

# The Case FOR RICE

## RESEARCH OVERVIEW



U.S.-grown rice is a nutrient rich grain that contributes more than 15 vitamins and minerals, fits the *U.S. Dietary Guidelines*, and can be included in many healthy eating plans. So it comes as no surprise that there is significant scientific agreement recommending whole grain rice and enriched, fortified white rice as a part of a healthy, balanced diet. Check out the science supporting the nutritional benefits of rice, making this grain more appealing with every bite.

### Eat Rice, Improve Diet Quality

Recent research published in the March 2014 issue of *Food & Nutrition Sciences*<sup>1</sup> examined data from 14,386 adults from National Health and Nutrition Examination Survey (NHANES) datasets from 2002-2010. Researchers compared nutrient intake of rice eaters versus those who reported not eating rice. Highlights of their results include the following:

- A significant trend to increased diet quality among rice eaters, with diet quality scores that were 5.5 points between those who ate no rice versus those eating the most rice.
- Higher intakes of fiber, folate, magnesium, and iron were found among those consuming rice.
- Increased fruit, vegetables, grains, meat, beans, and oil were also found among rice eaters.
- A negative correlation between rice consumption and solid fats and added sugars (SoFAAS).

These results add to similar data from two previously published studies using national nutrition surveillance survey studies. The first study, published in 2009, used the 1994-1996 Continuing Survey of Food Intakes by Individuals (CSFII) and the NHANES 2001-2002 datasets and reported that rice eaters consumed less saturated fat and more fiber and higher amounts of iron and potassium.<sup>2</sup>

A study, published in 2010, of both adults and children found that individuals eating at least one serving per day of rice ate less total fat, saturated fat, and added sugars; and had higher amounts of 12 different vitamins and minerals in their diet. And, in adults, rice eaters were significantly less likely to be overweight or obese; they also had a 34 percent reduced risk for high blood pressure, a 27 percent reduced risk for increased waist circumference and a 21 percent reduced risk for metabolic syndrome.<sup>3</sup>

Together, the results of these three published reports show that rice consumption is associated with higher diet quality and eating patterns more consistent with the recommendations set forth in the *Dietary Guidelines for Americans*.

### Rice & Weight Management

When patients and clients are struggling with weight issues, the first foods that are excluded from the diet tend to be carbohydrates. All carbohydrates are not created equal, however, and rice in particular is one that offers many health benefits and may assist in maintaining a calorie-controlled eating plan. A human clinical trial published in 2013 reported that having white or brown rice at a meal increased satiety and feeling of fullness more than a calorically equivalent glucose solution control.<sup>4</sup>

#### References

<sup>1</sup> Nicklas, T.A., et al. (2014) Rice Consumption Is Associated with Better Nutrient Intake and Diet Quality in Adults: National Health and Nutrition Examination Survey (NHANES) 2005-2010. *Food and Nutrition Sciences*, 5, 525-532.

<sup>2</sup> Batres-Marquez P, Jensen HH, Upton J. Rice consumption in the United States: Recent evidence from food consumption surveys. *J Am Diet Assoc.* 2009;109:1719-1727.

<sup>3</sup> Fulgoni, V, Fulgoni S, Upton J, Moon M. Diet quality and markers for human health in rice eaters versus non-rice eaters: An analysis of the US NHANES, 1999-2004. *Nutrition Today.* 2010;45:262-272.

<sup>4</sup> Wang X, O'Neill M, Thomas W, Slavin J. White and brown rice are equally satiating and more satiating than glucose beverage. *J Obes Weight Loss Ther.* 2013;3:6.