# **Rice Nutrition 101**

### RESEARCH HIGHLIGHTS THE IMPORTANCE OF RICE CONSUMPTION

#### THE POSITIVE IMPACT OF RICE CEREAL

The authors of this study used the National Health and Examination Survey (NHANES) dataset to examine the food patterns of infants and toddlers from birth to 23 months of age consuming rice or non-rice baby cereals versus non-consumers. It revealed that rice cereal consumption is linked to better nutrient intake and health outcomes with a lower risk of disease. Specifically, infants and toddlers with diet patterns containing both rice and non-rice cereal had higher intakes of carbohydrates, iron, calcium, magnesium, zinc, and vitamin E and a lower intake of processed foods such as pizza, cured meats, and desserts.<sup>1</sup>

#### RICE CONSUMPTION LINKED TO BETTER NUTRIENT INTAKE & DIET QUALITY

Using data from the National Health and Nutrition Examination Survey datasets (2005-2010), researchers evaluated the association of rice consumption with overall diet quality and key nutrient intakes in a nationally representative sample of 14,386 U.S. adults. The results showed that adults who eat rice had diets more consistent with what is recommended in the U.S. Dietary Guidelines, and they showed higher amounts of potassium, magnesium, iron, folate and fiber while eating less saturated fat and added sugars. Eating rice was also associated with eating more servings of fruit, vegetables, meat, and beans. This research builds on two previously published studies that showed the positive contribution of rice to diet quality.<sup>2</sup>





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### BETTER HEALTH PARAMETERS & NUTRIENT INTAKE WITH RICE CONSUMPTION

Evaluation of health parameters is frequently a topic among nutrition professionals and in this study, authors evaluated whether rice consumption impacts any of the following health parameters for adults 20 years and older: obesity risk, cholesterol levels, energy intake, major vitamin and mineral intakes, weight status, blood pressure, diet quality, and serum folate level. The data used in this study are from NHANES (2007-2008) and the Food Commodity Intake Database.

The study showed that rice eaters, including children and adults, consume significantly more folate, iron, potassium, vitamins B6, B12 and A, thiamin, riboflavin, niacin, vitamin D, phosphorus, magnesium, copper and zinc. Findings indicate that individuals who consume rice have a smaller waist circumference and are less likely to be overweight or obese. In addition, evidence reveals that these individuals enjoy a healthier diet with significantly higher intakes of nutrient dense foods than those who do not consume rice.<sup>3</sup>

<sup>1</sup>Nicklas, T. A., O'Neil, C. E., & Fulgoni, V. L., 3rd (2020). Nutrient intake, introduction of baby cereals and other complementary foods in the diets of infants and toddlers from birth to 23 months of age. AIMS public health, 7(1), 123-147. https://doi.org/10.3934/publichealth.2020012.

<sup>2</sup> Nicklas, T. A., O'Neil, C. E., & Fulgoni, V. L., (2014). Rice consumption is associated with better nutrient intake and diet quality in children: National Health and Nutrition Examination Survey (NHANES) 2005-2010. J Nutr Food Sci, 4:262. doi: 10.4172/2155-9600.1000262.

<sup>3</sup> Kennedy E, Luo H. (2015). Association between rice consumption and selected indicators of dietary and nutritional status using National Health and Nutrition Examination Survey 2007-2008. Ecol Food Nutr. 54(3):224-39. doi: 10.1080/03670244.2014.972391.

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### RICE TAKEAWAYS FROM THE 2020-2025 DIETARY GUIDELINES FOR AMERICANS

#### **WHOLE GRAINS & REFINED GRAINS**

According to the 2020-2025 Dietary Guidelines for Americans, dietary patterns higher in whole grains and lower in refined grains are associated with positive health outcomes. Americans are encouraged to make at least half of their grains whole, by consuming foods like brown rice, to increase their intake of dietary fiber which is an under consumed nutrient. If consuming refined grains, individuals should choose enriched grains.

#### **FORTIFIED RICE CEREAL**

The 2020-2025 Dietary Guidelines for Americans states that breastfed infants ages 6-12 months should be provided foods rich in iron, including fortified cereals such as rice cereals. The guidelines state that rice cereal fortified with iron is a good source of nutrients for infants. Fortified rice cerals can prevent iron deficiency during the first year of life among infants with insufficient iron stores or breastfed infants who are not receiving adequate iron from another source. The guidelines also encourage offering young children more whole grains than refined grains to increase dietary fiber and potassium intake.<sup>4</sup>

#### FALL INTO ONE OF OUR FAVORITE RICE RECIPES

This Vegetarian Paella comes together in under an hour using simple ingredients. Starring U.S.-grown short grain rice, this recipe brings all the flavor and comfort of the classic Spanish rice dish and comes to us from our friend Jamie Vespa, MS, RD in partnership with USA Rice. You can easily find this recipe and many more at thinkrice.com.

#### **INGREDIENTS:**

1.5 cup US-grown short grain rice
¼ cup + 2 Tbsp Extra-virgin olive oil,
divided
1 yellow onion, finely chopped
1 red bell pepper, thinly sliced
8 oz. cremini mushrooms, sliced
3 garlic cloves, minced
1.5 tsp paprika
1 tsp saffron threads

1 tsp kosher salt 0.5 tsp black pepper 1 cup dry white wine 15 oz. can chickpeas, rinsed and drained 2.5 cup vegetable broth 0.5 cup frozen green peas, thawed ¼ cup fresh parsley, finely chopped Lemon zest & juice 1/3 cup green olives, sliced

#### **DIRECTIONS:**

- 1. Heat ¼ cup oil in large high-sided skillet with a fitted lid over medium-high. Add onion, bell pepper, and mushrooms; cook 7 to 8 minutes, until softened. Add garlic, paprika, saffron, salt, and pepper; cook 2 minutes, until fragrant.
- 2. Add wine and cook 2 to 3 minutes, until mostly reduced. Stir in rice; cook 2 to 3 minutes, until rice begins to turn translucent. Stir in chickpeas, tomatoes, broth, and green peas. Bring to a low boil, reduce heat, cover, and cook 25 minutes.
- 3. Meanwhile, combine parsley, lemon zest and juice, and remaining 2 tablespoons oil in a small bowl. Once rice is cooked, remove lid and cook 5 more minutes. Scatter parsley oil overtop, and garnish with olives, if desired.

<sup>4</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at DietaryGuidelines.gov.

