

Nutrition Perspectives

UC Davis Department of Nutrition, UC Agriculture and Natural Resources, and Center for Nutrition in Schools

Adding Folic Acid to Corn Masa Flour May Prevent Birth Defects

If you're a Latina who's expecting a baby, your diet may be missing a key ingredient believed to help prevent certain kinds of birth defects.

That ingredient? Folic acid, which has long been used to fortify, or strengthen, certain enriched grains.

However, as Captain Richardae Araojo, director of the U.S. Food and Drug Administration's (FDA) Office of Minority Health notes, "Hispanic women may not benefit from folic acid-enriched cereal grain products because these products are often not a staple in their diet."

This could be a reason why Latinas represent the highest percentage of U.S. women giving birth to children with neural tube defects (NTDs), according to the Centers for Disease Control and Prevention (CDC). NTDs are birth defects of the brain, spine and spinal cord, such as anencephaly and spina bifida.

In 2016, FDA moved to help protect these women and their children by approving the addition of folic acid to corn masa flour, an ingredient in foods including tortillas, tacos, tortilla chips and tamales. Foods made from this flour are staple foods of Mexican and some



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Central and South American diets.

When consumed by pregnant women before and during pregnancy, folic acid—a B vitamin—may help to prevent neural tube defects.

Corn masa flour, sometimes called masa—Spanish for dough—is produced by cooking corn in alkali (a substance that has a bitter taste and then forms a salt when mixed with an acid), then grinding it.

An Important Preventive Step

In 1998, in response to a recommendation by CDC and the U.S. Public Health Service, FDA made it easier for many expectant mothers to consume folic acid. The agency required the addition of folic acid to standardized enriched cereal grains, such as enriched rice and flour, and standardized enriched cereal grain products, such as enriched bread and macaroni.

Refined grains are enriched when certain B vitamins are added back after processing. Standardized foods contain ingredients required

by FDA and are produced in a specified way.

“The reasoning was that enough people—including expectant mothers—eat enriched grains as a matter of course. And that could make a difference in the number of neural tube defects,” says Dennis M. Keefe, Ph.D., director of FDA’s Office of Food Additive Safety. In fact, the number of NTDs in the U.S. for all populations has since declined.

However, the incidence of neural tube defects in some Hispanic American populations has not declined to the same extent as in the general population.

So, FDA reviewed and approved a food additive petition from five organizations—the March of Dimes Foundation, the American Academy of Pediatrics, the Spina Bifida Association, the National Council of La Raza, and Gruma Corporation—requesting that folic acid be added to corn masa flour. Manufacturers may now voluntarily add the amount of folic acid (up to 0.7 milligrams) per pound of corn masa flour that is consistent with the levels in the enriched cereal grains mandated in 1998.

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In 2016, the FDA approved the addition of folic acid to corn masa flour, an ingredient in foods including tortillas, tacos, tortilla chips and tamales.

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Sheri Zidenberg-Cherr, Ph.D., Nutrition Specialist, Anna M. Jones, Ph.D., and staff prepare NUTRITION PERSPECTIVES. This newsletter is designed to provide research-based information on ongoing nutrition and food-related programs. It is published quarterly (four times annually) as a service of the UC Davis Center for Nutrition in Schools, the University of California Agriculture and Natural Resources and the United States Department of Agriculture. NUTRITION PERSPECTIVES is available online, free of charge, at <http://nutrition.ucdavis.edu/perspectives>. Questions or comments on articles may be addressed to: NUTRITION PERSPECTIVES, Department of Nutrition, University of California, Davis, CA 95616-8669. Phone: (530) 752-3387; FAX: (530) 752-8905.

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When consumed by pregnant women before and during pregnancy, folic acid—a B vitamin—may help to prevent neural tube defects.

adding this amount of folic acid to the food supply would be safe for the general population.

“In addition to reviewing the safety and projected consumption data, we had to verify that folic acid remained stable throughout the production process and didn’t break down into other harmful substances during manufacturing,” Keefe says.

After this intensive review, FDA was able to give the go-ahead to those manufacturers who want to add folic acid to their corn masa products.

Cynthia Pellegrini, senior vice president of public policy at the March of Dimes, says, “FDA worked closely with us to design a study that garnered the information needed to establish the safety of this action. We’re thrilled at the outcome and feel confident that it will address the disparities we’ve seen in the Latina community and will give even more babies a healthy start in life.”

If You’re Pregnant or Thinking of Becoming Pregnant

CDC recommends that for folic acid to help prevent some major birth defects, a woman should start consuming 400 mcg a day at least one month before she becomes pregnant and the entire time while she is pregnant. For masa, cereals and grain products, read the ingredient statement to see if the food has been enriched with folic acid.

Some easy ways to make sure to get enough folic acid are to:

- Eat a bowl of an enriched breakfast cereal that has 100% of the Daily Value of folic acid.
- Eat other enriched cereal grain products mandated to contain folic acid.
- Take a vitamin or multivitamin supplement that contains folic acid each day.

Talk to your health care provider about what’s best for you.

Source: FDA Consumer Updates. Jan 9, 2018, <https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm504412.htm>

FDA Takes Step to Protect Consumers Against Dietary Supplements Containing Dangerously High Levels of Extremely Concentrated or Pure Caffeine

The U.S. Food and Drug Administration has taken an important step to better protect consumers from the dangers of highly concentrated and pure caffeine products. These products present a significant public health threat because of the high risk that they will be erroneously used at excessive, potentially dangerous doses. Highly concentrated and pure caffeine, often sold in bulk packages, have been linked to at least two deaths in otherwise healthy individuals.

The agency issued a new guidance to clarify that dietary supplements containing pure or highly concentrated caffeine in powder or liquid forms are considered unlawful when sold in bulk quantities directly to consumers. Given the significant public health concern, this guidance is immediately in effect. The FDA is prepared to take steps right away to begin removing illegal products from the market.

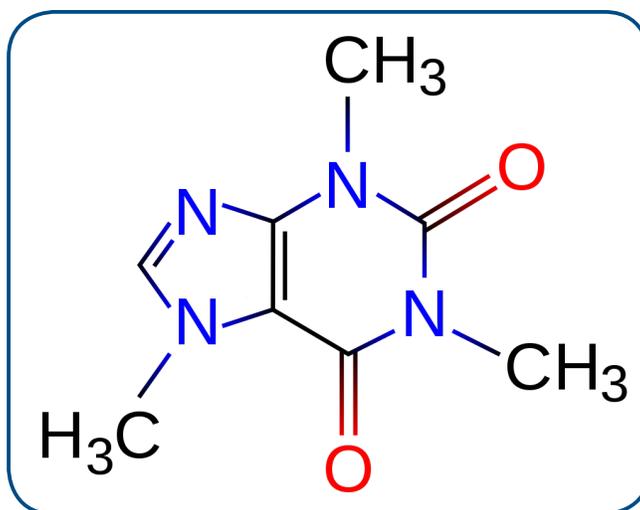
“Despite multiple actions against these products in the past, we’ve seen a continued trend of products containing highly concentrated or pure caffeine being marketed directly to consumers as dietary supplements and sold in bulk quantities, with up to thousands of recommended servings per container. We know these products are sometimes being used in potentially dangerous

ways. For example, teenagers, for a perceived energy kick, sometimes mix dangerously high amounts of super-concentrated caffeine into workout cocktails. The amounts used can too easily become deceptively high because of the super-concentrated forms and bulk packaging in which the caffeine is being sold,” said Scott

Gottlieb, M.D., FDA commissioner. “We’re making clear for industry that these highly concentrated forms of caffeine that are being sold in bulk packages are generally illegal under current law. We’ll act to remove these dangerous bulk products from the market.”

A half cup of a highly concentrated liquid caffeine can contain approximately

2,000 mg of caffeine and just a single teaspoon of a powdered pure caffeine product can contain approximately 3,200 mg of caffeine. This is equivalent to about 20 to 28 cups of coffee, a potentially toxic dose of caffeine. In fact, less than two tablespoons of some formulations of powdered, pure caffeine can be deadly to most adults, while even smaller amounts can be life threatening to children. Risk of overuse and misuse is high when highly concentrated caffeine is sold in bulk quantities, and consumers are expected to measure a very small, precise recommended serving. Regardless of whether



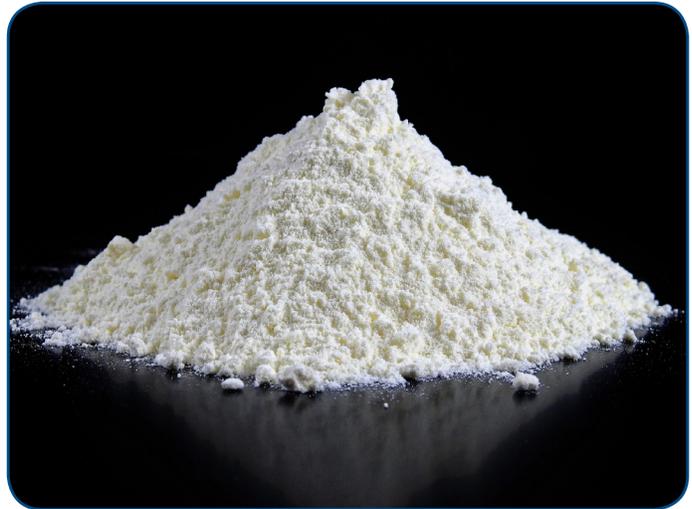
Caffeine is a chemical found naturally in many plant products, including tea leaves, coffee beans, cacao pods, and kola nuts.

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the product contains a warning label, such products present a significant and unreasonable risk of illness or injury to the consumer.

The recommended safe serving of highly concentrated or pure caffeine products is often 200 mg of caffeine, which equates to 1/16 of a teaspoon of pure powder or approximately 2.5 teaspoons of a liquid. Yet, despite these small serving sizes, powdered forms of caffeine are sold in large bags and liquid forms are sold online in bottles that can contain a gallon or more. Often, consumers do not have the right tools to correctly measure such a small amount. Even if they do, simple and common errors, such as packing the powder too tightly or using a “heaping scoop” instead of a “level scoop,” can increase the amount of caffeine in a single dose, with harmful results. Consumers could also make similar errors with highly concentrated liquid caffeine products. For comparison, a can of caffeinated soda contains about 35 mg of caffeine, which would equate to less than half a teaspoon of highly concentrated liquid caffeine.



Highly concentrated or pure caffeine could potentially be mistaken for common household products. For example, pure powdered caffeine closely resembles flour or powdered sugar.

Additionally, these products often closely resemble safe household items, potentially leading to accidental and dangerous ingestions. Highly concentrated caffeine in a clear liquid form could



Caffeine is most commonly associated with beverages, such as coffee that are safe when consumed in moderation (400mg of caffeine per day or less).

be easily confused with commonly available liquids, such as water or distilled vinegar, and pure powdered caffeine could be easily confused with flour or powdered sugar. The consequences of a consumer mistakenly confusing one of these products could be toxic or even lethal.

When formulated and marketed appropriately, caffeine can be an ingredient in a dietary supplement. For example, the guidance describes how dietary supplements containing caffeine in certain forms are less likely to present the same safety risks, including those sold in premeasured packets or containers, or in solid dosage forms such as tablets or capsules, or when sold in formulations that are not highly concentrated.

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Moreover, this guidance does not affect other types of products that might also contain caffeine, such as prescription or over-the-counter drugs or conventional foods, like traditionally caffeinated beverages.

In 2015 and 2016, the FDA issued warning letters to seven distributors of pure powdered caffeine, with several of the letters citing that the products were dangerous and presented a significant or unreasonable risk of illness or injury to consumers. Since that time, the FDA has continued to see a proliferation of similar products being sold online. The FDA intends to carefully review any dietary supplement products that contain potentially dangerous amounts of caffeine in any form, and the agency will continue to take action when products put consumers at risk.

The FDA, an agency within the U.S. Department of Health and Human Services, protects the public health by assuring the safety, effectiveness, security of human and veterinary drugs, vaccines and other biological products for human use, and medical devices. The agency is also responsible for the safety and security of our nation's food supply, cosmetics, dietary supplements, products that give off electronic radiation, and for regulating tobacco products.

Source: FDA News Releases. Apr 13, 2018, <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm604485.htm>.

2018 Physical Activity Guidelines Advisory Committee Submits Scientific Report



Several benefits to physical activity were identified, including improved cognitive function in children ages 6 to 13.

The 2018 Physical Activity Guidelines Advisory Committee, a group of nationally recognized experts in physical activity and public health, has submitted its recommendations to the U.S. Department of Health and Human Services (HHS) Secretary.

The 2018 Physical Activity Guidelines Advisory Committee Scientific Report describes findings from the Committee's systematic review of the scientific evidence on physical activity, fitness, and health, and will help inform the next edition of the Physical Activity Guidelines for Americans (1).

The 2018 Scientific Report reinforces the recommendations included in the 2008 Physical Activity Guidelines that physical activity reduces the risk of a large number of diseases and conditions. In addition to disease prevention benefits, the Scientific Report includes findings that regular physical activity provides

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a variety of benefits that help people sleep better, feel better, and perform daily tasks more easily. The Committee also found that some benefits happen immediately, on the same day a single bout of physical activity is performed.

Expanding on findings from the Advisory Committee Scientific Report, 2008, the 2018 Committee identified health benefits of physical activity that had not been previously identified including:

- Improved bone health and weight status for children ages 3 to 5
- Improved cognitive function for children ages 6 to 13
- Decreased risk of certain cancers, dementia, and excessive weight gain for adults
- Improved quality of life and sleep for adults
- Reduced feelings of anxiety and depression in adults
- Additional benefits for specific population including older adults, women who are pregnant or postpartum, and individuals with pre-existing medical conditions



This report will be used to inform the Physical Activity Guidelines for Americans.



Regular physical activity is associated with decreased risk for dementia and certain cancers.

Additionally, the Committee found strong or moderate evidence that more time spent in sedentary behavior is related to greater all-cause mortality, cardiovascular disease mortality and incidence, type 2 diabetes incidence, and the incidence of certain cancers.

The Scientific Report is not a draft of the Physical Activity Guidelines for Americans policy, but the report will be considered, along with input from federal agencies and comments from the public, in the development of the Physical Activity Guidelines for Americans, 2nd edition, to be released later this year.

The 2018 Physical Activity Guidelines Advisory Committee Scientific Report is available online at <https://health.gov/paguidelines/second-edition/report.aspx>.

Reference:

1. 2018 Physical Activity Guidelines Advisory Committee. 2018 Physical Activity Guidelines Advisory Committee Scientific Report. Washington, DC: U.S. Department of Health and Human Services, 2018.

Source: Office of Disease Prevention and Health Promotion News. Mar 5, 2018, <https://health.gov/news/blog-bayw/2018/03/2018-physical-activity-guidelines-advisory-committee-submits-scientific-report/>

Thousands in the San Joaquin Valley Have Unsafe Drinking Water, But Clean Water Is Close

Tens of thousands of people living in the San Joaquin Valley's unincorporated, rural, low-income communities have unsafe drinking water pouring from their taps. That water is delivered from a patchwork of community water systems that often don't meet state or federal standards for drinking water, or from private wells that are not tested.

However, a University of California, Davis, study that assessed water systems throughout the valley found that safe water is often close at hand. Most people without safe water, or about 99,000 residents, live near public systems with clean water. They could access that water if service extensions, piping and other infrastructure were implemented, the report found.

"There are solutions," said Jonathan London, associate professor, director of the UC Davis Center for Regional Change and lead author of the report.

Some of that work is already happening. Students in the UC Davis School of Law Aoki Water Justice Clinic have been meeting with these communities to secure funding to build that infrastructure. Law students are also working with community organizations seeking policy changes to increase access to safe drinking water for low-income Californians.

"We are confident that these communities, local water systems, and the state can work together to fund and encourage infrastructure improvement to ensure that no one in the San Joaquin Valley need worry about what is coming out of their faucets," London said.



Tens of thousands of people in rural areas of San Joaquin Valley have unsafe drinking water delivered from a patchwork of community water systems or untested private wells.

The report, "The Struggle for Water Justice in the San Joaquin Valley: A Focus on Disadvantaged Unincorporated Communities," looked at access to safe drinking water in low-income communities without city governments in the eight counties of the San Joaquin Valley.

The study's purpose is to inform state policy and local planning in order to improve access to safe drinking water for these communities.

"Within the next decade and with adequate funding, we could solve a problem that has plagued low-income, rural communities for over 50 years," said Camille Pannu, the water justice clinic director who also contributed to the report.

Success stories are found already in Tulare and Kings counties

The report found that more communities need to follow the examples from Kings and

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In Tulare and Kings counties, where high levels of arsenic and nitrates were found in the water, water delivery systems were consolidated and lines were added to provide safe drinking water.

Tulare counties, where residents with unsafe water recently consolidated some water delivery systems and added lines to provide safe drinking water to residents. Previously, the people in the affected communities had dangerous levels of arsenic and nitrates in their water supplies.

Using a combination of solutions, the communities forged agreements among existing water agencies and obtained grants to help finance the changes, and in some cases, the state ordered consolidations.

The poor and people of color are adversely affected

People of color made up a majority of those without safe water, the Center for Regional Change study found. For example, while Hispanics make up just under half, or 49 percent, of the total population of the San Joaquin Valley, they represent more than two-thirds of residents in these unincorporated communities and 57 percent of all residents served by out-of-compliance water systems. Caucasians account for about 36 percent of those receiving water from unsafe systems.

Those without safe water face additional economic burdens as they need to augment their water needs by buying bottled water, or purchasing filter systems, for drinking and cooking.

Study proposes practical solutions

Ways safe drinking water can be achieved, according to the report, include:

- Develop and strengthen consolidation and service extension mandates and incentives for cities, counties and community water systems.
- Create larger, more stable, and more equitably distributed and coordinated sources of funding for drinking water systems.
- Improve public access to data and planning tools; enhance existing data systems and coordinate water monitoring efforts.

The research began in fall 2016, and was funded by Resources Legacy Fund and the Water Foundation.



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Reference:

1. London J, Fencil A, Watterson S, et al. The Struggle for Water Justice in California’s San Joaquin Valley: A Focus on Disadvantaged Unincorporated Communities. 2018. Davis, CA: UC Davis Center for Regional Change.

Source: Karen Nikos-Rose. UC Davis News, Mar 12, 2018; <https://www.ucdavis.edu/news/thousands-san-joaquin-valley-have-unsafe-drinking-water-clean-water-close>

Most with Hypertension Not Receiving Advice to Reduce Sodium Intake from Health Professionals

Hypertension, also called high blood pressure, is one of the more common risk factors for cardiovascular disease. While there are many factors that can contribute to the development of hypertension, diet, especially reducing sodium intake, can play an enormous role in the prevention and treatment. When given advice to cut back on sodium from a health professional, many will take steps to do so (1). Researchers from the Centers for Disease Control and Prevention (CDC) wanted to find out how common this advice was.

To investigate this question, researchers used data from the 2015 Behavioral Risk Factor Surveillance System (BRFSS), a survey with tens of thousands of participants in nine states and Puerto Rico (2). The researchers estimated hypertension status and whether participants were advised to reduce sodium using a series of questions such as “Have you ever been told by a doctor, nurse, or health professional that you have high blood pressure?” and “Has a doctor or other health professional ever advised you to reduce sodium or salt intake?” and “Are you currently watching or reducing your sodium or salt intake?”



Hypertension, defined as blood pressure greater than 130/80 mm Hg, is one of the most common risk factors for heart disease.



According to the CDC, cardiovascular disease is the leading cause of death in the United States.

The study, published in the *Morbidity and Mortality Weekly Report*, reported less than half (41 percent) of those with hypertension recall receiving advice from their health professionals to reduce sodium intake. Among those without hypertension the proportion was even lower, with only 12.8 percent receiving this advice.

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The researchers then took it a step further by examining whether those who recall receiving advice were more likely to report reducing or controlling their sodium intake. They found that receiving advice from a health professional made a large difference. Among those who received advice, the majority reported watching or reducing the amount of sodium they consumed regardless of hypertension diagnosis, although the proportion of those watching their sodium intake was higher (80.9 percent) in those with high blood pressure versus those who had not been diagnosed (72.7 percent). Among those who did not recall receiving advice, the proportion who were controlling sodium intake was much lower, with 55.7 percent of those with a hypertension diagnosis watching their sodium intake and 46.9 percent of those without a diagnosis.

The results of this study highlight the importance of physicians and other health professionals recommending lifestyle changes such as controlling sodium intake to their patients



Reducing sodium can play a large role in preventing and treating hypertension.



The DASH (Dietary Approaches to Stop Hypertension) eating plan, which is rich in fruits, vegetables, whole grains, nuts, vegetable oils, and low-fat dairy, is a lifestyle change that has been shown to help reduce blood pressure.

with hypertension. Recently, clinical practice guidelines for high blood pressure were updated, including revision of the definition of high blood pressure (3). Previously, hypertension was defined as blood pressure greater than 140/90 mm Hg; the new clinical practice guidelines have lowered this number to 130/80 mm Hg. This change means it is likely that many more individuals will be diagnosed with hypertension and will need this type of advice from their health professionals.

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By Anna M. Jones, Department of Nutrition, University of California, Davis.

Some Facts about Gluten



Gluten-free products are now more readily available in stores, and many Americans think a gluten-free diet can help them lose weight or is healthier than a diet that has gluten.¹ This belief has created a gluten-free fad. Gluten-free foods are a \$3.42 billion global business with a projected \$24 billion in sales by 2020.^{2,3}

What is gluten?

Gluten is a type of protein found in wheat, rye, and barley. Eating foods with gluten may cause an autoimmune reaction in those that have

celiac disease, an allergic reaction in those who have a wheat allergy, or other immune reactions.⁴ These reactions are called “non-celiac gluten sensitivity.”

What is celiac disease?

Celiac disease is an autoimmune condition where a reaction is triggered by eating gluten. In a person who has the disease, eating gluten will cause damage the lining of the small intestine. The symptoms include chronic diarrhea, weight loss, abdominal pain, and even vomiting or constipation, and the symptoms may take weeks to years to show after eating gluten.^{2,4} It can also result in, anemia, osteoporosis, and neurological issues.⁴

How is celiac disease diagnosed and treated?

Medical tests (antibody tests and biopsy of the small intestine) are used to diagnose celiac disease. It is treated with a gluten-free diet.^{2,4}



What is a wheat allergy?

Wheat allergy is an immune reaction to wheat proteins that causes an allergic reaction, affecting the skin, gastrointestinal tract, or respiratory tract.⁴

How is wheat allergy diagnosed and treated?

Wheat allergy is diagnosed with medical tests (skin prick test and antibody tests). It can be treated by removing wheat from the diet. Medications such as antihistamines and corticosteroids may be used to treat symptoms.^{2,4}

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Gluten (Continued from Page 12)



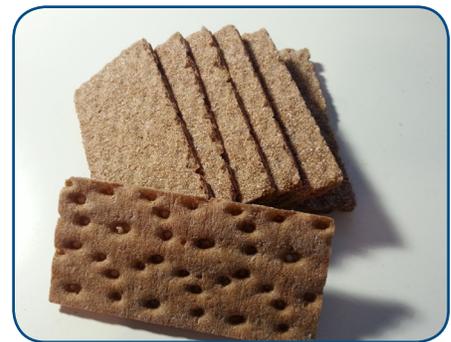
What is non-celiac gluten sensitivity?

Non-celiac gluten sensitivity (NCGS) occurs when a person has symptoms similar to those of celiac disease, but have not been diagnosed with celiac disease.⁴ Symptoms can also be very similar to those of Irritable Bowel Syndrome (IBS) and other food sensitivities.⁵ The symptoms include behavioral changes, bone or joint pain, muscle cramps, leg numbness, weight loss, and chronic fatigue.⁴

Other symptoms may include such as headaches or migraines, a ‘foggy mind’, eczema, anemia, and depression.⁶

How is non-celiac gluten sensitivity diagnosed and treated?

While NCGS appears to be similar to celiac disease, the key difference is that NCGS does not damage the small intestine. Because there is no physical damage present in NCGS, it is difficult to make a diagnosis to help reduce IBS-like symptoms.⁴



If you don't have a gluten-related disorder, is a gluten free diet healthier?

Contrary to popular belief, a gluten-free diet is not healthier for those who do not have a gluten-related disorder. There is no scientific evidence that a gluten-free diet will help with weight loss and health.^{1,2}

Often, gluten-free diets have more fat and are low in vitamin B12, zinc, iron, folate, and fiber.^{1,2} While more gluten-free options are available thanks to the growing market, gluten-free products are more expensive and there is no evidence that a gluten-free diet will benefit the general population.²

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By Hanee (Hyun Hee) Park, Rachel E. Scherr, Sheri Zidenberg-Cherr. Center for Nutrition in Schools, Department of Nutrition, University of California, Davis.

How Do Different Milk Alternatives Measure Up?



Of the four milk alternatives examined, soy milk was the most nutritionally similar to cow's milk.

Cow's milk is a great source of several nutrients and goes well with a variety of foods, from cereal to coffee to cookies. But not everyone can or chooses to drink milk. Many people turn to plant-based alternatives with the assumption that they are nutritionally equivalent to cow's milk or perhaps even a healthier option. When it comes to nutrients, how do plant-based alternatives measure up? That's what a recent review article in the *Journal of Food Science and Technology* sought to find out.

The researchers reviewed the four most common alternatives to cow's milk: Soy milk, almond milk, rice milk, and coconut milk. What they found is each one stacks up against cow's milk a little differently.

First, let's take a look at soy milk. Overall, it's the only one of the four alternatives examined to have a similar amount of protein to cow's milk. It is also the only alternative to have a comparable potassium content, a key nutrient for which most Americans are not meeting recommendations. Both soy milk and cow's milk are often fortified with vitamin D, resulting in similar amounts of this nutrient. The main drawback to soy milk is that, like cow's milk, soy is one of the most common allergies.

Almond milk is significantly different from cow's milk when it comes to nutrient content. It is much lower in calories, protein, carbohydrates, fat (when compared to whole cow's milk), and potassium. When fortified, it often has similar levels of calcium and vitamin D. Tree nuts, including almonds, are another very common allergy.

Rice milk, though similar in calories to cow's milk, has very different proportions of nutrients. On average, it contains only 1 gram of protein and 2 grams of fat, with the majority of the calories coming from carbohydrates. It is also low in potassium, though it tends to be fortified with calcium and vitamin D.

Coconut milk contains no



Compared to cow's milk, almond milk is much lower in calories, potassium, and protein.

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protein and very little carbohydrate. Although lower in calories than cow's milk, nearly all calories in coconut milk are from saturated fat. Like the other cow's milk alternatives, it is often fortified with calcium and vitamin D. Of the four alternatives, it is the lowest in potassium.

Overall, if looking for an alternative to cow's milk that is nutritionally similar, soy milk is the only one of the four most common that stacks up. Almond, rice, and coconut milks all fall short, especially with regard to protein.



Coconut milk contains no protein, and while it is low in sugar, nearly all of the fat is saturated.

Table: Selected nutrients found in cow's milk and milk alternatives.

Nutrient	Cow's Milk (Whole)	Soy Milk	Almond Milk	Rice Milk	Coconut Milk
Carbohydrates	11.5g	5	1.32	25.28	1
Sugars	12 ²	3.5	<1	13.12	0.625
Fiber	0	1	<1	0	<1
Total Fat	9	4.5	2.5	2.33	4.38
Saturated	5.5	<1	0	<1	4.13
MUFA	2.5	1	1.67	1	<1
PUFA	<1	2.5	.67	1	<1
Protein	8	9	1.67	1	0
Calcium	294	205	325	245	244.75
Iron	<1	<1	<1	<1	0
Potassium	373	364	65	50	46.67
Vitamin D	3.2 ²	1.86	2.32	2	2.92
Calories	158	95	36	133	48.75

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