



Nutrition Impact Sources of Nutrients Study: Summary Highlights

September 2015

Nutrition Impact, LLC

Sources of Nutrients Study Background

Objective

Nutrition Impact determined the contribution of grain foods to calories and nutrient intakes and compared to other food sources in the US diet.

Data Source

Using data from the National Health and Nutrition Examination Surveys (NHANES), 2009-2012, Nutrition Impacted conducted a food source analyses assessing where Americans (children and adults) get their calories and nutrients from foods. Focus will be on the contribution of grain foods for the total day.

Ethnicity

Ethnicities of different age groups were considered. This deck contains selected data to serve as highlights of the entire study. The ethnicities considered were 1) all ethnicities, 2) Hispanics, 3) non-Hispanic Blacks, 4) non-Hispanic Whites and 5) Other.

A photograph of several slices of golden-brown, toasted bread stacked on a dark, rustic wooden surface. A piece of coarse, light-colored burlap fabric is visible in the upper right and lower right corners, partially covering the bread. The lighting is warm, highlighting the texture of the bread and the wood.

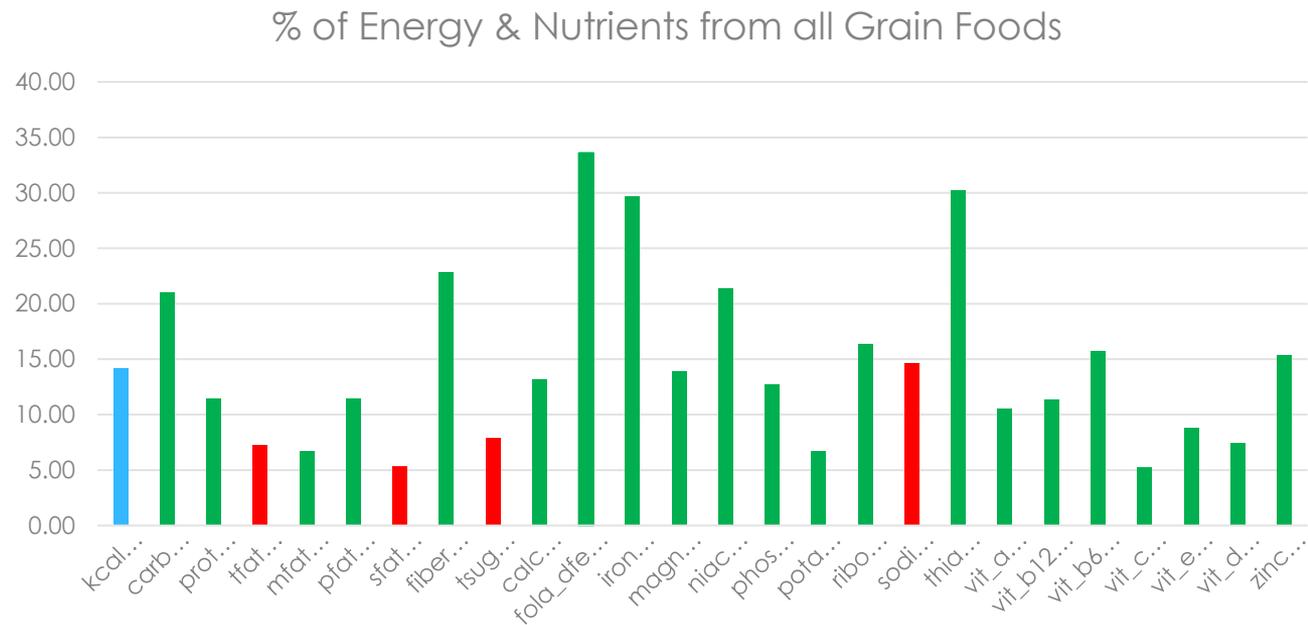
Summary Highlights in Adults 19+ Years-Old (All Ethnicities*)

*data available for ethnicity groups, different ages (i.e., elderly adults), and children

Legend for Energy and Nutrients

Energy/Nutrients	Energy/Nutrients
kcal	calories
carb	carbohydrate
prot	protein
tfat	total fat
mfat	monounsaturated fat
pfat	polyunsaturated fat
sat	saturated fat
tsug	total sugar
calc	calcium
Fola_dfe	folate
iron	iron
magn	magnesium
niac	niacin
phos	phosphorus
pota	potassium
ribo	riboflavin
sodi	sodium
thia	thiamin
vit	vitamin

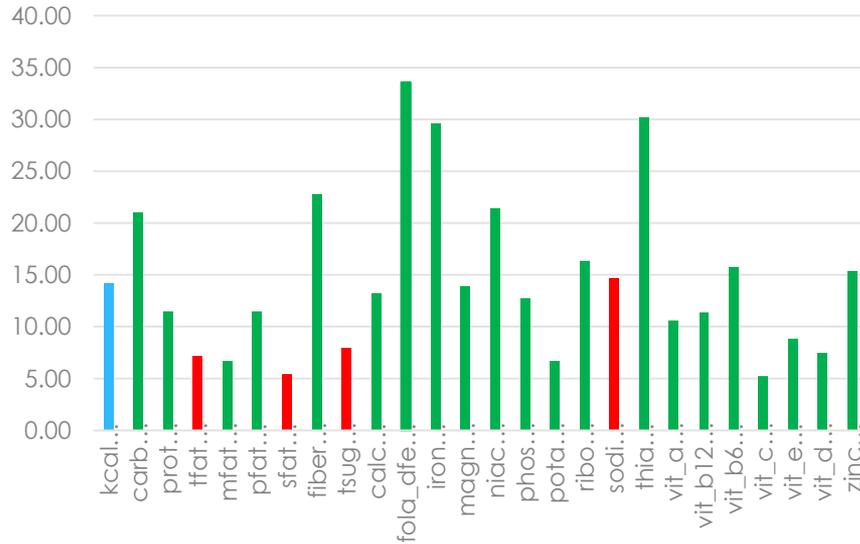
Grain Foods are Meaningful Contributors of Fiber, Magnesium, Niacin, Folate, Iron, Thiamin, Zinc, Vitamin B6...



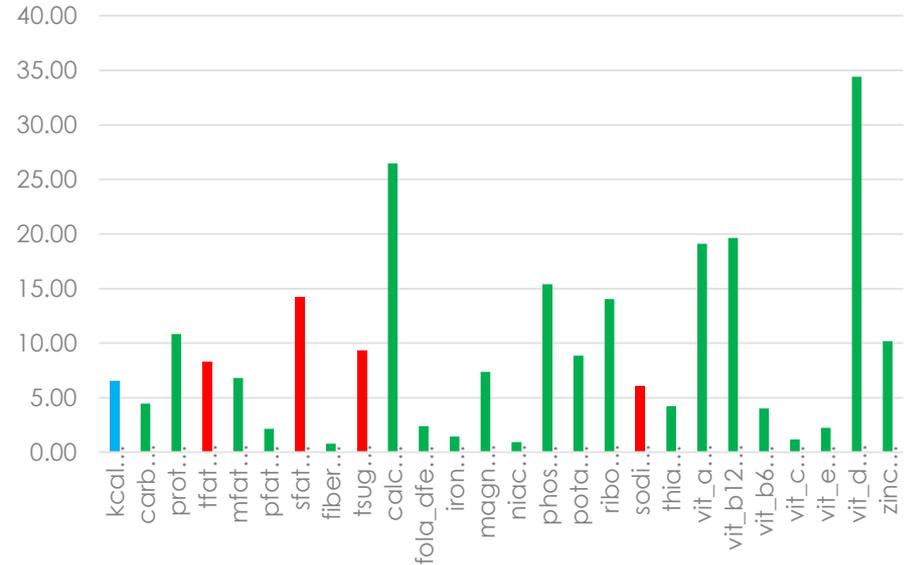
NHANES 2009-2012; All Adults 19+ Years of Age; N=10,697

Grains & Milk/Dairy Group are Both Nutrient-Rich

% of Energy and Nutrients from all Grain Foods

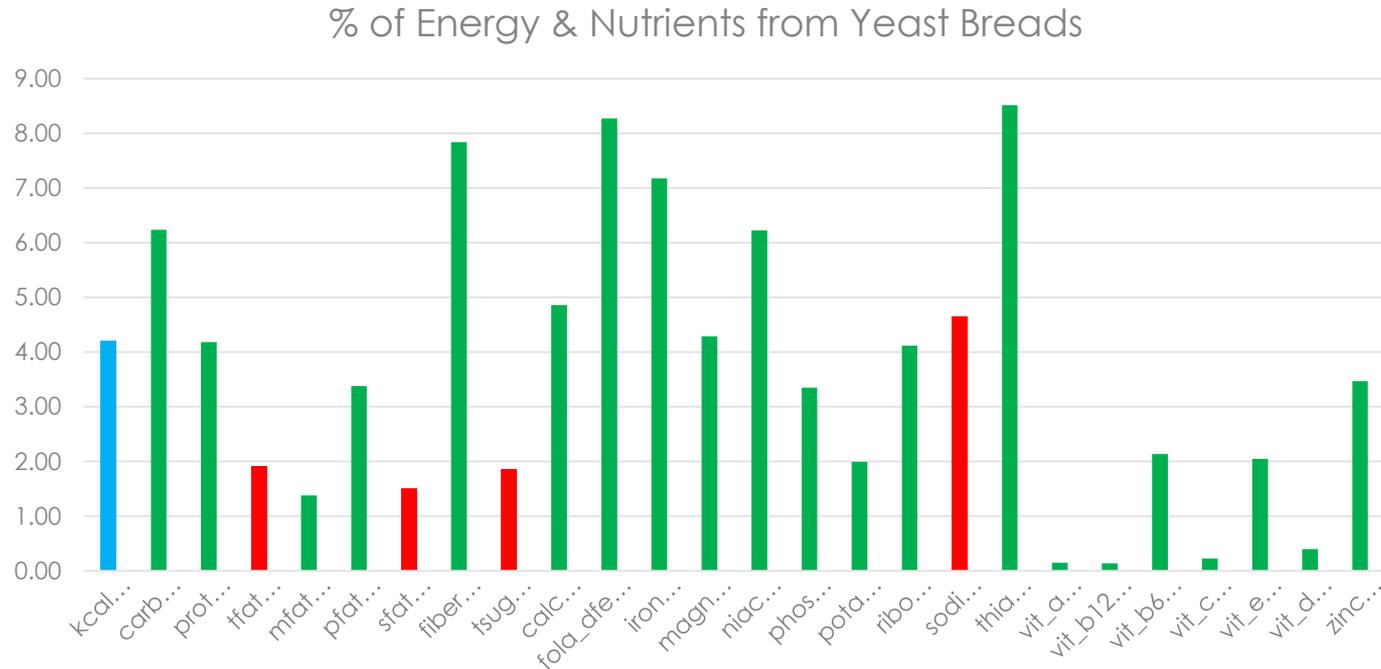


% of Energy and Nutrients from Milk and Dairy



NHANES 2009-2012; All Adults 19+ Years of Age; N=10,697

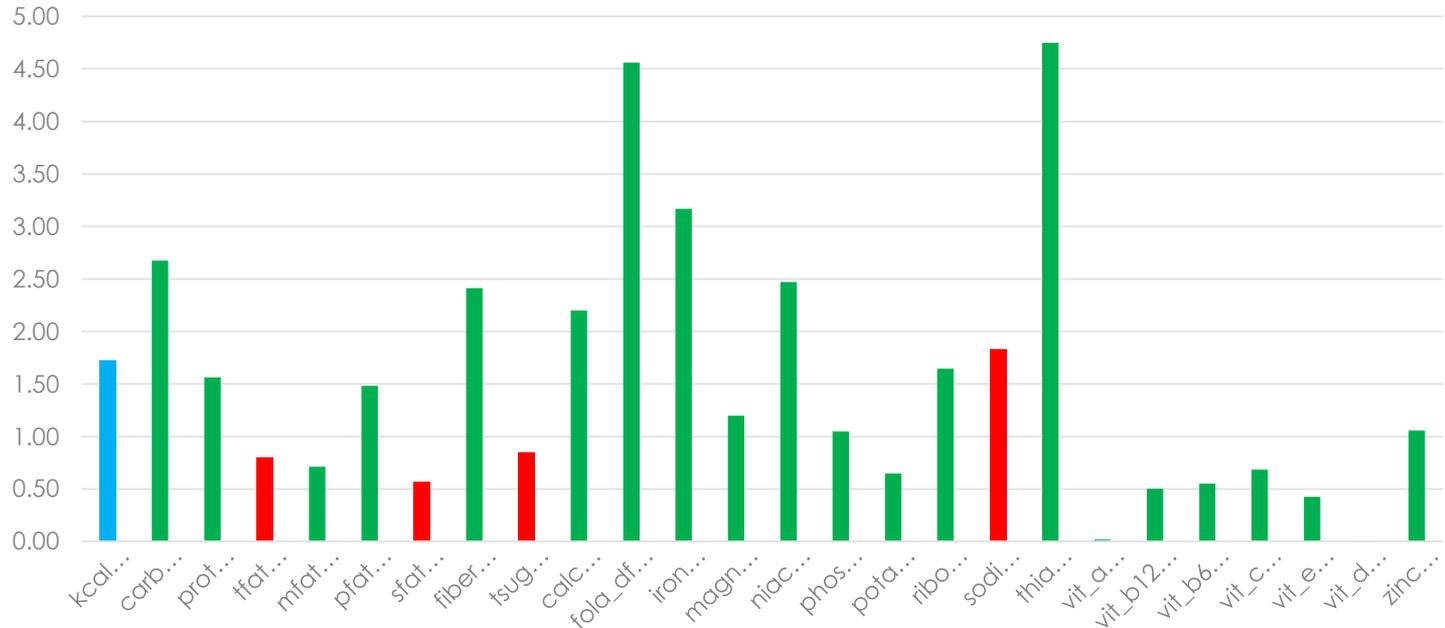
Yeast Breads are Meaningful Contributors of Several Nutrients to US Adult Diet



NHANES 2009-2012; All Adults 19+ Years of Age; N=10,697

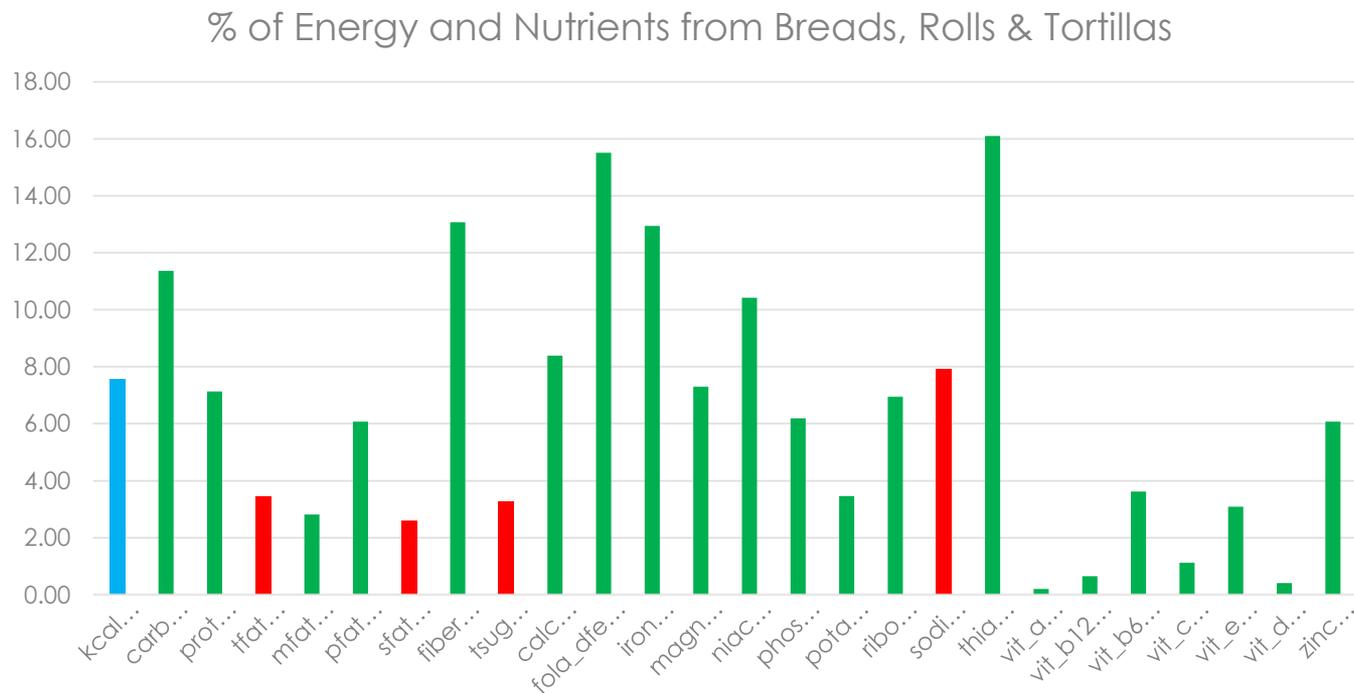
Rolls & Buns are Meaningful Contributors of Fiber, Folate, Iron, Niacin, Thiamin

% of Energy and Nutrients from Rolls and Buns



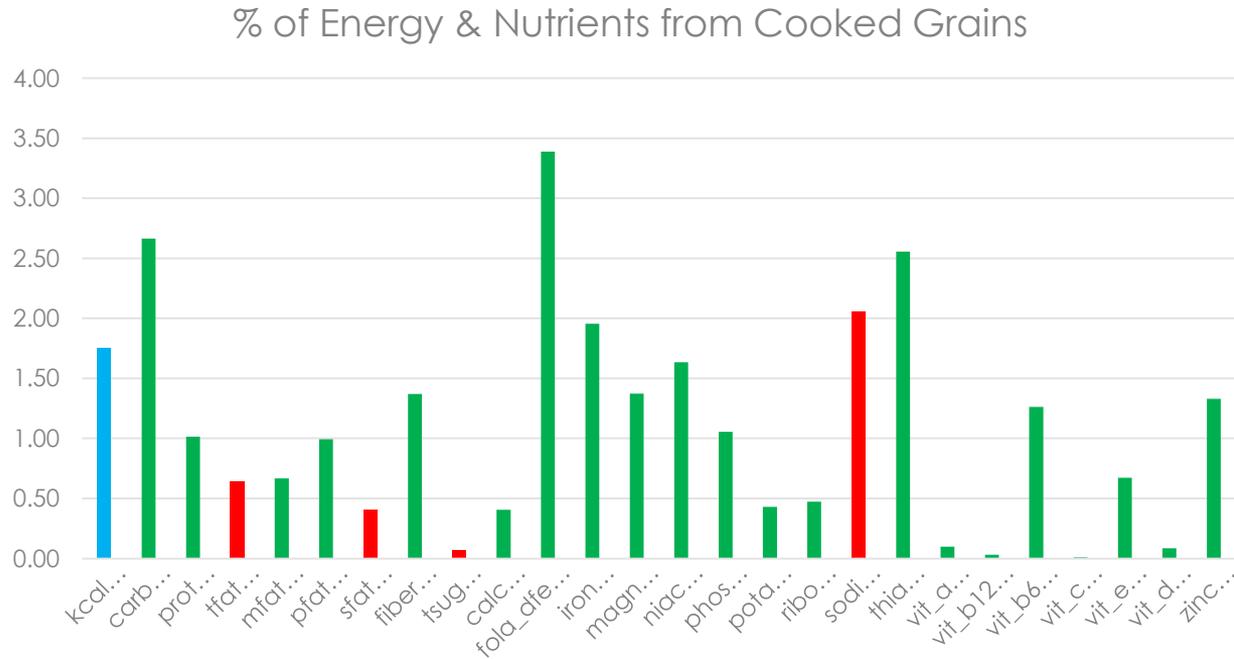
NHANES 2009-2012; All Adults 19+ Years of Age; N=10,697

Breads, Rolls & Tortillas are Meaningful Contributors of Several Nutrients to the US Adult Diet

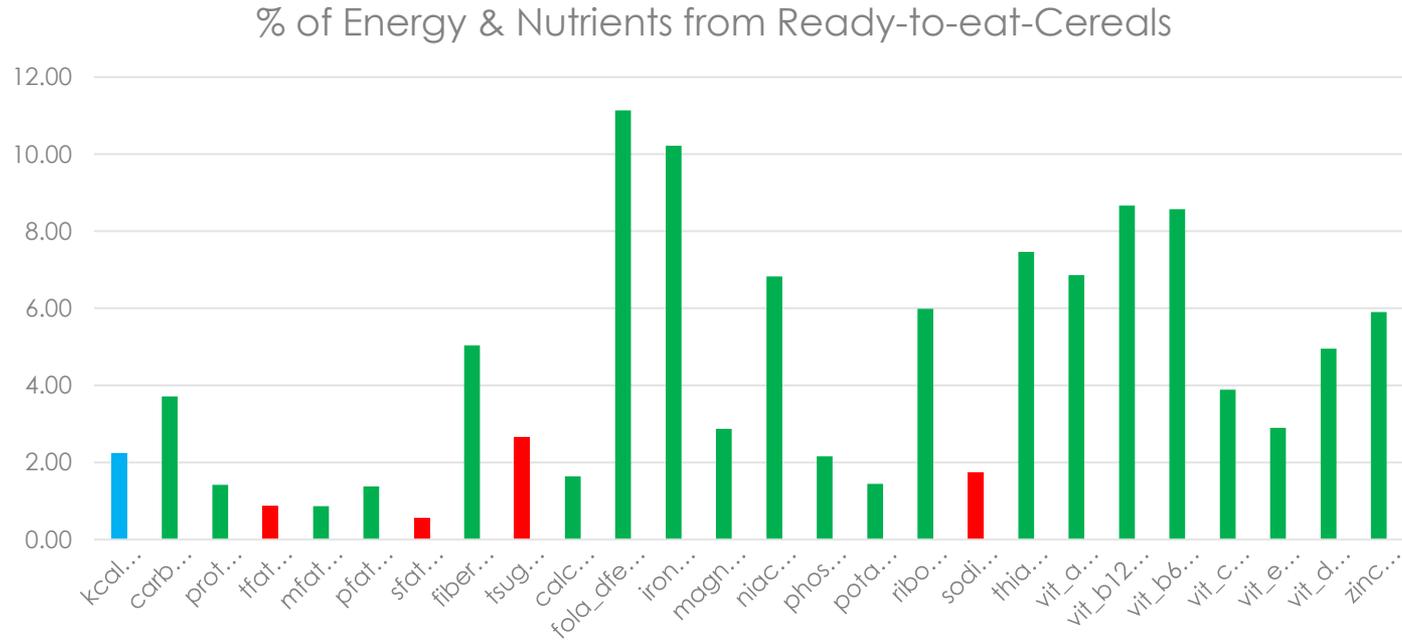


NHANES 2009-2012; All Adults 19+ Years of Age; N=10,697

Cooked Cereals Alone are Meaningful Contributors of Folate, Thiamin, Iron, Magnesium, Niacin, Zinc



Ready-to-eat-Cereals are Meaningful Contributors of Folate, Fiber, Iron, Zinc and Vitamins



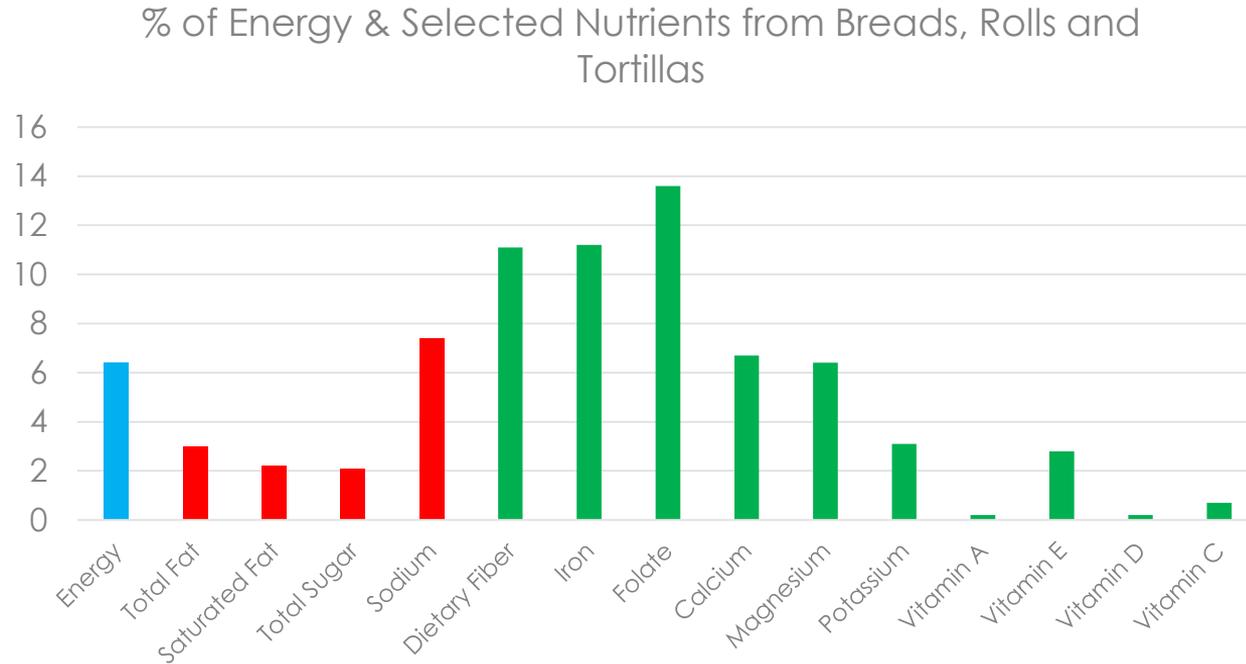
NHANES 2009-2012; All Adults 19+ Years of Age; N=10,697

2015 Dietary Guidelines Advisory Committee Report

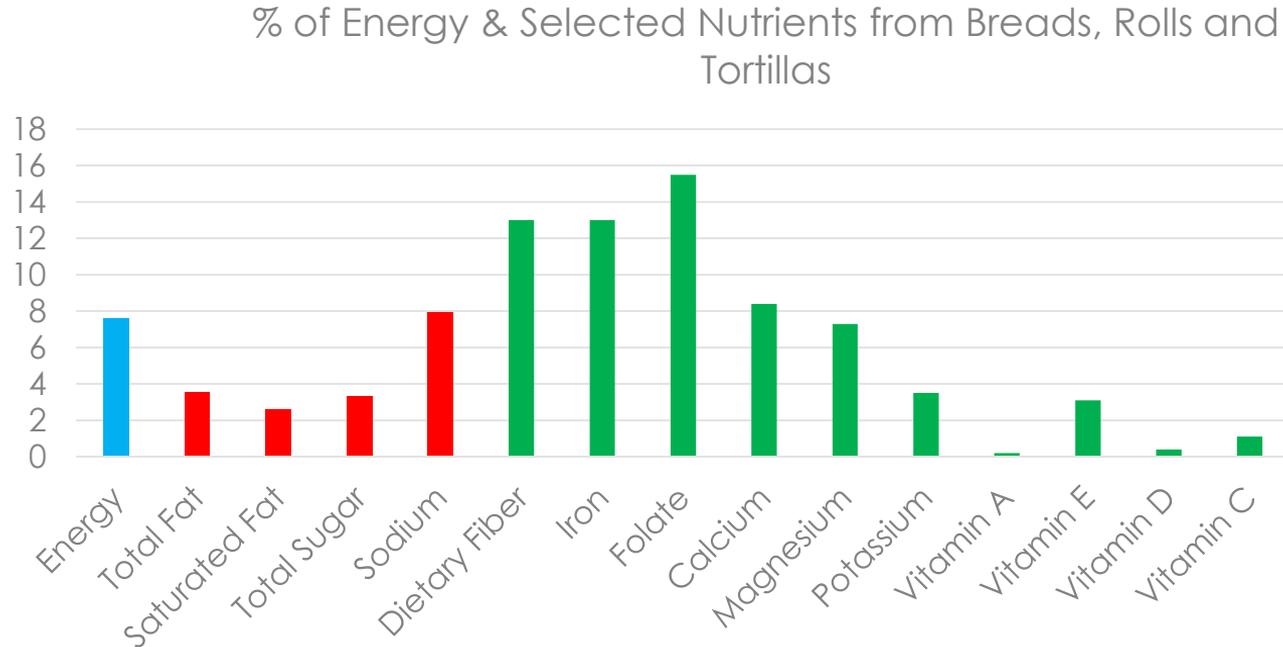


“The DGAC found that several nutrients are under-consumed relative to requirement levels set by the Institute of Medicine (IOM) and the Committee characterized these as shortfall nutrients: **vitamin A, vitamin D, vitamin E, vitamin C, folate, calcium, magnesium, fiber, and potassium**. For adolescent and premenopausal females, iron also is a shortfall nutrient. Of the shortfall nutrients, calcium, vitamin D, fiber, and potassium also are classified as nutrients of public health concern because their under-consumption has been linked in the scientific literature to adverse health outcomes. **Iron** is included as a shortfall nutrient of public health concern for adolescent females and adult females who are premenopausal due to the increased risk of iron-deficiency in these groups.”

Breads, Rolls & Tortillas Help Close the Nutrient Shortfall Gap



Breads, Rolls & Tortillas Help Close the Nutrient Shortfall Gap



What Does this All Mean?

Grain foods account for less than 15% of American adults calories

Go ahead – enjoy your carbs! Pasta, noodles, and cooked grains provide less than 1 percent of calories in adult diets

30% of daily iron intake comes from grains

Yeast breads provide less than 6% or 15 g of carbs in the diet

Breads, rolls, and tortillas help fill nutrient gaps of fiber, folate, iron, calcium, magnesium, and potassium by providing 6-15% of these nutrients



Nearly a quarter of daily fiber comes from grains foods
#grainfoods #fiber

Key Takeaways and Next Steps

- While grain foods as a whole are contributors of energy and sodium in the US diet, grain foods are also contributors of DGAC shortfall nutrients, including dietary fiber, folate, magnesium, calcium, and iron
- Grain foods are nutrient-dense foods—eliminating grains from the US diet may lead to nutrient intake consequences
- A journal article of this material becomes a good story and can be used in Dietary Guidelines and other policy influencing
- Next steps to build on this work include describing the percentages of the US population that would not meet recommendations when a percentage (100%, 50%, 25%) of grain foods are eliminated from the diet in adults and children



**GRAIN FOODS
FOUNDATION**

Questions & Thank you!