

MyPyramid.gov

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The US Department of Agriculture (USDA) has unveiled a new symbol and an interactive “food guidance system” called “MyPyramid: Steps to a Healthier You,” which replaces the 13-year-old Food Guide Pyramid. The new program aims to support the eating and physical activity habits necessary to promote health and prevent such common diseases as obesity, cardiovascular disease, diabetes, osteoporosis, and some cancers. Over the past few decades, population-specific scientific evidence of the effects of nutrition, activity, and body weight on health outcomes has become available. This scientific literature allowed the formulation of new and more detailed recommendations. The USDA’s new system emphasizes the need to individualize dietary and physical activity information for people age 2 and older, while acknowledging the fact that regardless of age or gender, everyone can benefit from physical activity and the same types of healthful foods. Of course, the recommended numbers of daily portions vary depending upon the individual’s estimated caloric needs and life stage.

With its new MyPyramid symbol and website, the food guidance system provides a visual representation and practical application of the 70-page *2005 Dietary Guidelines for Americans* document released this past January by the USDA and the US Department of Health and Human Services. Featured is an interactive, web-based tool, www.MyPyramid.gov, which has been designed to provide a “one-stop shopping” site for nutrition and physical activity information. The

website contains a number of layers accessible to consumers, providing recommendations that range from general to personalized. However, even the most basic level of the website offers sex- and age-specific information and considers a person’s activity level when calculating caloric requirements. For even more personalized information, an individual can enter his or her own height, current weight, and usual dietary and activity habits into the program. Also recognized now are specialty populations such as vegetarians, pregnant women, and lactose-intolerant persons.

The new symbol is a reworked and simplified pyramid graphic (Figure 1). While many graphic options were investigated, focus groups indicated that 80% of Americans recognized the former pyramid, although few reported actually following its advice. Colored vertical bands now represent the six different food groups: orange for grains, green for vegetables, red for fruits, yellow for oils, blue for dairy, and purple for meat and beans. By clicking on each colored band, an individual can see detailed information about each food group, along with estimations of his or her own daily and weekly needs. Individuals are encouraged to incorporate variety into their diets by including foods from each color group every day.

Recommended proportions are subtly indicated by the width of the vertical bands, with food groups that form the basis of a daily diet (e.g., grains, fruits, and vegetables) having the widest stripes, and foods that should be limited (e.g., oils) possessing the narrowest stripe. New to the pyramid is the inclusion and strong emphasis on physical activity to promote a balance between energy intake (food) and energy expenditure



Figure 1. The USDA's new MyPyramid logo.

(movement). A staircase with a figure walking up the side of the pyramid is now prominently featured. Some nutrition experts have criticized the new system, noting that, by itself, the simplified MyPyramid graphic does not offer as much nutritional information as the old Food Guide Pyramid. Clearly, the new MyPyramid graphic was not intended as a stand-alone educational tool. Instead, this new symbol serves to act as a reminder of the individualized information each person must seek on the www.MyPyramid.gov website.

The www.MyPyramid.gov site offers both health professionals and lay people many current and science-based resources that were previously not easily accessed. For the clinician, the website provides downloadable educational materials and handouts that could be easily incorporated into the clinical setting. From the menu on the left blue box, clicking on the link labeled "For Professionals" brings up several options, including "Education Framework," a link that contains information about the key concepts used in the design of the program. Also included in this section are a downloadable food-tracking worksheet, a sample menu, and a mini poster.

Another option on the blue menu box is "Tips & Resources," which contains some helpful, printable handouts, including "Tips for Making Wise Choices," "Tips to Help You Eat Vegetables," and "Tips to Help You Make Wise Choices from the Meat and Beans Group." In addition, posters based on a 2000-calorie diet with pictures of food and serving sizes are available to hospitals, clinics, schools, etc.

For all visitors to the website, there are links and resources that can be utilized to seek more detailed information about the scientific basis for the new

recommendations or about common health conditions such as heart disease, obesity, diabetes, osteoporosis, hypertension, anemia, and neural tube defects.

Food and activity databases are now available to consumers through the www.MyPyramid.gov site. Eight thousand individual foods and beverages are listed with their caloric, macronutrient, and micronutrient details (see the USDA Nutrient Data Laboratory website at www.nutrition.gov/index.php?mode=subject&subject=ng_composition&d_subject=Food%20Composition). With the previous pyramid, many people found it difficult to understand what to do with "mixed foods" such as soups or casseroles. In response, another handout provides examples (see www.mypyramid.gov/tips_resources/mixed_food_information_print.html). The activity database provides information about caloric expenditure and metabolic equivalents for 600 types of physical activity.

Four interactive program features are available to target an individual's information needs. "MyPyramid Plan," the most basic page, offers general information by quickly estimating which and how much of the different foods are needed daily and weekly depending on age, gender, and activity levels. Daily food intake patterns are illustrated. It is important to note that height and current weight are not included in this quick assessment tool and, as a result, recommended caloric intakes can be inaccurate. However, the "MyPyramid Tracker" page requires several additional steps and allows for a more individualized assessment of caloric requirements, current food intake, and dietary quality. Physical activity relative to weight, goals can also easily be estimated. The quick and easy "MyPyramid Plan" page calculations are based on only age, sex, and activity level. Height, current weight, and healthy body weights are not considered here. As a result, a 5'1" woman will be given the same caloric recommendations as a 5'11" woman, thereby overestimating requirements. However, by going one step further onto the "MyPyramid Tracker," this problem is corrected.

The "Inside the Pyramid" page offers detailed information about each food group, including which specific foods to choose frequently and which to limit, plus practical shopping and preparation tips, with recommended daily intakes now given in common household measures (e.g., cups, ounces, and teaspoons). Recommendations for physical activity and exercise, healthy oils, and discretionary calories, and

limits on sodium, sugar, alcohol, and unhealthy fats are more thoroughly explained here. Cumulative physical activity (from both activities of daily living and structured exercise) is emphasized, and individuals are encouraged to meet the current recommendations for ≥ 30 , ≥ 60 , or ≥ 90 minutes of cumulative activity to promote specific health outcomes.

One benefit of a web-based program is its ability to continually modify and update information and programming to offer a smooth and current resource. Additional program enhancements are reported to be in the works. For example, while the current website is geared towards adults, a child-friendly version targeting children ages 6 to 11 (and their teachers) is under development and is expected to be unveiled in the fall of 2005.

How have the food messages changed from the previous pyramid? Dietary quality plays a greater role. The grains category now distinguishes between whole and refined grains, and describes how to distinguish one from the other using food labels. Vegetables are divided into five categories (dark green vegetables, orange vegetables, beans and peas, starchy vegetables, and other), and variety is emphasized. Under fruits, variety is encouraged, but juice is restricted. Healthy oils from plant foods are endorsed, and limits are placed on the intake of saturated and trans fats. For the milk group, which also includes yogurt and cheese, selection of low-fat, calcium- and vitamin D-rich foods is emphasized. For lactose-intolerant individuals, the site provides food substitution options. The meat and beans message recommends lower meat intake than many Americans currently eat, encourages the selection of lean protein sources and healthier cooking methods, and clearly states that beans, nuts, and other vegetarian protein sources can be a healthy meat substitute. Individuals can click on a link to find supportive evidence for recommendations to increase the consumption of fish, seeds, and

nuts. Limits are suggested for alcohol, sodium, and added sugars. And in the "big picture," the need to balance total caloric intake against healthy body weight objectives is repeated throughout. Another new component is a food safety section under each food group.

COMMENT

In the clinical setting, the concept of 12 new pyramids can seem overwhelming. Health professionals must provide encouragement and even assistance to individuals so that they can determine the specific pyramid that relates to their needs or their children's needs. The message is this that new version is all about them!

While some have criticized the new time-specific physical activity recommendations (≥ 30 minutes each day for general health, ≥ 60 minutes each day for weight maintenance, and ≥ 90 minutes each day for weight loss) as being unattainable, it is important to remember how these guidelines were derived. Based on the preponderance of scientific data and given the sedentary nature of most American's work and leisure activity, the evidence indicates that these time requirements are necessary to derive the desired health benefits.

In the past few decades, daily caloric intake has increased across all ages, races, and socioeconomic strata, while energy expenditure has decreased. The new MyPyramid food guidance system encourages nutrient-rich food choices and appropriate activity levels, regardless of age, in an attempt to promote a leaner and healthier US population. While it is forward-thinking in its use of the Internet, the USDA's next steps must be to expand the resources beyond this medium to ensure that this important health information is accessible to all individuals.