

The Truth About Gluten

March 2017 – Danielle Boudreau (Registered Dietitian)

Going gluten-free has become one of the biggest food trends in recent years. Gluten-free diets have become popular in part to celebrity endorsements and media popularity. Many people have adopted gluten-free diets in attempts to lose weight, detoxify their bodies, and be healthier. However, there is no evidence to suggest that a gluten-free diet is better for you unless it is medically indicated. In fact, it can be harmful to eliminate foods without professional support because you may miss out on key nutrients that your body needs. If you are considering going gluten free, speak with your family doctor and/or a registered dietitian to ensure that you are still meeting your needs.

What is Gluten?

Gluten is a protein found in many grains that consists of prolamin and glutelin. Gluten is not the same across all grains because different grains have different prolamin and glutelin fractions. The most common sources of gluten are wheat and wheat derivatives, rye, and barley. Gluten is also found in triticale, malt, brewer's yeast, and wheat starch. When people think of food sources of gluten, they often think about pastas, breads, cereals, and pastries. However, gluten can also be hiding in less obvious foods. Always check the label when choosing processed foods, including granola bars, chips, candy, soups, salad dressings, and soy sauce. Oats do not contain gluten, however they are at high risk for contamination. Therefore, if you need to follow a gluten free diet, be sure to check the label and ensure that you are choosing gluten free oats. Beer is another hidden source of gluten that many people do not think of, however, there are some gluten-free beers available.

Who Needs to Avoid Gluten?

The only people who need to avoid gluten are those who have a medical reason to do so. There is currently no evidence to suggest that a gluten-free diet will be healthier than a regular diet for those who do not need it.

Celiac Disease

Celiac disease is an autoimmune disorder that damages the small intestine and reduces the body's ability to absorb nutrients when gluten is consumed. Approximately 1% of people are affected by celiac disease. People with celiac disease need to follow a strict gluten free diet in order to control their symptoms. A gluten free diet is required because people with this condition experience a reaction to the prolamin fraction of gluten found in wheat (gliadin), rye (secalin), and barley (hordein). Symptoms include diarrhea, gas, bloating, and muscle wasting.



Non-Celiac Gluten Sensitivity/Non-Celiac Wheat Sensitivity

This is an area that still requires more research as the cause of the symptoms is still unclear. Symptoms will mirror those of celiac disease such as bloating, gas, abdominal pain, and diarrhea, however, patients will not test positive for celiac disease. It is estimated that this condition affects 6-8x more people than celiac disease. Early research suggested that this condition was not associated with the same small intestinal damage that is seen in celiac disease, however there is now limited research to suggest that some patients may also experience inflammation. Research is also now suggesting that gluten may not be the cause of the symptoms. A group of poorly digested carbohydrates known as FODMAPs may be responsible for these symptoms rather than gluten.

Disadvantages of Going Gluten-Free

If you have a medical reason to eliminate gluten from your diet, the benefits of a gluten-free diet will far outweigh the risks, especially if you seek support from a registered dietitian. A registered dietitian will help you overcome some of the challenges described below as you manage your symptoms. However, if you are eliminating gluten for the purpose of health or weight loss, you should consider these disadvantages.

1) Health Risks - Vitamin, mineral, and other nutrient deficiencies

Eliminating gluten from the diet may result in decreased consumption of whole grains which would result in a decreased intake some nutrients including fibre, B-vitamins, and iron. Additionally, some gluten free foods have higher amounts of fat and sugar to make up for the lack of gluten. In Canada, it is required that white flour be enriched with some B-vitamins and iron. Fortification of gluten-free products is permitted in Canada, however, there are no specific requirements for which nutrients should be added and in what amounts. It is possible to follow a gluten-free diet without nutrient deficiencies, but it is important to work closely with a registered dietitian to ensure that you are meeting your needs.

2) Cost

The cost of gluten free products is significantly higher than their gluten-containing counterparts. If gluten free is not necessary, this money could be put towards other healthy foods such as fresh fruits and vegetables.

3) Restricted diet

Eliminating gluten from the diet will restrict your dietary options. There are many more gluten-free products on the market now, but you may still notice that you have less variety in your diet.

How we Help

At Physio Sport Med, we can answer your nutrition related questions and help you navigate through the endless nutrition myths in the media. If you have been diagnosed with celiac disease or you are having digestive symptoms such as gas, bloating, pain, diarrhea, or constipation, we can help you manage these symptoms while maintaining a healthy, balanced, eating pattern.

References

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