

# Hot Topic:

## GLUTEN-FREE

**What is gluten? It's a protein found in wheat, rye, barley and triticale, and foods prepared with these grains. Gluten is the protein that's responsible for the elasticity of dough, giving a wonderful taste and texture to a variety of products.<sup>1</sup>**

Currently, many are joining a gluten-free movement and avoiding gluten. However, some of those avoiding gluten do not have a medical reason to do so. A gluten-free diet is only necessary for those with celiac disease, wheat allergy or non-celiac gluten sensitivity.

According to Health Canada, approximately one per cent of the population has celiac disease, a disorder caused by an autoimmune reaction to gluten.<sup>2</sup> Well under one per cent of the population has a wheat allergy. The number of North Americans with a newly recognized condition called non-celiac gluten sensitivity is a point of debate. The Center for Celiac Research in Baltimore estimates it may affect up to six per cent of the population.<sup>3,4</sup> Thus, under 10 per cent of Canadians need to avoid gluten.

Celiac disease is a genetic disease that is triggered by gluten, but there also must be a physical or emotional stressor. People can carry the gene and never get celiac disease. It often involves digestive symptoms, but can show many types of symptoms making it easily confused with other conditions. This makes it difficult to diagnose correctly. A blood test is needed, as well as a small intestinal biopsy, in which doctors examine small pieces of tissue from the small intestine. The test is valid only if a person is ingesting gluten so Health Canada and the Professional Advisory Board of the Canadian Celiac Association urge people not to self diagnose and start a gluten-free diet before undergoing testing.<sup>5,6</sup>



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## OTHER CONDITIONS

A wheat allergy has classic allergy symptoms such as digestive symptoms, rash and hives. It can be diagnosed by a blood test that measures antibody reactions to one of the proteins in the grain.

Non-celiac gluten sensitivity is characterized by a group of symptoms such as abdominal pain, bloating, gas, diarrhea or constipation, and ‘foggy’ brain.<sup>7</sup> These symptoms are non-specific and may also be part of other conditions such as irritable bowel syndrome, so it’s often difficult to make a concrete diagnosis. It’s important to note that there are no specific tests to diagnose non-celiac gluten sensitivity.<sup>8</sup>

According to the Dietitians of Canada, a gluten-free diet is only necessary for those who have celiac disease or gluten sensitivity.<sup>9</sup> Further, there are no health benefits of a gluten-free diet, and there may be some significant disadvantages<sup>10</sup> including difficulty getting certain foods and higher food costs. Unless you have one of these conditions, there are no nutritional advantages or other known benefits of a gluten-free diet.

## WEIGHT LOSS AND THE GLUTEN-FREE DIET

The gluten-free diet has gained popularity because it has been embraced by celebrities as a weight loss plan. In Canada, sales of gluten-free products ballooned to \$458.9 million in 2012, up from \$178.9 million in 2008. That works out to an annual growth rate of 26.6 per cent.<sup>11</sup>

Market research experts predict that by 2016, gluten-free market growth will slow to the single digits. Consumers will be people who have celiac disease or gluten-intolerance, rather than people choosing gluten-free for weight control – a good hint that gluten-free diets as a weight loss regimen are a passing fad.<sup>12</sup>

To date, no randomized controlled clinical trials have been conducted to support a weight-loss claim for a gluten-free diet.<sup>13</sup> Claims that grains such as wheat contribute disproportionately to weight gain or to visceral adipose tissue (VAT), which is excess weight in the mid-section (often called central obesity or belly fat), are not supported in the scientific literature.<sup>14</sup> Recent data from the Framingham Heart Study showed that



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those who most closely adhered to dietary guidelines of making half their grains whole had the lowest VAT. They ate three servings of whole grains and two servings of refined grains that were not gluten-free.<sup>15</sup>

An article in *Cereal Foods World* by Dr. Julie Miller Jones, PhD, a nutritionist and past president and chair of the board of the American Association of Cereal Chemists, said it is not true that wheat causes belly fat or that elimination of wheat will cure this condition.<sup>16</sup>

It is well documented that no one food or food group is responsible for obesity. Too many calories of any kind and too little exercise will result in obesity.

## GLUTEN-FREE? WORK WITH A DIETITIAN

A gluten-free diet does not need to be a grain free diet, since there are many nutritious and delicious gluten-free nutrient-rich grains such as brown rice, quinoa, corn, millet, buckwheat and pure oats to replace gluten-containing grains and ensure a balanced diet. Studies show that poorly planned gluten-free diets are low in iron, folate, niacin and zinc. Most are also very low in fibre, especially cereal fibre. Adequate fibre has many health benefits and is associated with maintaining a healthy weight and body mass index, (BMI).<sup>17</sup>

Individuals on gluten-free diets should work with a registered dietitian who can conduct a nutritional assessment, watch for nutrient deficiencies, and provide tips for improving the diet.

<sup>18,19</sup>



For more information and links to scientific evidence visit:  
[www.HealthyGrains.ca](http://www.HealthyGrains.ca)

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