The Mediterranean Food Guide Pyramid

By Jennifer Bendelius, MS, RD, CDN

It has been said that the Mediterranean regions have the most healthful dietary traditions in the world, especially when compared to other industrialized countries, like the United States. This statement is supported by epidemiological studies done in the region. In order to improve our own dietary habits it can be beneficial to look at other cultures’ cuisine and incorporate some of their habits into our own diet. This can help the school nurse in making healthful choices for herself and the children she serves. A historical look at the Mediterranean food guide pyramid will enable the reader to understand the reasons behind the development of this pyramid. This will be followed by a verbal and pictorial description of the Mediterranean Food Guide Pyramid, and a look at the lifestyle characteristics and different food groups that the pyramid represents. Finally, we will review eight guidelines that make up the Mediterranean Food Guide Pyramid.

In 1994, the World Health Organization (WHO), the Oldways Preservation and Exchange Trust, and the Harvard School of Public Health formed a committee to evaluate the epidemiological research that had been done over the years on the dietary traditions of the Mediterranean peoples. The results of this meta-analysis revealed that the inhabitants of these regions had lower rates of chronic diseases and a longer life expectancy than other countries. This was startling, based on the fact that income and medical services were fairly limited in these regions, especially when compared to the United States. After evaluating the findings of the studies, the committee wanted to help others adopt the healthful dietary traditions of the Mediterranean. The result was the Mediterranean Food Guide Pyramid.

The Mediterranean Food Guide Pyramid is an adaptation of the USDA Food Guide Pyramid. It is used to help the average person understand how to adopt this type of diet. The nutritional portion of the Mediterranean Food Guide Pyramid is broken down as follows:

- 60% of calories are from carbohydrates, such as bread, pasta, grains, and fruit.
- 30% of the calories are from fats. (The fat component is made up primarily of olive oil.) Very little saturated fat is consumed.
- 10% of the calories are from protein. Protein sources are primarily consumed in small amounts, for example, 3 to 4 ounces.

The above caloric breakdown is a set of guidelines; therefore, they are not to be calculated to an exact amount. As one looks at the pyramid one can see different aspects of the cuisine and the way of life that surrounds it. The right side of the pyramid shows how frequently one should consume each of the food groups. The left side depicts moderate wine consumption in addition to at least 6 glasses of water. (Moderate wine consumption is defined as a glass of wine per day for women and two glasses per day for men.) The substance in wine that is thought to provide health benefits is a flavonoid called resveratrol. It is possible that the same benefits may be obtained from drinking grape juice. Please keep in mind that those who are pregnant, driving or have a history of a drinking problem should not consume alcohol at all. At the very base of the pyramid is perhaps the most important lifestyle characteristic, physical exercise. Physical activity is to be done on a daily basis. The exercise should be about 30 minutes in duration, and this time need not be consecutive.

At the bottom of the food portion of the pyramid are whole-grain bread, pasta, rice, couscous, polenta, other whole grains, and potatoes. This group is to be consumed in the greatest quantity. Keep in mind that this group is not calorie free, and one must watch portion sizes if trying to manage weight. A rule of thumb is not to consume more than 1/2 to 1 cup serving size of foods from this group at one meal. This is a big departure from typical U.S. serving sizes, which includes bagels that may be equivalent to five servings of the bread group. Notice that there are no exact serving sizes or amounts given in this food guide pyramid. One of the downfalls of the pyramid, critics have said, it that it is too vague. However, if one uses common sense and consumes foods in a moderate quantity one will be eating portion sizes similar to those in the Mediterranean regions. One of the advantages in this group is the amount of fiber and water-soluble B vitamins present in the whole-grain group. Fiber aids a feeling of fullness in the stomach, and reduces the risk of many different chronic diseases.

Vegetables find themselves “on center stage” in this type of cuisine. The vibrant colors, interesting textures, and rich flavors add to palatability. The vegetables contain fiber, vitamins, minerals, and phytochemicals. These increase the life span of those consuming this type of diet. It is important
to mention the lack of sodium, cholesterol, and saturated fat in this group. We Americans consume on the average two servings of vegetables per day; our own USDA Food Guide Pyramid recommends five per day. A good way to increase vegetable intake is to try new vegetable recipes.

Beans, legumes, and nuts are in their own group in this cuisine, whereas in the USDA Food Guide Pyramid they are located within other groups. It is a stand-alone group in this food guide pyramid in part to make people realize the healthful importance of these foods. They are full of protein, vitamins, minerals, and phytochemicals. The protein in the legume/bean group is mostly incomplete; it must be consumed with a complementing protein in order for the body to use it as a complete protein. The nut group contains all of the above plus fat, which is why it is recommended that this group be consumed in small quantities. The fats in the nut group are often unsaturated and healthful.

Fruits contain lots of carbohydrates, vitamins, minerals, phytochemicals, fiber and water. The water and fiber add to the satiety produced by the fruit group. This group lacks sodium and fat, which are often added to cakes, pies, and cookies. In order to gain the benefits of this cuisine it is not necessary to consume foods indigenous to the Mediterranean region. The Mediterranean Food Guide Pyramid is made up of types of foods that the people consume, not just foods that are grown in the area. So eating New York blueberries in the summer, if one lives in New York, is a very healthful choice (for both the individual and the environment).

Olive oil, a fat, is in a group of its own. We as Americans may find this unusual. We have been told for years that we should consume a low-fat diet. The American diet includes a lot of processed foods that have hidden added fats. Olive oil, often referred to as the liquid gold of the region, is made up mostly of monounsaturated fat. The traditional Mediterranean diet is made up of as much as 40% fat, although the American Heart Association recommends a diet with no more than 30% fat. Less than 10% should be from saturated fat sources (for a more in-depth discussion of fat see SNN Nutrition Corner, fall 2002). The big difference between the fat in a typical American diet and the fat in the Mediterranean diet is that most of the fat in the Mediterranean diet is unsaturated, and from vegetable sources such as olive oil, olives, and non-tropical nuts. Other fat sources such as butter and margarine are rarely consumed in a traditional Mediterranean cuisine.

Cheese and yogurt are also in a group of their own. This group is to be consumed daily in small portion sizes. These foods contain protein, fat-soluble vitamins and saturated fat. It is beneficial to consume low-fat or nonfat varieties when possible. The typical portion size of cheese is 1 1/2 teaspoons of a hard grated cheese.

The fats to be consumed weekly include fish, poultry, eggs, and sweets. Fish and poultry are consumed in portion sizes of 3–4 ounces and generally no more than 15 ounces per week. Egg consumption should be under four per week, and that includes eggs used in baking. Sweets, such as cakes, pies and cookies, generally 1/2 cup is one portion size; should be saved for special occasions;

The red meat group is to be consumed only monthly, in a portion size of 3–4 ounces. Red meat contains fat-soluble vitamins and iron, but it also contains saturated fat.

The different regions of the Mediterranean exhibit variations on the dietary components of the cuisine. For example, European Muslims definitely drink alcohol, but not as wine, and some of the peoples are mainly vegetarians.

An appropriate conclusion to a look at one of the most healthful and tastiest cuisines on earth is a concise review of the overall characteristics that make this life style beneficial. These characteristics are a brief synopsis of what has been discussed in this article. They are as follows (Altomari-Rathjen & Bendelius, 2003):

- Make regular daily physical activity part of your life. The exercise can be functional or conventional in nature. The activity should take place at least six days per week and last for 30–45 minutes each day.
- Plant sources are at the center of the plate and the center of the dietary portion of this life-giving cuisine. Plant sources include grains, vegetables, fruits, legumes, and nuts. (These foods should be minimally processed, seasonally fresh, and locally grown when possible.)
- Fruit should be consumed daily and should replace other desserts. Cakes, pies, cookies, and other sweets should be limited to weekly, or on special occasions.
- Olive oil is the fat of choice. Olive oil should replace other fats, not used in addition to other fats such as butter and margarine. Total dietary fat should range from 25% to 35% fat, with no more than 7% to 8% of fat from saturated sources.
- Daily consumption of dairy products, but limited to small quantities. When possible, choose low-fat or non-fat dairy products.
- Low to moderate amounts of fish and poultry, on a weekly basis. Fish is favored slightly over poultry.
- Red meat, when consumed, should be limited to 12–16 ounces per month. Lean versions of red meat are preferable.
- Consumption of wine should be moderate, and is optional. (Wine consumption is not appropriate for everyone. Pregnant and lactating women, and those who have had problems with alcohol abuse should avoid alcohol consumption.)

REFERENCES


ABOUT THE AUTHOR

Jennifer Bendelius, MS, RD, CDN, recently completed her Masters in Nutrition Education from Columbia University. She is a Registered Dietitian and certified by the State of New York as a Nutritionist. A “new mom,” Jennifer acts as a consultant on the side.