

Stacking it all up: How does the U.S. Food Guide Pyramid Compare to Other Food Guides?

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Previously published on Intelihealth.com, July 23, 2002

A recent study published in the Journal of the American Dietetic Association looked at the food guides of 12 different countries: Australia, Canada, China, Germany, Korea, Mexico, the Philippines, Portugal, Puerto Rico, Sweden, the United Kingdom and the United States. Despite several different shaped guides, and small variations in the categorization of foods, most recommendations for eating a healthy diet were consistent with the U.S. Food Guide Pyramid. Considering that the U.S. Food Guide Pyramid has recently come under some criticism, which pyramid "measures up" with the most accurate nutrition information?

You say "potato," I say "la papa": Do countries group foods differently, and does it make a difference?

Most countries categorize foods into "food groups" quite similarly. The groupings of foods typically seen in a food guide include grains, vegetables, fruits, meat, milk/dairy products and fats and sugar. One concern about grouping foods into broad categories is that not all foods within a food group are created equal. The U.S. Food Guide Pyramid has been criticized for recommending six to 11 servings of bread, cereal, rice and pasta per day, without differentiating between whole grain foods and refined products. For example, on the U.S. Food Guide Pyramid, a slice of white bread is equal to a 1/2 cup of brown rice. Nutritionally, this just isn't true. White bread has little or no fiber and is not nearly as rich in health-promoting phytochemicals as whole grains such as brown rice or whole-wheat bread. Should we be relying on a food guide that isn't able to help us determine what are the most nutritious choices?

Another area in which the U.S. Food Guide Pyramid has drawn some criticism is the recommendation for fat and sugar intake. The U.S. Pyramid pictures fat as a small circular icon and sugar as a small triangular icon, sprinkled throughout the pyramid. There is a separate fat and sugar category at the top of the pyramid, which is meant to convey the nutritional recommendation to decrease or limit fat and sugars in the diet overall. Nutritionally, this recommendation ignores the fact that not all fats and carbohydrates (sugars) are created equal. Some dietary fats, like monounsaturated fats (found in nuts and olive oil) and polyunsaturated fats (omega-6 found in soybean, sunflower and safflower oil and omega-3 fats found in salmon, mackerel and sardines) are heart-healthy. These fats should actually be added to the diet, to replace other fats such as saturated fat (found in animal products, such as cheese, cream, butter and heavily marbled red meat) and trans fats, (also known as hydrogenated fats, found in margarine and packaged, processed foods containing partially hydrogenated vegetable oil). There are also different kinds of carbohydrates (sugars). Some, the "simple" carbohydrates found in cakes and cookies, should be reduced; while others, the "complex"

carbohydrates found in whole grain breads and cereals, are much more nutritious and important to consume.

Sweden is one nation that recognizes that it does make a difference how foods are grouped in a food guide. For example, Sweden's "Food Circle" has two categories of vegetables, differentiating between "root vegetables" and "essential vegetables". Root vegetables, which include foods such as potatoes, carrots, rutabagas and parsnips, are "base foods," meant to be consumed daily as part of the carbohydrate intake. It is recommended that "essential vegetables," consisting of all remaining non-starchy vegetables such as leafy greens, broccoli and tomatoes, be consumed daily in addition to the root vegetables. In this way, the food guide is encouraging a variety of vegetables to be consumed, not just starchy vegetables. In the United States, where french fries are often referred to as the most frequently consumed "vegetable," we might benefit from such distinctions in our food guide.

Trying the Food Guides on for Size: Serving Size, that is.

Serving size and recommended quantities for intake are relatively similar among all the food guides. For example, a "serving" of vegetables on the U.S. Food Guide Pyramid is equal to a "sample" on the Australian food guide and a "portion" on the United Kingdom's food guide.

Each serving, sample or portion of fruits or vegetables is equal to

- 1 cup of a raw leafy green vegetable
- 1/2 cup of any other vegetable
- 1 medium piece of fruit
- 1/2 cup cut up fruit (such as melon or berries)

How often should we eat these servings? The U.S. Food Guide Pyramid suggests five to nine servings of fruits and vegetables each day. Australia recommends a slightly higher intake of fruits and vegetables, suggesting two to nine servings of vegetables per day and one to five servings of fruit each day. Still other pyramids, such as the Okinawa pyramid (see below for more information) recommend increasing intake to seven to 13 servings of vegetables per day and two to four servings of fruit per day.

The Bottom Line: Whose guide should we be following?

All the food guides assessed in the JADA study support consuming a diet rich in grains, vegetables and fruits, and moderate in meat and dairy products. This simplified, broad nutrition message is a good beginning. However, a more detailed, specific food guide seems necessary to help people make healthier choices. There are several newer pyramids, offering consumers more up-to-date nutrition information, and more specific guidelines for how to incorporate truly healthy eating strategies into the diet. Two of the newer pyramids are the Healthy Eating Pyramid developed by Dr. Walter Willett of Harvard School of Public Health and the Okinawa Food Pyramid.

The [Healthy Eating Pyramid](#) is a distillation of research encouraging people to eat foods that have been shown to improve and reduce risk of chronic disease. The base of the pyramid recognizes the importance of attaining or maintaining a healthy body weight along with daily exercise. The pyramid places healthy fats (monounsaturated and polyunsaturated) in the foundation highlighting the importance of good fats in our diet, but keeps saturated and trans fats to a minimum by listing red meat, whole milk dairy products, butter and hydrogenated vegetable oils in the use sparingly section on the top.

The Healthy Eating Pyramid has two carbohydrate building blocks: whole grains (brown rice, whole grain bread and cereals) that are slowly digested as part of the foundation, and highly refined, rapidly digested carbohydrates (white bread, white rice, potatoes, etc.) at the very top. Fruits and vegetables, as in the majority of pyramids, are essential ingredients to healthy diets and should be consumed daily (vegetables in abundance, fruits two to three times/day). For protein, this pyramid recognizes beans and nuts, along with fish, poultry and eggs as best sources. It also includes alcohol in moderation and taking a multivitamin for insurance.

The Okinawa Food Pyramid was born out of 25 years of research in Okinawa, Japan, where the population's health and lifestyle behaviors have proven to be exceptional. The Okinawa Pyramid emphasizes as its base daily consumption of whole grains (seven to 13 servings), and vegetables (seven to 13 servings). Also recommended daily are fruits (two to four servings), "flavanoid" foods such as soy flax or legumes (two to four servings), calcium foods (two to four servings), omega-3 foods (such as salmon, 1-3 servings) and vegetable oils (1-2 TBSP.). Meat, poultry and eggs are optional, and recommended to be eaten zero to seven times per week. Sweets are also optional and recommended to be consumed no more than three times per week.

A healthful diet that has been around since antiquity but has recently received much deserved attention is the Mediterranean diet. In 1993, Oldways Preservation & Exchange Trust along with Harvard School of Public Health developed the Mediterranean Diet Pyramid. The base of the pyramid is one strong foundation, emphasizing daily physical activity. The Mediterranean Pyramid focuses on plant-based foods, suggesting daily intake of whole grains, fruits, vegetables, beans, nuts and legumes. Olive oil, the main source of fat, is recommended daily, as are yogurt and cheese. Fish, poultry, eggs and sweets are recommended for weekly consumption, while meats, (such as red meat) are suggested only monthly.

In assessing the most pertinent health concerns of the U.S., such as heart disease, obesity, diabetes and cancer, it is prudent to search for a pyramid that will "stack up" more favorably for disease prevention than our current USDA food guide.

In your search for the Food Guide that best meets your nutritional needs don't forget to check out these models:

- [The Healthy Eating Pyramid](#)

- The Okinawa Food Pyramid
- The Traditional Healthy Mediterranean Diet Pyramid
- The Traditional Healthy Latin American Pyramid
- The Traditional Healthy Asian Pyramid
- The California Cuisine Food Pyramid
- The Vegetarian Food Pyramid
- The Physical Activity & Exercise Pyramid

For more information on various Food Guide Pyramids, link to www.oldwayspt.org.