



About the Nutrient Rich Foods Coalition

The Nutrient Rich Foods (NRF) Coalition is a partnership that brings together leading scientific researchers, health professionals, communications experts and agricultural commodities that represent the five basic food groups. It is dedicated to helping educate people on how to get more nutrients from their diets by choosing nutrient-rich foods first.

The NRF Coalition works closely with a Scientific Advisory Committee and a Consumer Communications and Nutrition Behavior Advisory Committee, whose members include leading scientists, health professionals and communications and behavioral experts.

Driving the Nutrient-Density Dialogue

In March 2004, the NRF Coalition began its efforts to help people build healthier diets by hosting a symposium for members of the nutrition and science communities to examine the scientific evidence supporting the long-standing principle of nutrient density and its role in nutrition guidance. As part of the discussion, Adam Drewnowski, PhD, University of Washington, presented the naturally nutrient rich (NNR) score, which provided a useful way to assign a nutrient density score based on nutrients to encourage.¹

In 2005, the Dietary Guidelines Advisory Committee (DGAC) recommended consumption of nutrient-dense foods as the basis of a healthful diet and also called for the development of a scientifically valid definition of nutrient density that could be put into consumer use.² The NRF Coalition, along with Drewnowski and researcher, Victor Fulgoni, PhD, began work to develop the NRF Index and education tools to bring it to life for consumers.

Four years later, a scientifically valid definition of nutrient density, known as the NRF Index, and comprehensive education tools based on the index, were presented to leaders from government organizations, academia, the food industry and health and professional groups at the *Achieve Better Health with Nutrient Rich Foods* symposium, held in March 2009.

Scientific Research Behind the NRF Index

Drewnowski and Fulgoni defined six guiding principles to develop and evaluate nutrient profiling systems, based on their work published in *Nutrition Reviews*.³ The principles include:

- **Objective**: Based on accepted nutrition science and labeling practices.
- **Simple**: Based on published Daily Values and meaningful servings of food.
- **Balanced**: Based on nutrients to encourage and nutrients to limit.
- **Validated**: Tested against an objective measure of a healthful diet.
- **Transparent**: Based on published formulas and open-source data.
- **Consumer-driven**: Based on consumer research.

The NRF Index meets all six of these guiding principles.

In addition, in creating the NRF Index, Drewnowski and Fulgoni conducted extensive research examining a variety of ways to score foods based on nutrient density, using correlation with the U.S. Department of Agriculture's (USDA) 2005 Healthy Eating Index (HEI),⁴ an accepted measure of diet quality, to determine which formula would best predict diet quality. A manuscript on the development and validation of the NRF Index was published in *The Journal of Nutrition*⁵ in August 2009.

Since 2004, 21 articles and one report have been published in scientific journals that support the NRF approach, the NRF Index and/or the broader concept of nutrient density. Several more articles are planned or pending for 2010.

Translating the NRF Index into Positive Food Guidance

Since 2004, the NRF Coalition has conducted several in-depth qualitative and quantitative research studies with more than 3,000 people to understand consumer views about healthful eating, the nutrient-density concept and facilitators and barriers people encounter when making food decisions to improve health. Findings indicated that people understand and embrace the concept of “nutrient richness”⁶ and are ready for a nutrient-rich approach to healthful eating.⁷ The research led to the development of comprehensive food guidance tools based on the NRF Index to help people choose more nutrient-rich foods within food groups and build healthier diets.⁸

Most recently, the NRF Coalition worked with leading researchers to commission the Nutrition Advice Study to test how educating people about the NRF approach could change their knowledge, attitudes and behavior related to meal planning, food shopping, and eating nutrient-rich foods. Top-line results indicate that the NRF approach empowered people to take small steps to improve their overall diet quality, including helping them to choose nutrient-rich foods, and increase meal planning and shopping with a list.⁸

Educating Health Professionals and Thought Leaders on the NRF Approach

The NRF Coalition continues to educate health professionals and thought leaders through scientific symposia, webinars and educational briefings. Available resources include the *Achieve Better Health with Nutrient-Rich Foods* Resource Guide, a food groups weekly tracker, nutrient-rich shopping list, downloadable nutrition-educator toolkit, and nutrient-rich recipes and meal ideas. The materials can be found in the “For Health Professionals” section of the NRF Web site (www.NutrientRichFoods.org).

NRF Coalition Members

NRF Coalition members include 15 agricultural commodity organizations representing the five basic food groups: California Avocado Commission, California Kiwifruit Commission, California Strawberry Commission, Egg Nutrition Center, Florida Department of Citrus, Grain Foods Foundation, The Beef Checkoff through the National Cattlemen’s Beef Association, National Dairy Council, National Peanut Board, National Pork Board, National Turkey Federation, United States Highbush Blueberry Council, United States Potato Board, Wheat Foods Council and the Wild Blueberry Association of North America.



© 2010 Nutrient Rich Foods Coalition

¹ Drewnowski, A. Concept of a nutritious food: toward a nutrient density score. *Am J Clin Nutr* Oct 2005;82:721–32.

² The Report of the Dietary Guidelines Advisory Committee on Dietary Guidelines for Americans, 2005, www.health.gov/dietaryguidelines/dga2005/report/ (Accessed February 8, 2010).

³ Drewnowski A, Fulgoni VL III. Nutrient profiling of foods: creating a nutrient-rich food index. *Nutrition Reviews* Jan 2008;66(1):23-39.

⁴ Healthy Eating Index—2005. <http://www.cnpp.usda.gov/Publications/HEI/healthyeatingindex2005factsheet.pdf> (Accessed February 8, 2010).

⁵ Fulgoni VL III, Keast DR, Drewnowski A. Development and validation of the nutrient-rich foods index: a tool to measure nutritional quality of foods. *J Nutr* Aug 2009;139(8):1549-54.

⁶ IA Collaborative. *NRFC Functional Requirement Focus Groups*, 2008. Copyright Nutrient Rich Foods Coalition, Oakbrook Terrace, IL, 2008.

⁷ IPSOS Public Affairs. *Online Survey*, 2008. Copyright Nutrient Rich Foods Coalition, Oakbrook Terrace, IL, 2008.

⁸ RTI International. *Nutrition Advice Study*, 2009. Copyright Nutrient Rich Foods Coalition, Oakbrook Terrace, IL, 2009.