



ADOPTING NUTRITIONAL PRACTICES



WholisticMatters®



What does a healthy plate look like?

The USDA's current nutrition guidelines take the form of "MyPlate" – an initiative which began in 2011 and concentrates on five key food groups:

- 30% grains
- 30% vegetables
- 20% fruits
- 20% protein
- Small portion of dairy

Additional recommendations include:

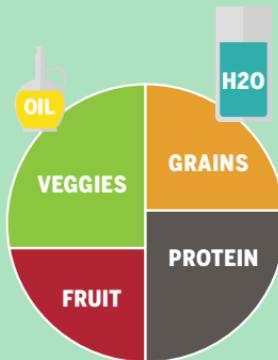
- Portion control
- Eat whole grains
- Drink fat-free or low-fat milk over full-fat milk
- Consume less sodium
- Drink more water and less sugar-sweetened drinks

HEALTHY EATING PLATE

The Harvard School of Public Health created the Healthy Eating Plate to address USDA MyPlate deficiencies.

- Most of your meal should be vegetables and fruits; variety and color matter
- Choose whole grains and limit refined grains
- Select versatile protein sources such as fish, chicken, beans, and nuts; limit red meat
- Choose healthy plant oils; low-fat does not necessarily mean 'healthy'
- Drink water, coffee or tea; limit dairy products
- Stay active

Source: <https://www.hsph.harvard.edu/nutritionsource/healthy-eating-plate/>



FRUITS AND VEGETABLE SERVINGS + GAES AND EXAMPLES

Consumption of fruits and vegetables in America is subpar, yet we know that 10 servings of fruits and vegetables per day can add years to your life. While 10 servings may seem daunting, if you break it into meals and snacks throughout the day, it is actually quite manageable.

For example, along with your other protein, fat, and carbohydrate sources, 10 servings of fruits and vegetables could look like this during the day (see table to the right):



WHAT DOES A DAY OF COLORFUL EATING LOOK LIKE?

| | Item | Serving | Color |
|-------------------|--|-----------|--------------------------------------|
| BREAKFAST: | ½ cup cooked red bell peppers | 1 serving | 1 red |
| | ½ cup cooked spinach | 1 serving | 1 green |
| | 1 cup raw blueberries | 1 serving | 1 blue |
| SNACK: | 1 apple | 1 serving | 1 white |
| LUNCH: | 3 cup loose spinach mix | 1 serving | 1 green |
| | 1 cup chopped raw carrot, cucumber, radish mix | 1 serving | 1/3 green 1/3 white 1/3 orange |
| SNACK: | 1 cup raw cherry tomatoes | 1 serving | 1 red |
| DINNER: | ½ cup cooked cauliflower | 1 serving | 1 white |
| | ½ cup cooked broccoli | 1 serving | 1 green |
| | 1 small cooked sweet potato | 1 serving | 1 orange |

TOTAL: 10 SERVINGS

**2 RED
3 1/3 GREEN
1 BLUE
1 1/3 ORANGE
2 1/3 WHITE**

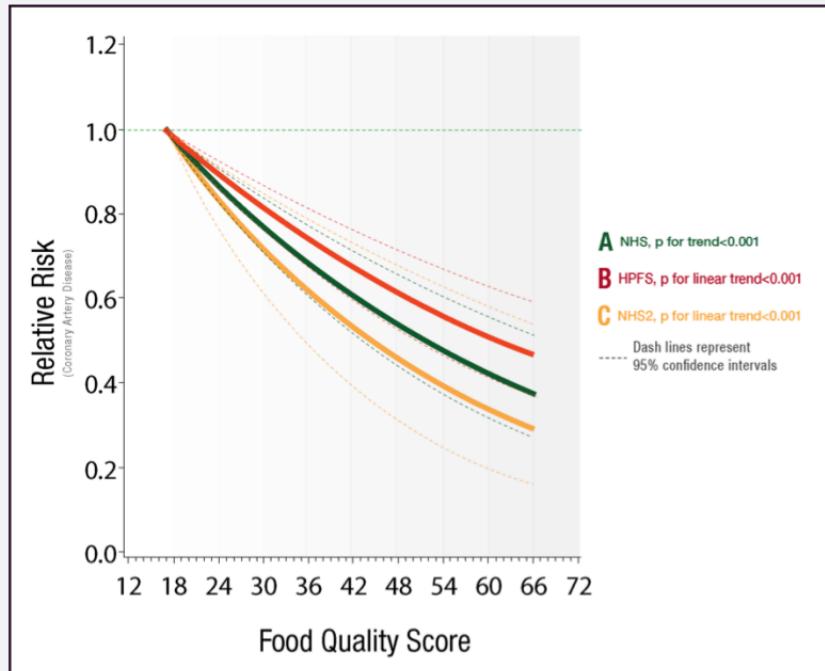
Food Quality Score

AIDING IN NUTRITION DISCUSSIONS

Food Quality Score (FQS) is an assessment of eating habits by food. FQS is linked to the consumption of fruits and vegetables, and it is associated with an individual's risk for chronic health conditions and specific outcomes for coronary artery disease¹.

An individual's relative risk declines with higher scores based on the assessment tool. For example, higher consumption of fruits and vegetables lowers the risk of all-cause mortality². The increased consumption of monounsaturated and polyunsaturated fats, paired with a decreased consumption of saturated fats and trans fat, also affects mortality¹.

FQS provides practitioners a simple tool to aid in nutrition discussion, ranking healthy and unhealthy food items into categories and quintiles. Based on an individual's consumption habits, a score is associated and tallied at the end of the questionnaire. Individuals answer a series of questions such as "How often do you usually eat fruits?" and "How



often do you usually eat green-leafy vegetables?" with answer choices ranging from "never or less than once a month" to "every day or almost every day."

The FQS shows the association between specific dietary habits and cardiometabolic health issues including¹:

- Cardiovascular
- Hypertension
- Glucose control in type 2 diabetes and pre-diabetes

Evidence from prospective studies and meta-analyses have demonstrated that higher intake of plant-based foods is associated with lower risk of hypertension, diabetes, CVD, cancer and mortality. This includes fruit, different types of vegetables, whole grains, nuts, and other plant-based foods^{3,4,5,6}.

FQS offers practitioners an opportunity to conduct targeted interventions with their patients to improve diet and lifestyle habits, reduce the risk of chronic disease, and improve quality of life.

EXAMPLE

How often do you usually eat fruits (e.g., apples, pears, berries, grapes, citrus, and etc.)?

1. Never or less than once a month
2. Less than once a week
3. 1 or 2 times a week
4. 3 to 5 times a week
5. Every day or almost every day

¹ Fung, TT et al. Am J Clin Nutr. 2016; 104:65-72.

² Wang, X et al. BMJ 2014; 349:g4490

³ Micha, R et al. JAMA 2017; 317(9):912-924.

⁴ Li, M et al. BMJ Open 2014; 4(II):e005497.

⁵ Ros, Emilio and Hu, Frank B. Circulation 2013; 128:553-565.

⁶ Mohammadifard, N et al. Am J Clin Nutr. 2015; 101(5):966-82.

Mediterranean Diet

The evidenced-based Mediterranean Diet has been shown to lower risk of diabetes, heart disease and metabolic syndrome. Based on eating habits around the Mediterranean Sea region, this diet combines a healthy lifestyle with unprocessed food choices to provide better glycemic control than traditional low-fat, high-carbohydrate Western diets.

Foods common in the Mediterranean Diet are high in phytochemicals, which prove beneficial in reducing disease risk. From carotenoids to polyphenols, the Mediterranean Diet boasts high antioxidant and anti-inflammatory properties. By eating a primarily plant-based diet, evidence has shown that the high intake of polyphenols leads to reduced risk for several diseases including, but not limited to, neurodegenerative, cardiovascular and obesity.

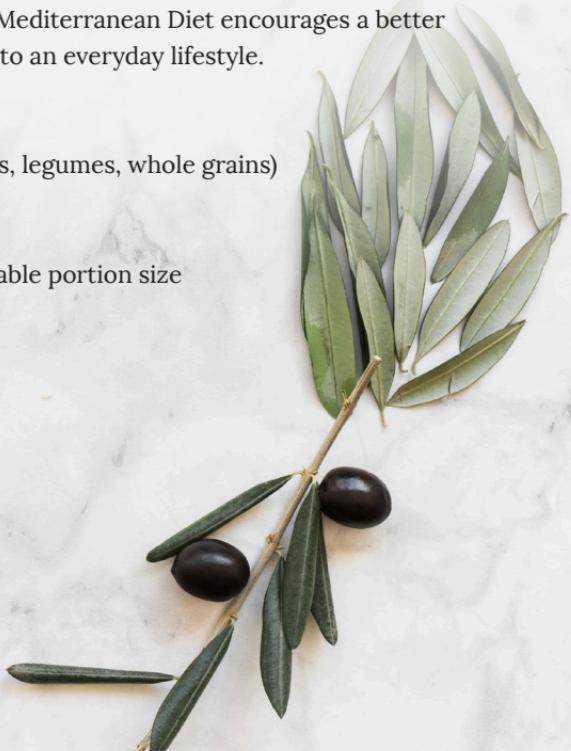
Coined as a heart-healthy, mono-unsaturated fat diet, the Mediterranean Diet encompasses a powerful food regime. The Mediterranean Diet reduces the risk of heart disease,



by associating its' recommendations with food choices that are low in low-density lipoprotein cholesterol (LDL) and high in fiber. This plays a large role in decreased type 2 diabetes onset, and management, as well as stabilizing high blood pressure. There are studies that support evidence of reduced incidences of cancer, Parkinson's and Alzheimer's disease. Focusing on in-season produce, extra-virgin olive oil, fruits, nuts, seeds, seafood and fish, and less red meat and added-sugar sweets, the Mediterranean Diet encourages a better balanced set of unprocessed foods that are easy to incorporate into an everyday lifestyle.

Other highlights from the diet include:

- Primarily plant-based foods (fruits, vegetables, nuts, seeds, legumes, whole grains)
- Aim for 7-10 servings of fruits and vegetables per day
- Switch to all whole grain choices
- Limit red meat to a monthly allowance and within reasonable portion size
- Using herbs and spices to flavor food instead of salt
- Enjoy social time with family and friends



About the Color of Food Series

This overview booklet is just one part of a multi-faceted series on the Color of Food. Understanding the significance of phytonutrient and nutrient gaps, the GAE connection, the whole food advantage, and the role of specialty crops and the Farm Bill provides the tools needed to make conscious decisions about our health and the health of the people around us.

Please check out other items in the Color of Food Series:

- *Color of Food*
- *Featured Crops: Nutrient and Phytonutrient Profiles*
- *Fruits and Vegetables*



We are dedicated to advancing the latest insights and information available in nutrition therapy and clinical nutrition and to presenting only the most balanced, credible, and reliable clinical nutrition and science available.

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