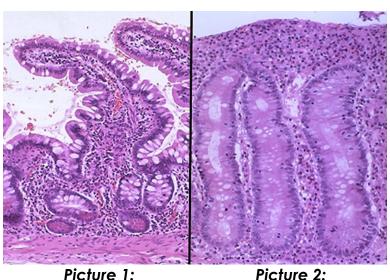


What is Celiac disease?

Celiac disease is a condition where the small intestines have been damaged. The small intestine helps us absorb and digest nutrients. Normally, our intestines have finger like projections called villi (Picture 1). The villi act as a delivery system by transporting the nutrients from the intestine to the rest of the body.

In Celiac disease, these villi become flattened and cannot absorb nutrients which are necessary for good health (Picture 2). The flattening of the villi occurs when gluten found in wheat, barley, rye and oats is consumed in the diet.



Picture 1: Normal Villi

Picture 2: Flattened Villi

What are the symptoms of Celiac disease?

The symptoms of Celiac disease can be different for every person.

- Diarrhea
- Weight loss
- Stomach pain
- Loss of appetite
- Constipation
- Tiredness
- Malnutrition
- Heartburn or gas or indigestion
- Nausea or vomiting



- Other non-intestinal disorders may include:
 - o Iron deficiency anemia
 - o Bone disease/bone or joint pain
 - Seizures
 - Mouth ulcers
 - Nosebleeds
 - Hair loss
 - Migraine

- Infertility
- o Growth delay in children
- Skin disorders (dermatitis herpetiformis)
- Muscle cramps
- Irritability and behavioral changes
- Hypoglycemia

How do you know if you have Celiac disease?

There are several blood tests that are useful in screening. Blood tests are designed to detect certain antibodies for the presence of Celiac disease. Usually, an endoscopy with a small bowel biopsy of the lower section of the intestine would show a flattening of the villi (see picture on page 1). Another biopsy is often done several months after treatment begins to see if the person is responding to treatment. A normal biopsy means that treatment is working.

What is the treatment for Celiac disease?

Unfortunately, at this point there is no cure for Celiac disease. But it can be treated and controlled by following a gluten-free diet for **LIFE**. This will allow the intestinal villi to heal properly. Once the intestine heals, the symptoms of Celiac disease improve. Removing all damaging grains like wheat, barley, oats and rye from the diet is the most important measure you can take to becoming healthy.

Facts about Celiac disease

- Cause of Celiac disease is still unknown
- Is an inherited autoimmune disease
- Can happen in any point in your life
- There is no way to prevent Celiac disease
- Once thought to be rare, estimated to effect 1 in 133 North Americans
- Only a small fraction of people have been diagnosed, so it probably affects more people who don't know
- Those with a family member with Celiac disease are at greater risk of developing the disease
- Most common in Caucasians and European ancestry
- Women are affected more commonly than men
- For Celiacs, even a small amount of gluten in the diet can cause damage to the intestines (even if you don't feel sick after eating gluten)
- Each country will have different standards on what is considered gluten-free. Canadian labeling guidelines are fairly strict as to what is considered gluten-free. Be careful when buying products from the US and abroad as the limits for acceptable amounts of gluten will differ from Canadian standards.





How do I get the right information?

The Canadian Celiac Association (CCA) is a national organization which provides information and support to people with Celiac Disease. This is done through education and research, program awareness and support.

- They provide excellent material to read.
- You can purchase excellent books and literature.
- They provide newsletters with up-to-date information and recipes.
- They meet in the region on a monthly basis and trial different foods. When you call the Celiac Association they will provide you with contact information with someone from your area.

THE CANADIAN CELIAC ASSOCIATION

5170 Dixie Road, Suite 204 Mississauga, ON L4W 1E3 Phone: 1-905-507-6208 or 1-800-363-7296

Fax: 1-905-507-4673 www.celiac.ca

Nutrition and Food Labels

If you are unsure about certain products, you can call the Celiac Association or contact the food company directly to get more information.

For a directory for toll free numbers call 1-800-555-1212 of food companies or for a complete list check out the website at http://www.sfu.ca/~jfremont/tollfree.html

The Gluten-Free Diet

- Avoid all wheat, rye barley and commercial oats
- Avoid less common sources like spelt, kamut, triticale
- Avoid HIDDEN sources of GLUTEN
 - Hydrolyzed vegetable protein (HVP)
 - Hydrolyzed plant protein (HPP)
 - o Some medications, toothpaste and mouthwash
 - o Malt, malt flavoring and malt vinegar
 - Modified starch (where the starch source is unknown)
- ** Note: if the label states modified cornstarch this is acceptable
 - Beware of cross-contamination. Even a small amount of gluten can cause damage
 to intestinal villi. At home, may sure all meal preparation surfaces, cutting boards,
 utensils, pots and pans are clean and free from gluten before you prepare your meal.
 It is a good idea to get your own toaster, peanut butter, margarine and jam
 containers. Cross contamination can also occur in restaurants, bulk food bins and in
 food manufacturing plants where both gluten and gluten-free products are
 produced.
 - Remember "wheat-free" does NOT necessarily mean gluten-free.



What about Oats?

Researchers have been studying the safety of oats for people on a gluten-free diet for over 20 years. Clinical studies show that a small amount of **UNCONTAMINATED OATS** may be safe for most adults and children. But, some people with Celiac disease cannot tolerate even pure oats. **COMMERCIAL OATS**, **OAT GUM**, **OAT HULL OR OAT FLOUR (that you would find in grocery store products) is NOT** gluten free. Commercial oats are contaminated with wheat or barley.

You can purchase pure oats from a company called Cream Hill Estates toll free 1-866-727-3628 or www.creamhillestates.com

For more information on The Canadian Celiac Association position on oats call 1-800-363-7296 or go to the website at www.celiac.ca

	What is Allowed	Check Labels	NOT Allowed
Food		AIELD	STOP
Grain Products	Gluten-free breads and baked products made with: amaranth, arrowroot, buckwheat, corn bran, corn meal, cornstarch, flax, legume flour (bean, garbanzo or chickpea, five, lentil, pea), millet, potato starch, quinoa, rice bran, rice flour, sago, sorghum flour, soy flour, sweet potato flour, tapioca and teff	Buckwheat flour (may contain wheat)	Bread and baked products made with wheat, rye, triticale, barley, oats, wheat germ, wheat bran, graham flour, gluten flour, durum flour, wheat starch, oat bran, bulgur, farina, semolina, spelt, kamut einforn, emmer, faro, imported foods labeled gluten free
	Cereals: gluten-free cereals Puffed amaranth, puffed buckwheat, puffed corn, puffed rice, rice flakes, and soy cereals, hot cereals: amaranth flakes, cornmeal, cream of buckwheat, cream of rice, hominy grits, rice flakes, quinoa flakes, soy flakes and soy grits	Rice and corn cereal, rice and soy pablum (barley malt extract or oat syrup)	Cereal made from wheat, rye, triticale, barley and oats; cereal with added malt extract or malt flavoring (e.g. Corn Pops TM , Rice Krispies TM)
	Pasta: gluten-free macaroni, spaghetti and noodles made from beans, corn, pea, potato, quinoa, rice, soy and wild rice		Pasta made from wheat, wheat starch, and other ingredients not allowed
	Miscellaneous: corn tacos, corn tortillas	Buckwheat pasta (may contain wheat flour)	Wheat flour tacos, wheat tortillas
		Rice crackers, some rice cakes and popped corn cakes (may contain barley, oats, malt, wheat)	
Fruits and Veggies	Fresh, frozen, and canned fruit Fruit juice	Fruit pie fillings (may be thickened with	Scalloped potatoes (containing wheat flour)
	Fresh, frozen and canned vegetables	flour), dried fruits (may be dusted with oat or wheat flour), fruit or vegetable with sauces (may be thickened with flour) French fries especially in restaurants (may contain wheat as an ingredient)	Battered dipped vegetables

Food	What is Allowed	Check Labels	NOT Allowed
Milk and Milk products	Milk, cream, most ice cream, buttermilk, plain yogurt, cheese, cream cheese, processed cheese, processed cheese foods, cottage cheese	Milk drinks (may contain wheat starch or barley), flavoured yogurt (may be thickened with starch), frozen desserts (may have cookie crumbs or granola), sour cream (some low fat may contain oat gum), cheese sauce and cheese spreads (may be thickened with wheat)	Malted milk, ice cream made with ingredients not allowed
Meat and Alternates	Meat, fish and chicken	Prepared luncheon meats, bacon, meat and sandwich spreads, meat loaf, frozen meat patties, sausages, pate, wieners, bologna, salami (made contain wheat fillers)	Breaded/ batter meat fish or chicken Canned fish in broth (Containing HVP/HPP) Basted turkey
	Eggs Beans, lentils, chickpeas, peas, beans, nuts, seeds, tofu	Egg substitutes, dried eggs Baked beans (may be thickened with flour), dry roasted nuts (may contain wheat), peanut butter (may contain icing sugar with wheat)	Frozen chicken containing chicken broth
Soup	Homemade broth, gluten-free bouillon cubes, cream soups and stock made from allowed ingredients	Canned soups, dried soup mixes, soup bases and bouillon cubes (may contain noodles, barley, HVP/HPP)	Soups made with noodles, or HVP/HPP
Fats	Butter, margarine, lard, oil, cream, shortening, homemade salad dressings	Salad dressings, some mayonnaise (may contain flour)	Packaged suet
Desserts	Ice cream, sherbet, whipped toppings, egg custards, gelatin desserts, gluten free cakes, cookies and pastries, gluten-free ice cream cones, wafers and waffles	Milk puddings, custard powder, pudding mixes (may contain wheat)	Ice cream with cookie, candy bars or other ingredients with gluten, cakes, cookies, muffins, pies and pastries, cones, waffles and wafers

Food	What is Allowed	Check Labels VIELD	NOT Allowed
Miscellaneous	Beverages: tea, instant or ground coffee (regular or decaffeinated), cocoa, soft drinks, cider, distilled alcoholic beverages such as rum, gin, whiskey, vodka, wines and pure liqueurs, some soy and rice beverages	Instant tea, coffee substitutes, fruit-flavoured drinks, chocolate drinks, chocolate mixes, flavoured and herbal teas (may contain grains)	Beer, ale and lager, cereal and malted beverages, soy or rice beverages made with barley or oats
	Sweets: honey, jam, jelly, marmalade, corn syrup, maple syrup, molasses, sugar (brown and white)	Icing sugar (confectioner's sugar) spreads, candies, chocolate bars, chewing gum, marshmallows and lemon curd (all may contain wheat or unidentified starch)	Licorice, Smarties TM and other candies made with ingredient not allowed
	Snack foods like plain popcorn, nuts and soy nuts,	Dry roasted nuts, flavored potato chips, tortilla chips and soy nuts, microwave popcorn (may have wheat or starch)	Pizza crust
	Condiments like pickles, relish, olives, ketchup, mustard, tomato paste, pure herbs and spices, pure black pepper, vinegars (apple or cider, distilled white, grape or wine, spirit), gluten-free soy sauce	Seasoning mixes, imitation pepper (may contain wheat or flour)	Soy sauce (made from wheat), mustard pickles (made from wheat flour), malt vinegar, Worcestershire sauce (contains malt vinegar)
	Other: sauces and gravies made with allowed ingredients, pure cocoa, pure baking chocolate, carob chips and powder, chocolate chips, MSG, cream of tartar, baking soda, yeast, brewers yeast, aspartame, coconut, gluten- free communion wafers	Baking powder (may contain starch from wheat)	Sauces and gravies made from ingredients not allowed, hydrolyzed vegetable/plant protein (HVP/HPP), communion wafers

Adapted from Dietitians of Canada Gluten-Free Diet Guidelines

Grocery Stores

IGA STORES

- St. Catharines
- Niagara Falls

ZEHR'S STORES

- Fairview Mall
- Pen Centre
- Niagara Falls
- Welland

SOBEY'S

- Grimsby Square 44 Livingstone Ave (905)945-9973
- 110 Hwy 20E Fonthill (905) 692-2570

A&P STORES

FORTINO'S

REAL CANADIAN SUPERSTORE

St. Catharines (905) 984-8408

ANTIPASTOS DI ROMA

87 Hannover, St. Catharines (905) 641-5211

Health Food Stores

DINH DINH ASIAN FOODS

79 Geneva Street, St. Catharines (905) 685-4977

NATURALLY HEALTHY

4025 Dorchester Road, Niagara Falls, (905) 374-8919

NATURE'S NIMBUS HEALTH FOODS

2-F Tremont Drive, St. Catharines (905) 685-3663

THE PEANUT MILL (FOOD FOR LIFE)

191 Welland Avenue, St. Catharines (905) 685-8848

WELL, WELL, WELL

318 Ontario Street, St. Catharines (905) 684-3312

PISTACHIO'S BULK AND HEALTH FOOD STORE

210 Bunting Road, St. Catharines (905) 684-3312

MY SILVER LINING

(905) 945-2273 Email: myra.v.louis@sympatico.ca

VITA HEALTH FOODS

3 Helliwell Lane, St. Catharines (905) 682-6866 Niagara Square, Niagara Falls (905) 357-1093

GOOD EARTH SHOP

1 Main Street, Grimsby (905) 945 9391

HEATH WISE

Seaway Mall, Welland (905) 735-4490

NUTRITION HOUSE

Pen Centre

221 Glendale Ave. St. Catharines (905) 704-0612

Fairview Mall

285 Geneva Street St. Catharines (905) 935-1872

AUGUST VITAL FOODS DISTRIBUTION

286 Cushman Road St. Catharines, (905) 646-0050

THE HEALTH POST

4958 King Street Beamsville (905) 563-6663

ROSEMARYS NATURAL CHOICE (pasta only)

Welland, (905) 714-0586

DOUGLAS MEMORIAL MEDICAL CENTRE

238 Bertie Street, Fort Erie (905) 991-9575

NATURES PANTRY

253 Niagara Blvd, Fort Erie (905) 994-1040

NATURES WAY

289 Ridge Road, Ridgeway (905) 894-8983

PORT WHOLE PANTRY

238 West Street, Port Colborne (905) 834-6586

Bakeries/Farmers Market

STERK'S BAKERY

3866 23rd Street, Vineland ON OR **NEW** Thorold location (905) 562-3086 or (905) 680-5054

BUNSMASTER BAKERY

203 Carlton Street, St. Catharines (905) 682-6848

SCHWENKERS'S FARMERS MARKET

2024 Third Street, St. Catharines (905) 682-3999

Bulk Food Stores

SELECT BULK FOODS

5233 Stanley Avenue, Niagara Falls (905) 354-BULK Or 2855

BULK BARN

FAIRVIEW MALL 285 Geneva Street, St. Catharines (905) 934-8012 SEAWAY MALL 800 Niagara Street, Welland (905)714-4440 PEN CENTRE 221 Glendale Ave (905) 685-1708

Direct Distributers

EL PETO

2-41 Shoemaker Street Kitchener, ON 1 800 387 4064

KINNIKINNICK FOODS

1-877-503-4466

GLUTINO, INC

1-800-363-3438

JUBILEE KAFE

25 Baseline Road West London ON 1-519-432-1683

SPECIALTY FOOD SHOP

Toll free: 1-800-737-7976 www.specialtyfoodshop.com