## Is Gluten Making You Fat?

Experts are beginning to accept the idea that sluggishness and weight gain can be blamed on a substance that lurks in wheat and many other common grains -- gluten. Gluten is a protein found in wheat, barley, and rye, and many food additives.

People are taking notice. Sales of gluten-free products grew about 30 percent a year from 2006 to 2010, and the total sales will reach $\$ 3.9$ billion by next year. In fact, 10 percent of new foods launched in 2010 featured a "gluten-free" claim.


Yahoo Health reports:
"... [F]for people with celiac disease ... eating foods that contain gluten can lead to a cascade of nasty reactions ... Even if you don't have celiac disease, gluten may still be bad for you ... A rising percentage of people in the United States consider themselves 'gluten-sensitive' ... Some may have a form of wheat allergy."

There is also emerging research that eating wheat, which contains gluten, can cause certain individuals to become psychotic. Most of the research on schizophrenia is focused on neurotransmitters, and the usual treatment is neuroleptic medication. However, the medicine tends to have serious side effects.

Some researchers have been looking at an unlikely suspect in the pathogenesis of schizophrenia -- wheat. Many schizophrenics seem to have a history of celiac disease (gluten/wheat intolerance) as children -- as much as 100 times the amount of celiac disease in the regular population.

Meanwhile, populations who traditionally eat a gluten-free diet have extremely rare occurrence of schizophrenia -- just 2 in 65,000 versus close to 1 in 100 in grain-eating countries. And when populations Westernize their diets, schizophrenia becomes common.
"In A Case Report of the Resolution of Schizophrenic Symptoms on a Ketogenic Diet, a high fat, low carb, low protein diet (thus very low in wheat) results in the remission of psychotic symptoms in a single case report."

## Dr. Mercola's Comments:

Gluten-free diet have become all the rage in some parts of the United States, with restaurants, caterers and grocery stores all increasing their offerings of gluten-free foods.

How did gluten, virtually unknown just a few years back, transition into a household word?

It began with the realization that gluten, a protein found in grains such as wheat, rye and barley, wreaks havoc in people with celiac disease, triggering an immune reaction that damages the small intestine and prevents absorption of nutrients.

But now an increasing number of people without celiac disease are also jumping on the gluten-free bandwagon and experiencing a range of health benefits, including weight loss.

## Why You May be Better Off Avoiding Gluten

According to statistics from the University of Chicago Celiac Disease Center, an average of one out of every 133 otherwise healthy people in the United States suffer from celiac disease (CD), but previous studies have found that this number may be as high as 1 in 33 in at-risk populations.

Those with celiac disease must avoid gluten to manage the condition, but in my experience, there is an epidemic of people with hidden intolerance to wheat products and gluten who would benefit from avoiding it entirely as well.

In fact, a primary part of our nutritional typing program is that everyone start out gluten-free for 60 days.

I also recommend that everyone following my beginner nutrition plan eliminate all gluten from their diets. Among the most important to avoid are those glutencontaining grains that contain gliadin molecules, such as wheat.

When gliadin in gluten becomes water soluble, it is free to bind to cells in your body. If you are sensitive, your body will make antibodies to gliadin and attack the cells gliadin has attached itself to, treating those cells as an infection. This immune response damages surrounding tissue and has the potential to set off, or exacerbate, MANY other health problems throughout your body, which is why gluten can have such a devastating effect on your overall health.

## Can Avoiding Gluten Help You Lose Weight?

Gluten often hides in processed foods like ready-made soups, soy sauce, candies, cold cuts, and various low- and no-fat products, as well as refined grain products like bread, pizza crust, pasta, cookies and pastries.

When you cut all of these foods from your diet, you end up cutting out primarily refined carbohydrates, which are linked to weight gain and obesity.

So it's very possible that switching to a gluten-free diet could help you lose weight, particularly if you've been eating a lot of refined gluten-containing foods. When eating gluten-free, however, you need to be careful that you're replacing the glutencontaining foods with healthy choices, like vegetables and other whole foods.

If you instead opt for gluten-free processed foods, like the wide assortment of gluten-free cookies, pasta and breads that are now commercially available, there's a good chance that you will not lose weight, and may actually gain instead.

In fact, one study of people with celiac disease who followed a gluten-free diet found that 81 percent gained weight after two years. So keep in mind that just because a food is gluten-free it does not necessarily make it healthy or automatically good for weight loss.

To lose weight effectively, you've still got to follow the principles of a healthy diet, which includes avoiding gluten-containing grains and focusing on whole food choices, not processed alternatives.

## Can Gluten Even Impact Your Brain?

It appears so, yes.
Research suggests that exorphins, opioid peptides from food proteins like gluten, may travel from your gut to your brain and cause symptoms of schizophrenia. In a paper by F. Curtis Dohan, he concluded that the following evidence makes it very likely that gluten may have a significant impact on schizophrenia:

> "1. In the 1960's many observations suggested schizophrenia and celiac disease ... share some but not all genes. Therefore, the role of gluten in schizophrenia was examined.
2. Epidemiologic studies demonstrated a strong, dose-dependent relationship between grain intake and the occurrence of schizophrenia ...
3. Clinical trials and case reports show that gluten is toxic for acute and relapsed schizophrenic patients, but only occasional long-term chronic patients respond to gluten or its absence.
4. Because of the evidence above, peptides with potent opioid activity were sought and found by National Institutes of Health investigators in enzymatic digests of gluten, its gliadin subfraction, and a-casein from milk. These opioid peptides were named exorphins.
5. Urinary excretion of small peptides by individuals with schizophrenia is greatly increased. Some are apparently from gluten. Some peptides are neuroactive, including opioid-like effects.
6. A specific gliadin peptide fraction, which in large doses is psychoactive in individuals with celiac disease, produced stereotyped behaviors and limbic seizures in rats hours after intracranial injection."

Another connection between gluten and your mental health is the fact that grains are inherently pro-inflammatory and will worsen any condition that has chronic inflammation at its root -- and not just inflammation in your gut, but anywhere in your body. Chronic inflammation in your body can wreak havoc on your brain, and the importance of reducing inflammation when dealing with mental health issues is well known.

Further, it is very common for people to experience an array of mental health and emotional improvements upon eliminating gluten from their diet.

## Which Grains are Gluten-Free?

Certain types of grains, seeds and flours available are naturally gluten-free, including:

- Rice
- Corn (only have non GMO)
- Quinoa
- Sorghum
- Soy (which I don't recommend eating for other reasons)
- Flax and amaranth seed

Buckwheat and millet do not contain the gliadin molecule that can provoke the inflammatory reaction from gluten. Therefore, they are usually safe to eat as well

When you start out on a gluten-free diet, be patient.
Most people don't feel better immediately as it may take 30 to 60 days for the inflammation to subside, and up to 9 to 12 months for the lining of your small intestine to heal.

On some occasions, an individual may experience significant improvement within weeks of eliminating gluten from their diet, but in other cases people may feel considerably worse upon initially starting a gluten-free diet, which may be due to other unidentified food allergies and food sensitivities.

However, it's important to stick with it as by around 6 to 9 months of eliminating gluten from your diet noticeable physical and mental/emotional changes will have taken place.

