

# Celiac Disease and Gluten Intolerance

How do I deal with it?

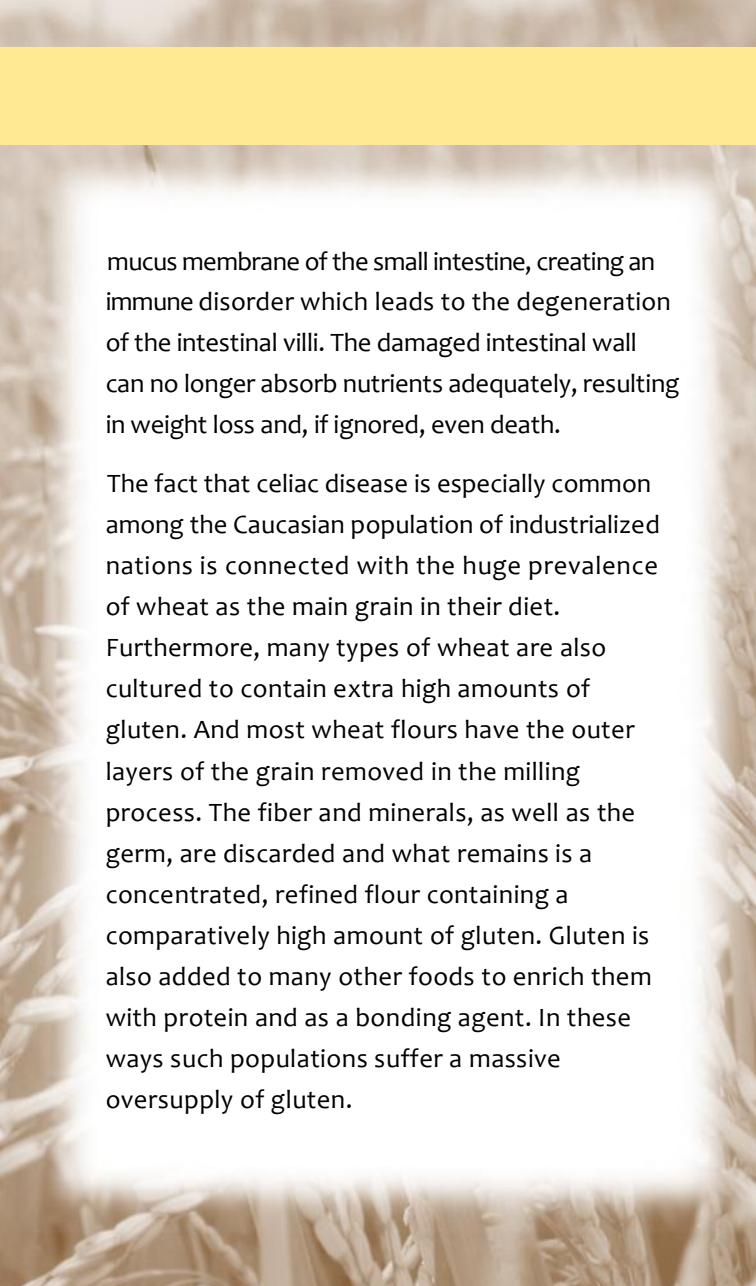


# Celiac Disease and Gluten Intolerance



Celiac disease is the body's inability to digest gluten, a protein found in many different grains. In its milder form it is known as "gluten intolerance." Someone with gluten intolerance will experience indigestion after consuming foods which contain gluten, but other physical symptoms are usually limited.

Full-blown celiac disease, on the other hand, is serious. In this case the gluten reacts with the



mucus membrane of the small intestine, creating an immune disorder which leads to the degeneration of the intestinal villi. The damaged intestinal wall can no longer absorb nutrients adequately, resulting in weight loss and, if ignored, even death.

The fact that celiac disease is especially common among the Caucasian population of industrialized nations is connected with the huge prevalence of wheat as the main grain in their diet.

Furthermore, many types of wheat are also cultured to contain extra high amounts of gluten. And most wheat flours have the outer layers of the grain removed in the milling process. The fiber and minerals, as well as the germ, are discarded and what remains is a concentrated, refined flour containing a comparatively high amount of gluten. Gluten is also added to many other foods to enrich them with protein and as a bonding agent. In these ways such populations suffer a massive oversupply of gluten.

# Celiac Disease and Gluten Intolerance

## How do I recognize celiac disease?



If a child experiences growth retardation or increasing digestive problems which indicate a difficulty to metabolize gluten, a blood test will ensure an accurate diagnosis.

The disease often appears unexpectedly; it is not passed on at birth. In fact, it is now classed as an autoimmune disorder, similar to juvenile or type 1 diabetes.

The onset of celiac disease can also occur in adulthood. As in earlier onset, it is recognized by a feeling of fullness, indigestion with diarrhea, and vitamin and mineral deficiency. The discovery of antibodies in the blood is the next step in a conclusive diagnosis.

## How can I deal with celiac disease?



There is no known cure for celiac disease, but you can learn to deal with it. A gluten-free diet enables the damaged villi to heal within a few weeks. Those affected must therefore consistently avoid all traces of gluten for the rest of their lives. Then children will be able to develop normally and adults pursue a normal career.

# The Origin of Gluten

## Grains which contain gluten:

Wheat, durum wheat, spelt, Kamut (or khorasan), barley, rye, oats

## Grains which do not contain gluten:



Rice



Corn



Millet



Quinoa



Buckwheat



Amaranth

## Where can gluten be hidden?

- Thickened sauces
- Convenience foods
- Soups
- Chips
- Canned meat, fish, and vegetables in sauces
- Reduced fat products
- Hot dogs, sausages

- Pill coating and candy coating
- Teas with preservatives or additives for flavor or color
- Additives, colorings, and flavorings
- Medicine, vitamins
- Toothpaste, oral care products, lipstick

- Chocolate
- Mixed seasonings
- Puddings
- Dairy products with fruit

## A Whole Food Alternative

Celiac disease clearly limits your choice of grains. Nonetheless, the body must be supplied with all the necessary vitamins and minerals.

When shopping, you must of course choose products labeled “gluten free.” But beyond that, look for **whole grain**, gluten-free products.

Whole grain +



Patients with celiac disease in particular need enough fiber, vitamins, and minerals. Foods made from whole grain flour provide the body with many nutrients that are otherwise lacking and have to be artificially added.



<b>Millet (100g)</b>		
	whole grain	hulled
Fiber (g)	13	3.8
Folic acid ( $\mu\text{g}$ )	18	12
Zinc (mg)	3.4	1.8

<b>Corn (100g)</b>		
	whole grain	grits
Fiber (g)	9.2	5
Vitamin A ( $\mu\text{g}$ )	185	44
Vitamin E (mg)	1.5	0.5
Folic acid ( $\mu\text{g}$ )	17	3
Calcium (mg)	15	4
Magnesium (mg)	120	20
Iron (mg)	1.5	1
Zinc (mg)	2.5	0.4

<b>Rice (100g)</b>		
	whole grain	white rice
Fiber (g)	2.2	1.4
Vitamin E (mg)	0.6	0.1
Calcium (mg)	23	6
Magnesium (mg)	157	64
Iron (mg)	2.6	0.6
Zinc (mg)	1.5	0.5

Source: Hohenheim University, Germany (<http://ia.info.dyndns.org> )

## Diabetes isn't a Must

Celiac disease and diabetes are exhibited together time and again. Diabetes (the “sugar disease”) is an illness in which the body is unable to produce enough insulin to keep the blood sugar level under control.

If a person becomes ill with type 1 diabetes, this can later lead to an outbreak of celiac disease. Before the outbreak, a silent, hidden gluten intolerance may have already been present. Besides the immunological connections, these two diseases also have an acquired genetic link. And conversely, celiac disease can bring diabetes in its train.

But we can influence it. If celiac disease is already present, the outbreak of diabetes can often be avoided by a careful, gluten-free diet.

Being especially cautious not to burden the pancreas needlessly also helps prevent diabetes. This can be done by eating a whole food diet. One result is that a whole food diet avoids unnecessary spikes in blood sugar. And abstaining from refined sugar and artificial sweeteners also enables the pancreas to work more evenly.

A whole food, gluten-free diet, coupled with regular athletic exercise, helps to prevent the development of diabetes.

### **Foods that over-stimulate the pancreas:**



White rice, corn grits, and other hulled grains



Refined sugar and sweets



Baked goods made from refined flour



Sweet fruit and dried fruit

## An Autoimmune Disease —

In recent years more has become known about celiac disease and it is now recognized as an immune disorder where the body creates antibodies to its own tissue.

Similar, more well-known diseases include juvenile or type 1 diabetes, rheumatoid arthritis, Crohn's disease and many more.

Regardless of which disease, there are some basic rules that can help:

Everything that unnecessarily stimulates the body should be avoided, since it's already in an "inflamed" condition. Such stimulants include:

- Meat—a vegetarian diet regulates and improves the immune processes.
- Coffee, green tea, black tea, yerba mate and hot chocolate (herbal and fruit teas do not stimulate, but help the digestive system).
- Smoking and alcohol
- Watching TV or listening to music for hours on end do not allow the nervous system to rest. As a rule of thumb, 30 minutes of TV per day are enough.

## how do I deal with it?

- Hot spices, flavor enhancers (like MSG code E621), and artificial sweeteners (such as aspartame code E951) have a stronger negative influence on the body's immune processes than previously suspected.
- Refined and concentrated foods—a whole food diet is less stimulating and more nutritious.
- Lack of sleep and inadequate exercise—getting sufficient sleep and casual, relaxed exercise calm the immune system.

In children, these diseases can be triggered or made worse by intense psychological or physical stressors they are unable to handle (such as parents separating, a loved one becoming sick or dying, or the child having an acute illness).



# Tips on Dealing With Celiac Disease

## What is helpful?



A vegetarian (gluten-free!) diet



A whole food diet



Relaxation (enough sleep)



Exercise

## What should I avoid?



Foods containing gluten



Meat



Smoking



Alcohol



Excessive television



Hot spices



Caffeine



Rice



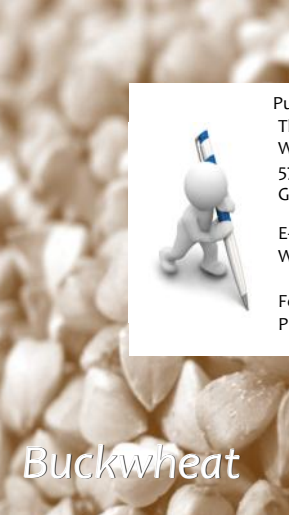
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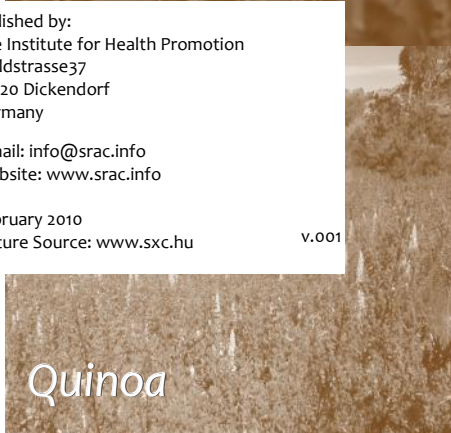
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