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The Hidden Risks of Unnecessary Gluten-Free Diets in Children

Analysis by Dr. Joseph Mercola | February 06, 2026

STORY AT-A-GLANCE

- Gluten-free diets were initially intended for children with medical conditions such as celiac disease, wheat allergy, and non-celiac gluten sensitivity
- A review published in Frontiers in Nutrition found that gluten-free diets, when not medically required, can cause nutrient gaps and raise health risks for children
- A recent study in The American Journal of Gastroenterology found that young patients exhibited a significant increase in urinary arsenic and other metal levels after only six months on a gluten-free diet
- When cooked properly, white rice can be a smarter choice than brown rice because it's easier to digest, contains less arsenic and heavy metals
- Instead of cutting out foods that are good for your gut, include healthy carbs, choose stable fats over seed oils, and learn to calm your food fears

Gluten-free diets were initially created for children with serious conditions such as celiac disease, wheat allergy, and non-celiac gluten sensitivity. For these kids, avoiding gluten is essential to protect their health. But when gluten is removed from their diet when they do not have these conditions, the outcome can be harmful.[1]

Rather than enhancing well-being, unnecessary gluten restrictions can lead to nutrient deficiencies. The facts show that only 1% (about 1 in 133) Americans have celiac disease[2] — an autoimmune condition — and an estimated 83% of them are undiagnosed

or misdiagnosed.[3] Yet 11% of U.S. consumers report follow a gluten-free diet.[4]

This disconnect has researchers concerned. When a diet meant for a serious medical condition becomes a common trend, it can lead to problems that affect families in unexpected ways.

Think Twice Before Putting Your Child on a Gluten-Free Diet

A comprehensive study published in Frontiers in Nutrition warns that while gluten-free diets are essential for kids with certain medical conditions, adopting them without medical guidance can lead to serious nutritional and developmental risks.

The researchers conducted an extensive review of studies published between 1990 and 2025, examining decades of data on celiac disease, wheat allergy, non-celiac gluten sensitivity, and children on gluten-free diets without a confirmed diagnosis. They found out that:[5,6]

- **Gluten-free diets are not automatically healthier —** Processed gluten-free foods are often calorie-dense and low in protein, fiber, and essential nutrients like iron, calcium, magnesium, zinc, folate, vitamins B12 and D, and dietary fiber. This imbalance can impair growth and neurological development in children.
- **Healthier gluten-free diets should emphasize whole foods —** The researchers recommend whole foods like fruits, vegetables, and naturally gluten-free grains such as quinoa, buckwheat, and amaranth rather than packaged gluten-free snacks to counteract the risks of nutrient deficiency.
- **Cardiometabolic and gut health risks are real —** Many gluten-free packaged foods are high in sugar and saturated fat but low in protein and fiber. They also have a higher glycemic index, which can increase cardiometabolic risk over time.
- **Gut bacteria may also suffer —** Long-term gluten-free diets were linked to unfavorable changes in gut microbiota, including reduced levels of beneficial bacteria like Bifidobacteria and Lactobacilli. These shifts are primarily driven by

lower intake of whole grains and fermentable fibers that support gut health.

- **Psychological effects are concerning —** Strict, unnecessary gluten-free diets may trigger eating disorders, especially among adolescents and females. One study cited a 9% prevalence of eating disorders linked to restrictive diets. These symptoms often mimic celiac disease, delaying accurate diagnosis.[7]

- **Seek professional help for better guidance —** For children who truly need it, experts recommend naturally gluten-free whole foods. Regular follow-up with healthcare providers is pivotal in ensuring proper monitoring.[8]

Before making any major changes to your child's diet, it's a good idea to consider the potential risks. Gluten-free foods aren't always completely safe, and even your favorite foods can sometimes have hidden health issues.

Gluten-Free Diets Linked to Higher Arsenic Levels in Children

A recent study published in The American Journal of Gastroenterology[9] and covered by Environmental Health News[10] sheds light on a surprising consequence of gluten-free eating in children with celiac disease: arsenic exposure.

Rice is a common food in gluten-free diets, but many rice-based products contain high levels of arsenic. Rice plants absorb arsenic from soil, where residues from past pesticide use remain. While large amounts of arsenic are toxic, even low-level exposure over time can increase the risk of cancer, other health issues, and learning problems in infants and children.[11]

- **Sharp increase in arsenic levels after going gluten-free —** Children newly diagnosed with celiac disease had their urine tested before and after adopting a gluten-free diet. Within six months, arsenic levels rose to five times higher than their baseline measurements.

- **Rice identified as the primary source of exposure —** Because rice and rice flour are often used in gluten-free breads, crackers, and cereals, children on a gluten-free diet tend to consume far more of it. Rice naturally absorbs arsenic from soil and water, making it a hidden source of arsenic in these diets.

- **Other metals also increased —** In addition to arsenic, researchers detected elevated levels of cobalt, nickel, strontium, and barium. While none reached immediately toxic levels, the concern lies in long-term, low-level exposure, which can still carry health risks.

- **Chronic exposure is the bigger worry —** Arsenic can build up in the body over time, and is linked to cancer, heart disease, and developmental issues. Even though the levels found in this study were below acute toxicity thresholds, researchers warn that prolonged exposure could still pose a hazard, especially for children.

- **Diversifying gluten-free grains is a key recommendation —** Study author Dr. Nan Du said:[12]

> *"More research needs to be done to determine whether there are long-term effects of this bump, but overall, I think it speaks to the importance of diversifying the grains in the gluten-free diet."*

This study is a helpful reminder that "gluten-free" doesn't automatically mean "healthier." For medically necessary diets, food safety goes beyond allergens. Long-term plans for kids with celiac should pair gluten avoidance with steps to reduce heavy metal exposure. For most people, though, it pays to view diet trends with a discerning eye — because this context helps us see gluten more clearly.

Why Gluten Is Often Misunderstood

Gluten is one of the most commonly consumed proteins in Western diets — estimates suggest intake ranges from 5 to 20 grams (g) a day,[13] but it is also among the most vilified due to widespread misconceptions.[14]

But contrary to common belief, gluten is not inherently unhealthy. In fact, for people without gluten sensitivity or celiac disease, gluten-containing grains can offer important health benefits, as they are high in fiber, B vitamins, magnesium, and plant compounds. Numerous large studies have found that people who eat two to three servings of whole grains per day tend to have lower risks of heart disease, Type 2 diabetes, and premature death.[15,16,17]

- **One 2017 BMJ study involving over 100,000 participants found no link between gluten consumption and heart disease —** The researchers suggest that avoiding gluten without a medical reason may reduce whole grain intake, which could in fact raise long-term cardiovascular risk.[18]

  Gluten may also have a prebiotic effect, feeding beneficial gut bacteria such as bifidobacteria. Certain wheat-derived compounds (like arabinoxylan oligosaccharides) help nourish the gut lining and support microbial diversity.[19,20]

- **Villainized in biased marketing campaigns —** Gluten has been painted as the "bad guy" in the food world, but most of that comes from diet trends and influencer marketing, not solid science.[21]

  Wellness blogs and social media often blame gluten for bloating or inflammation, even though research shows it's harmless for most people. This fear-driven messaging makes bread and other wheat products appear risky, leading many people to eliminate them in pursuit of quick fixes like weight loss or improved digestion.

  The result? A booming gluten-free industry. In fact, the global market was worth $7.75 billion in 2023 and is expected to hit $13.67 billion by 2030. Yet studies show demand is growing faster than actual medical need, meaning the trend is driven more by belief than by health necessity.[22]

- **Gluten-free diets may weaken digestion —** Over time, avoiding gluten-containing foods can reduce microbial diversity in your gut, which is crucial for digestion and immune balance.

- **A personalized approach is essential —** Not all children thrive on the same diet, and overly restrictive diets can have negative effects. Gradually building tolerance rather than eliminating foods out of fear helps improve healthy gut-brain communication. Monitoring progress, such as recording symptom-free days or successful food reintroductions, can make the recovery process more empowering.

If you want to know more about gluten and how it impacts your health, read "**What You Must Know About Gluten**."

Don't Cut Rice Out — Just Pick the Right Kind

Rice is delicious and nutritious, but you need to be smart about choosing the right variety and how you prepare it to avoid the risk of arsenic. Many assume brown rice is always the healthier option, but that isn't true for everyone.

For many people, especially those struggling with inflammation or metabolic problems, white rice is often the better option. It's easier to digest, less likely to feed harmful gut bacteria, and lower in fiber and omega-6 fats that can interfere with your cells' energy production. Here's how to keep rice on your plate without undue health risks:

- **White rice has lower levels of arsenic —** White basmati rice from India, Thai jasmine, and California-grown white rice are recommended because they generally contain lower levels of hazardous metals.

  In contrast, brown rice retains its outer layers, which can contain heavy metals and linoleic acid (LA). These substances may adversely **impact mitochondrial health**, promote inflammation, and slow energy production.

- **How to cook it and cut toxins —** Soak your rice for a minimum of 30 minutes before cooking. Then, boil it in 6 to 10 cups of water per cup of rice. Drain it like pasta. This simple step can remove up to 60% of arsenic.

- **Skip parboiled, instant, and packaged rice products —** Convenience comes at a cost. These processed options often have more contamination and fewer nutrients. High-heat processing raises inorganic arsenic levels, and plastic packaging can leave chemical residues. Stick with whole, unprocessed rice and cook it yourself.

- **Make a delicious meal out of it —** Pair rice with tasty, nutrient-rich side dishes or colorful vegetables that are rich in protein and vitamins to keep your blood sugar steady and your meals balanced.

- **Avoid brown rice-based baby food for infants and toddlers —** Avoid feeding them rice cereal or porridge made from brown rice, including homemade versions. Breast milk remains the optimal choice for infant nutrition, so if you can breastfeed, do so.

  If not, consider preparing your own infant formula with **this recipe** that's based on nutrient-rich animal foods such as raw grass fed cow's milk, organic raw cream, and grass fed beef gelatin. For infants who cannot tolerate milk proteins, a **hypoallergenic, meat-based formula** is a safer alternative.

Stop Pointing Fingers, Start Focusing on Your Gut Instead

If you've stopped eating gluten but still feel bloated, foggy, or uncomfortable after meals, gluten probably isn't the real issue. Healing happens when you repair your gut at the cellular level — here are steps on how you can address your gut issues:

1. **Confirm the real source of the problem —** Before changing your diet, consult with a clinician to rule out celiac disease and wheat allergy. These are the only conditions that truly require lifelong gluten avoidance. After that, focus on what's really disrupting digestion. Keep a simple food and symptom journal for two weeks. Note what you eat, how you feel, and your stress levels.

2. **Nourish your gut with natural FODMAPs —** Whole foods containing natural fermentable oligosaccharides, disaccharides, monosaccharides, and polyols (FODMAPs) can support gut health. For instance, fructose found in fresh fruit and

lactose in grass fed dairy nourish Akkermansia muciniphila, a beneficial bacterium that enhances your intestinal barrier and helps maintain immune balance.

3. **Enjoy carbs that are good for you —** Your gut depends on mitochondria to power everything from digestion to nutrient absorption. To support cellular repair, aim for about 250 g of carbs per day from easily digestible sources such as ripe fruit, white rice, and root vegetables.

   Many people who "can't tolerate gluten" are simply trying to digest fiber-rich grains with an inflamed or depleted gut. Begin with gentler starches, then reintroduce whole grains once the intestinal lining and microbiome have recovered.

4. **Cut out harmful seed oils from your diet —** Seed oils like soybean, canola, safflower, and sunflower oil contain excessive amounts of the polyunsaturated fat (PUF) linoleic acid (LA), which damages mitochondria and weakens the gut lining. LA accumulates in tissues, readily oxidizes, and disrupts cellular energy metabolism.

   I recommend keeping your daily LA intake below 5 grams, ideally closer to 2 grams. The Seed Oil Sleuth feature in my Mercola Health Coach app, which is expected to launch sometime this year, can help you track your LA intake to a tenth of a gram.

5. **Rebuild trust in food and retrain your gut-brain connection —** Your gut-brain connection, which links your digestive and nervous systems, can become trapped in "fight or flight" mode if you fear food, causing digestion to slow down before it begins. Before eating, take deep breaths and remind yourself that food is nourishment, not a threat.

Having a truly healthy diet isn't measured by how many foods you cut out, but about what you choose to include. Gluten-free eating may sound like a quick fix, but unless you have specific conditions, removing gluten won't magically heal your gut. Real vitality comes from variety: whole, minimally processed foods, healthy carbs that fuel your cells, and habits that calm your gut-brain connection.

Fear-based food trends don't heal the body; nourishment does. Focus on restoring energy and balance instead of chasing restrictive diets. When you feed your gut what it truly needs, you gain more than comfort — you gain resilience, confidence, and the freedom to enjoy food without fear. That's the foundation of lasting health.

Frequently Asked Questions (FAQs) About the Risks of Gluten-Free Diets

Q: Were gluten-free diets meant for general health?

A: Gluten-free diets were developed as a medical therapy for children with serious gluten-related disorders, including celiac disease, wheat allergy, and non-celiac gluten sensitivity. They were never intended as a general wellness or preventive diet for healthy children without a diagnosis.

Q: What does current research say about the risks of putting children on a gluten-free diet without medical necessity?

A: A major review published in Frontiers in Nutrition found that unnecessary gluten-free diets in children are associated with nutrient deficiencies, impaired growth, changes in gut bacteria, and increased psychological stress, especially during critical developmental years.

Q: Can gluten-free diets expose children to higher levels of toxins like arsenic?

A: Yes. A study published in The American Journal of Gastroenterology found that children with celiac disease had significantly higher urinary arsenic levels after just six months on a rice-heavy gluten-free diet, raising concerns about long-term exposure from common gluten-free foods.

Q: Do people need to give up rice to protect their health?

A: Choosing the right type of rice and preparing it correctly helps reduce arsenic levels. Brown rice contains bran and germ, which may have higher arsenic and cadmium levels, and is rich in linoleic acid (LA). White rice has these outer layers removed through milling, making it easier to digest and serving as a cleaner, starchy source of energy.

Q: If gluten isn't the real problem for most kids, what actually helps heal the gut?

A: Gut healing isn't achieved by cutting out more foods. It comes from restoring energy with healthy carbohydrates, reducing exposure to mitochondrial toxins like seed oils, supporting gut bacteria with whole foods, and rebuilding confidence around eating instead of reinforcing food fear.

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