

PYRAMID BUILDER

Nutritional standards for a nation

MOST PEOPLE HAVE PROBABLY NOTICED THE food guide pyramids that appear on milk cartons and loaves of bread, showing the U.S. government-recommended quantities and kinds of food to eat each day for optimal health. As a member of the committee asked to develop national dietary guidelines, Dr. Irwin Rosenberg had a hand in building those pyramids — which serve as the basis for programs ranging from school lunches to Meals on Wheels — and helping to feed all Americans better.

Rosenberg and healthy eating habits go way back. As dean for nutrition sciences and director of the Jean Mayer USDA Human Nutrition Research Center on Aging (HNRCA) at Tufts and an internationally recognized leader in the field, he has been a key figure in nutrition science for decades. Rosenberg helped create the two “pillars” of U.S. nutritional policy, the Dietary Guidelines for Americans and the Recommended Dietary Allowances, or RDAs. From 1980-82, he chaired the Food and Nutrition Board of the National Academy of Science, which oversees the formulation of the RDAs that appear on the labels of processed foods and vitamins. RDAs represent the amounts of specific nutrients that are adequate to meet the needs of most healthy people.

In the current RDA process, Rosenberg and his colleagues were able to formulate nutrient requirements for older Americans based on Tufts research into vitamin absorption among the elderly. This was something new. Previously, nutritional requirements for elderly Americans had been based on extrapolations from the nutritional needs of younger persons.

More recently, Rosenberg's work with folic acid absorption stands to extend his impact dramatically. Prompted in part by Rosenberg's research, the U.S. Food and Drug Administration determined a year ago that all enriched flour, rice and

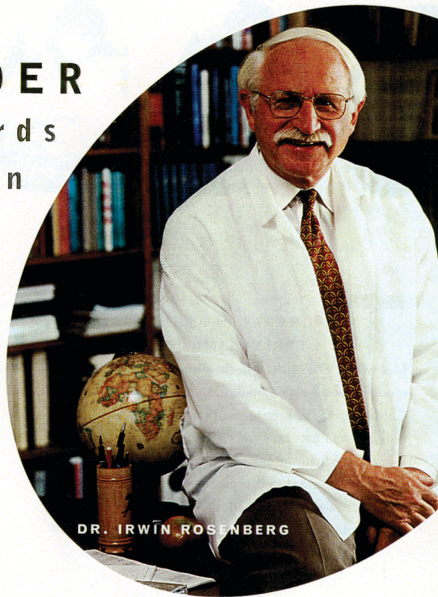
Rosenberg's findings may lead to a greater emphasis on vitamin B-12 supplementation, especially among the elderly.

pasta manufactured domestically must include folic acid. Rosenberg and his colleagues have shown that folic acid and vitamin B-12 are key regulators of homocysteine, a blood factor (like cholesterol) implicated in heart disease, stroke and dementia in the elderly.

Among other effects, these findings may lead to a greater emphasis on vitamin B-12 supplementation, especially among the elderly. “If we could improve the function of such people by even 10 to 15 percent, it would be of tremendous benefit to elderly individuals, to their families and to society,” Rosenberg points out.

Nutrition experts at Tufts are apt to be influencing the country's food choices far into the future. Alice Lichtenstein, professor of nutrition, and Dr. Johanna Dwyer, director of the Frances Stern Nutrition Center, are currently serving on the Daily Guidelines committee. In addition, Drs. Robert Russell, associate director of the HNRCA, Bess Dawson-Hughes, '75, director of the Calcium and Bone Metabolism Laboratory, and Norman I. Krinsky, professor of biochemistry, are working with Rosenberg to update the RDAs (now called Dietary Reference Intakes, or DRIs).

Irwin Rosenberg has led the way. “As a result of his creative leadership,” says Russell, a longtime friend and colleague, “Tufts is making nutritional policy for the nation — and the world.”



Gabriele Amersbach