

Leading national health and nutrition organizations have come together to urge child nutrition advocates, school food service organizations and health organizations to support the use of “nutrient density” as the cornerstone of dietary recommendations and meal planning. Taking this step will help Americans of all ages choose more healthful diets and help to reduce the risk of obesity and chronic disease beginning in childhood.

Americans Consume Nutrient-Poor Diets

The diets of most Americans fall far short of current dietary recommendations. The Healthy Eating Index (HEI), a tool developed by the USDA’s Center for Nutrition Policy and Promotion to assess the nutritional quality of diets, has demonstrated that approximately 74% of Americans need to improve their diets.¹ Among children, the situation appears to be even worse. According to the 2007 National Youth Risk Behavior Surveillance, only 14% of adolescents in grades 9-12 consume three servings of milk per day, while only 21% consume at least five servings of fruits and vegetables per day.² Overall, only 2% of school-aged children consume the recommended daily number of servings from all major food groups.³

The Importance of Nutrient-Rich Foods in Planning Nutritious Meals for Children

With these disturbing statistics as a backdrop, the long-standing debate over the best way to improve the diets of Americans—children in particular—continues unabated. In the meantime, obesity rates continue to climb to record numbers,⁴ putting children and adults at increased risk for diet-related chronic diseases such as type 2 diabetes, metabolic syndrome and cardiovascular disease.^{5,6,7} Many public health dietitians and nutritionists are concerned that we have become an overweight, yet undernourished nation, consuming too many high-energy foods that are low in critical nutrients, such as vitamins, minerals, protein or fiber.⁸ The relationship between consuming high-calorie, nutrient-poor diets and overweight and obesity is of immediate concern for American children. According to the Centers for Disease Control and Prevention, an estimated 17% of American children are either overweight or obese.⁹ Another 34% are at risk for becoming overweight.

Nutrient Density as a Tool for Improving Diets

Nutrient density is a concept that has been used by registered dietitians (RDs) for many years and is already a cornerstone of the 2005 Dietary Guidelines for Americans and MyPyramid.^{10,11} Though there is no generally accepted definition for what constitutes a nutrient-dense (nutrient-rich) food, it is typically defined as foods that provide substantial amounts of nutrients for relatively few calories.¹⁰ MyPyramid and the Dietary Guidelines, upon which MyPyramid is based, urge Americans to get more nutrition from their diets by choosing nutrient-rich foods and beverages within each basic food group—Fruits, Vegetables, Grains, Meat & Beans, and Milk. The Dietary Guidelines provides examples of nutrient-rich meal plans using the DASH Eating Plan.¹² Choosing naturally nutrient-rich foods and beverages based on their complete nutrient package, can help children and adults to meet their nutrient requirements without consuming excess calories. The more low-nutrient-dense foods children include in their diets, the more difficult it becomes for them to meet their nutritional needs without gaining excess weight. That becomes even more problematic for sedentary children. In 2002, the CDC conducted the YMC Longitudinal Survey (YMCLS), a national survey of children aged 9-13 years and their parents. This report found that 61.5% of children aged 9-13 years do not participate in any organized physical activity during their non-school hours and that 22.6% do not engage in any free-time physical activity.¹³

Adoption of nutrient density as the basis for dietary guidelines for the National School Lunch Program, and the School Breakfast Program will improve the nutritional quality of foods sold in schools. Engaging and educating children on making more nutrient-rich food choices is also a key part of the solution.¹⁴

The concept of nutrient density must also be applied to meals and snacks eaten at home and when dining out in order to have the desired effect on the overall nutritional quality of the diets of children. The concept of nutrient density provides an easy-to-understand way for children to get the nutrients they need within recommended calorie allowances. However, focusing only on nutrients to limit, such as sugar, saturated fat, cholesterol or sodium, without regard to the beneficial nutrients a food might provide, as some nutrient profiling systems have done, may unintentionally limit nutritious food choices, such as flavored milk, in schools. Foods and beverages should be evaluated on their complete nutrition content, not only on nutrients to be limited. Selecting foods from the Food Groups to Encourage that are rich sources of nutrients in short supply in children's diets (calcium, potassium, magnesium, vitamin E, and fiber)¹⁵ is also an effective way to put the concept of nutrient density into practice.¹⁰

Recommendations

There is compelling scientific justification for using nutrient density as the basis for dietary recommendations.¹⁶ Educating the public, parents and children on how to choose nutrient-rich foods is a positive approach that emphasizes a food's total nutrient content and teaches how to make healthy food choices. Helping children select nutrient-rich foods from the basic food groups allows them to get proper nutrition now, and to establish life-long healthy eating habits.

These health and nutrition organizations support the nutrient rich foods approach, which considers the total nutrient package of a food or beverage, as a way for Americans to build and enjoy a healthier diet by getting the most nutrition from their calories.



Endnotes

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