Food Pyramid: Old and New: Dr. J. S. Pai

The food pyramid was introduced by the US Department of Agriculture in 1992 in order to increase awareness among Americans about good dietary practices. The pyramid looked like as shown below which advocated consumption of good proportions (6-11 servings) of cereal groups including bread, pasta etc. Next to it were fruit (2-4 servings) and vegetable (3-5 servings) groups. It was recommended that meat, beans, eggs and nuts (put altogether) be consumed at 2-3 servings, which was same for milk and its products. Cautionary note was about fats, oils and sweets, recommended to be used sparingly.



USDA and the US Department of Health and Human Services

This simple graphical illustration conveyed rapidly what USDA wanted to say about the healthy diet. This pyramid was taught in schools, appeared in large number of media articles and brochures and was used on cereal boxes and food labels. Unfortunately, the information within this pyramid did not point the way to healthy eating since it was based on shaky scientific evidence and it did not change over the decade during which our understanding of the connection between diet and health made major advancements.

Recently, the new food pyramid MyPyramid, was launched by the USDA based on its January 2005 Dietary Guidelines for Americans is supposed to be an improvement over the earlier model. This one highlights the benefits of whole grains and emphasizes healthy fats and low-fat dairy products for consumers. The new symbol shown below has turned the old pyramid on its side and buries the old pyramid but still there are some flaws which continue to remain in the new model as well.



The new guidelines recommend consumption of more dairy, whole grains, fruits and vegetables. Whole grain products manufacturers are quite happy as there was a wave of low-carb fever in the western world which cut down the whole grains too. The new recommendations make a distinction between whole grain carbohydrates (good ones) and the refined white sugar and white flour (bad ones). Dairy products were also deemphasised in old pyramid, but in the new pyramid dairy also got prominent place along with grains. Since dairy products manufacturers have all kinds of low-fat formulations, they are quite happy to meet the requirements of lowering the fat intake and increasing dairy products.

Like carbohydrates, healthy fats have been differentiated e.g. fish has been recommended along with caution about trans and saturated fats as well as cholesterol. The food groups are colour coded and the amounts recommended are reflected in the width of the band. Brown (grains) is the broadest, followed by blue for milk products, green for vegetables, red for fruits and purple for animal products including meats and eggs and the narrowest yellow is fats.

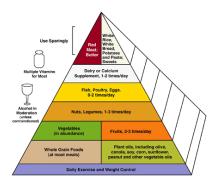
An additional feature of the pyramid is there are steps shown and a person going up. This indicates the importance of physical activity and it is also conveyed that there are different sizes of pyramid and one has to choose his/her "My Pyramid" depending on the physical activity among other factors like age, gender etc. The new website www.MyPyramid.gov unprecedented 160 million hits in the first three days online, of which 20% were from outside the US. This has shown the enormous awareness as well as the interest in information received from authentic source. The website gives a lot of information including dietary guidelines, animated tour of the site, tips and resources as well as information for professionals in planning diets/menus and food formulations.

There are some sceptics such as some faculty members from Harvard School of Public Health. They remind us of a question: who built the pyramid of Senwosret? King Senwosret, of course but then there are others who also claim the credit like his architect, the quarry master, the stone cutters, the slaves as well as the boys who carried water to the slaves. Similarly, USDA's MyPyramid has some obvious builders like USDA scientists, nutrition experts, staff members and consultants, but also some others who are not so obvious. Intense lobbying efforts from a variety of food industry also helped shape the pyramid, as per these sceptics.

Dietary guidelines for Americans give standards for various nutrition programmes including school lunch programme and also influences what food products Americans buy. Thus, these guidelines influence how billions of dollars are spent and even minor changes can help or hurt the food industry. Some of the guidelines have been appreciated by all and include: physical activity and control of weight, distinction between bad fats (saturated and trans) and the good ones (mono- and polyunsaturated) rather than putting a low cap on all fats, and rather than emphasising "complex carbohydrates", limiting sugars and stressing the benefits of whole grains.

There are negative aspects as sceptics point out as follows. As per guidelines, it is okay to consume half the grain group as refined starches, which behave like sugar, adding empty calories and having adverse metabolic effects, increasing risk of diabetes and heart disease. Another bone of contention is lumping together red meat, poultry, fish and beans including soy, even though there is mounting evidence that replacing red meat with a combination of fish, poultry, beans and nuts offers health benefits. They also are concerned about recommendation of consumption of large amount of dairy products to prevent osteoporosis, believing that some people are lactose intolerant, there is an association between ovarian cancer and prostate cancer with dairy products and insufficient evidence of link between consumption of dairy products and prevention of osteoporosis.

Healthy Eating Pyramid



The nutrition experts have prepared another pyramid, healthy eating pyramid, which has corrected all the flaws from the new pyramid. They have also used colour codes. They recommend sparing use of red meat and butter put in one red compartment at the narrowest portion of the pyramid along with a pale yellow compartment for white rice, white bread, potatoes, pasta and sugar. Next is dairy or calcium supplement along with multiple vitamins, then fish, poultry and eggs group, and nuts, legumes groups with increasing sizes. Vegetables in abundance have been recommended along with fruits 2-3 times daily. Whole grain foods have been recommended in most meals with plant oils with mono- or polyunsaturated fats. The base of the pyramid has daily exercise and weight control.

One thing you can be sure of, that is our knowledge is continually updating about nutrition. We must use a variety of foods in our daily diet. Use of fruits, vegetables, beans and grains is undeniably good. We must also include milk products, fish and poultry more than red meat to give us the completely balanced diet. However, we find it hard to include all these and expect our mothers and wives to be happy, unless we go every day to a buffet dinner in a hotel or restaurant. It also hits one hard that tasty foods made with butter, potatoes, red meat, sugar, refined flours etc. are not necessarily good for you and we may have to curtail them. I am sure some ingenious cook book writer will come up with tasty recipes without these delicacies.

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