

## NUTRIENT DENSITY

# Unintended consequences of eating by headlines

by Neva Cochran, MS, RDN, LD



Alarming headlines about food and nutrition not only confuse consumers, but may also result in the exclusion of nutrient-rich foods from the diet. As health professionals we know that nutrition and health recommendations must be based on a preponderance of scientific evidence, not results of a single study trumpeted in the news. This can be a daunting task, especially for topics that evoke strongly-held beliefs that often defy scientific reality. One problem of omitting a particular food or group is missing out on essential nutrients that food provides, which may not be easily replaced with other foods. The following five examples illustrate unintended consequences that can occur when eliminating these foods.

### Flavored milk

Chocolate and other flavored milks have become a popular target for purportedly contributing to childhood obesity, especially in school meals. Yet studies show that drinking flavored milk does not promote weight gain compared to children who drink plain milk<sup>1</sup>. And research demonstrates that when schools eliminate flavored milk, both milk consumption and nutrient intake decline<sup>1,2</sup>. Replacing the essential nutrients from a 35% decline in milk consumption requires three to four additional foods on the menu resulting in 16-141 more calories and 2-20 g more fat<sup>2</sup>. The extra 20 calories and 10 g of sugar in a cup of fat-free chocolate milk vs. 1% low-fat plain milk is inconsequential when compared to the many nutrients present: calcium, riboflavin, potassium, phosphorus, protein and vitamins A and D.

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### Eggs

Eggs have been unfairly implicated for raising blood cholesterol, despite numerous recent studies showing that the majority of us can eat an egg a day without elevating cholesterol levels<sup>3</sup>. Eggs not only provide high-quality protein, but also supply more than a dozen vitamins and minerals, most of which are found in the yolk including vitamins A, D, E, B12, and B6, plus iron,

zinc, choline, folic acid, phosphorus, selenium, and protein. In particular, eggs are one of the few natural sources of vitamin D, a “nutrient of concern” highlighted in the 2010 Dietary Guidelines for Americans. Eggs also provide small amounts of lutein and zeaxanthin, two nutrients which are part of the carotenoid family (like beta-carotene in carrots) that contribute to eye health and help prevent age-related macular degeneration, one of the leading causes of blindness.



### Potatoes

White potatoes, long a part of the typical American dinner plate, have recently been maligned as “fattening” or lacking nutritional value. A 2012 Purdue University Roundtable, “White Vegetables: A Forgotten Source of Nutrients,” addressed the role of potatoes and other white vegetables in health and wellness. Evidence revealed that white vegetables like potatoes can increase intakes of shortfall nutrients, particularly fiber, potassium and magnesium, as well as increase overall vegetable consumption<sup>4</sup>. NHANES 2009-2010 data confirmed that white potatoes and French fries provide only 4% and 2% of total energy, respectively, but significantly increase total vegetable and potassium intakes. Among 14-18 year olds who eat them, white potatoes provide 23% of dietary fiber and 20% of potassium, but only 11% of total calories in the diet<sup>4</sup>.

### Bread and pasta

Wheat bread and pasta have taken a hit over the last decade as the gluten-free craze has taken hold. Yet only about 1% of the U.S. population actually has gluten sensitivity or a gluten intolerance (celiac disease) requiring a gluten-free diet. Wheat, the predominant gluten-containing grain in the U.S., contributes significant fiber, trace minerals, B vitamins, antioxidants and phytonutrients to the diet. The resistant starches and gluten in wheat have health benefits related to gastrointestinal health, blood pressure control and immune function<sup>5</sup>. Fortified with folic acid, wheat foods also help

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## MyPlate meal planning

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### Helpful tips for eating “nutrient-rich”

People eat food, not nutrients, so it's often difficult to convey to them the best ways to consume more potassium, dietary fiber, calcium, vitamin D, etc.

Here are tips that target nutrient-rich foods using tools from MyPlate:

- **Eat breakfast:** Click on the Supertracker “Food Tracker” to compare how much easier it is to reach MyPlate daily recommendations for dairy and fruit when folks eat breakfast instead of skip it. Dairy and fruit are rich in potassium, calcium, vitamin D and fiber.
- **Eat more high-fiber foods:** Plug into MyPlate’s “Recipe Finder” the words “beans,” “lentils,” or any vegetable to select foods with more potassium, fiber or folate.
- **Eat more protein, fewer carbohydrates:** Since all recipes in the Recipe Finder are low-fat and contain nutrition information, use this tool to compare the protein and carbohydrate content of recipes. This advice is especially helpful for folks who wish to shed pounds.



**Serena Ball, MS, RD,** helps people eat healthy daily through her blog TeaspoonOfSpice.com.

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3. <http://www.choosemyplate.gov/healthy-eating-tips/sample-menus-recipes/HamAndSwissBreakfastCasserole.pdf>
4. <http://recipefinder.nal.usda.gov/cookbook>
5. <http://recipefinder.nal.usda.gov/>
6. <http://pinterest.com/MyPlateRecipes/>
7. <https://www.supertracker.usda.gov/default.aspx>

### MESSAGES

- There are a number of free online tools that can be utilized to encourage patients and clients to manage their weight and eat a nutrient-rich diet.
- The USDA's MyPlate program has several online tools for meal planning and sourcing recipes, with an emphasis on “nutrients of concern” such as calcium, vitamin D, potassium, folic acid, iron, and B12.

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women meet their requirement for this key vitamin during pregnancy. By eating enriched grain products, researchers found that 77% of low-income women could consume adequate amounts of folic acid, which is often not taken as a supplement due to costs<sup>6</sup>.

### Beef

Another staple of the U.S. diet, beef has garnered its share of bad press over the years. With 29 cuts of beef meeting government guidelines for “lean,” beef can promote health and provide a rich source of nutrients. More than 50 studies substantiate that lean beef does not increase cholesterol levels or cardiovascular disease risk when consumed as part of a low saturated fat diet<sup>7</sup>. Compared to non-beef eaters, those who eat lean beef consume significantly more vitamins B6 and B12, iron, zinc, and potassium<sup>8</sup>. Beef is also a major source of protein, vitamins B6 and B12, zinc, iron, niacin, phosphorus and potassium in the diets of children and teens<sup>9</sup>. With twice the iron and five times the B12 as in chicken, and 10 times the iron in fish, lean beef helps increase “nutrients of concern” for pre-menopausal women and those over 50.

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### MESSAGES

- Avoiding certain foods in the diet may reduce intakes of key nutrients that are not easily replaced with other foods.
- Certain nutrient-rich foods, such as chocolate milk, eggs, potatoes, fortified grains, and beef, have been unjustly avoided in the past, which may negatively affect diet quality.