fish That's Easily Made Gluten-Free." *Gluten-Free Living*, Whole Grains Council, 17 Aug. 2017.
2. Barone M *et al.* A comparison of the nutritional status between adult celiac patients on a long-term, strictly gluten-free diet and healthy subjects. *Eur. J. Clin. Nutr.* 70, 23–27 (2016).
3. Davis CR *et al.* Mediterranean diet lowers blood pressure. *Am J Clin Nutr.* 105, 1305-1313 (2017).
4. Isakov NF *et al.* Mediterranean diet linked with fewer signs of precancerous colorectal polyps. Presented at the European Society for Medical Oncology's 19th World Congress on Gastrointestinal Cancer. Barcelona, Spain (2017).
5. Boutot ME *et al.* Vegetable protein linked with lower risk of early menopause. *Am J Epidemiol.* (2017).
6. Miranda A, Gomez-Gaete C & Mennickent S. Role of mediterranean diet on the prevention of Alzheimer disease. *Rev. Med. Chil.* 145, 501–507 (2017).
7. D'Cunha NM *et al.* Evaluation of dietary and lifestyle changes as modifiers of S100 β levels in alzheimer's disease. *Nutritional Neuroscience.*(2017).
8. Anastasiou CA *et al.* Mediterranean diet and cognitive health: initial results from the Hellenic Longitudinal Investigation of ageing and diet. *PLoS One* 12, e0182048 (2017).
9. Sanz J *et al.* Plant-based diet can reduce obesity risk by 43%. Presented at the European Congress on Obesity. Porto, Portugal (2017).
10. D'Innocenzo S, Biagi C, Lanari M. Obesity and the Mediterranean diet: a review of evidence of the role and sustainability of the Mediterranean diet. *Nutrients.* June 9;11(6):1306. (2019).
11. Subhan FB, Chan CB. Review of dietary practices of the 21st Century: facts and fallacies. *Can J Diabetes.* 40, 348-354 (2016).
12. Sotos-Prieto M *et al.* Association of changes in diet quality with total and cause-specific mortality. *N. Engl. J. Med.* 377, 143–153 (2017).
13. Samieri C *et al.* The relation of midlife diet to healthy aging: a cohort study. *Ann Intern Med.* 159, 584-59 (2013).
14. Barre A *et al.* Diet and risk of cholecystectomy: a prospective study based on the French E3N cohort. *Am. J. Gastroenterol.* (2017).
15. Shapira N. The potential contribution of dietary factors to breast cancer prevention. *Eur. J. Cancer Prev.* 26, 385–395 (2017).
16. Bruno E *et al.* Adherence to mediterranean diet and metabolic syndrome in BRCA mutation carriers. *Integr. Cancer Ther.* (2017).
17. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *2020 – 2025 Dietary Guidelines for Americans.* (Table A3-5). Accessed Nov 2025.
<https://www.dietaryguidelines.gov/resources/2020-2025-dietary-guidelines-online-materials>