



# Gluten-Free Diet

## The basics you need to know

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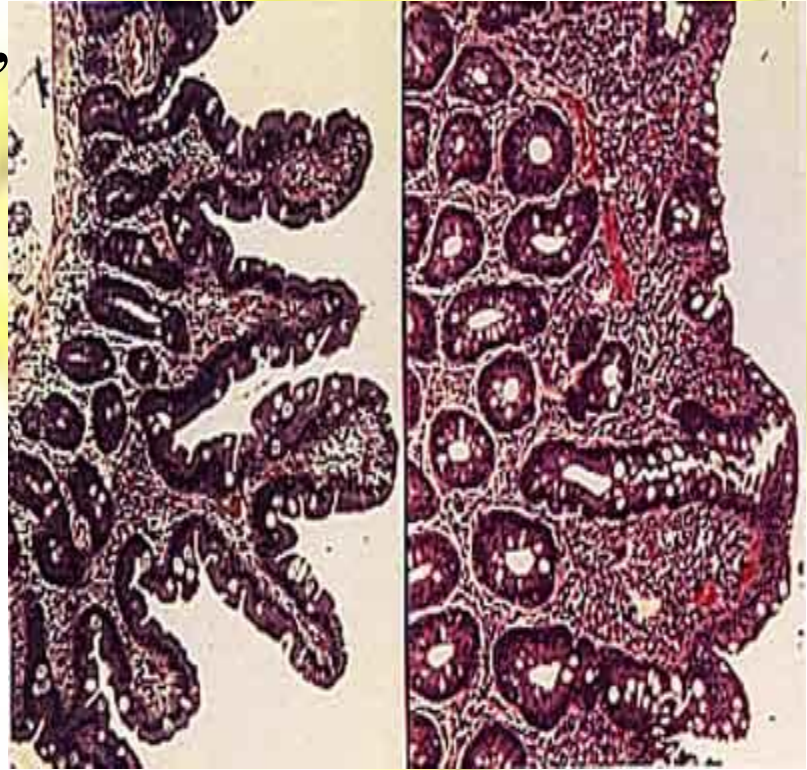
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# Objectives

- Overview of celiac disease, including symptoms and complications
- Define gluten-free diet
- Cross-contamination in the kitchen
- Where to find products
- Where to get help

# What is Celiac Disease?

Intolerance to gluten,  
genetic disorder



# Common Symptoms

- Diarrhea, constipation, abdominal pain, weight loss, weakness, fatigue, anemia, bone pain, muscle cramps, osteoporosis, migraines, lactose intolerance
- Kids - irritability, learning problems, slow growth, poor dentition, diarrhea, bloated abdomen

# Complications and Related Diseases

- Anemia, osteoporosis, intestinal cancers, infertility, miscarriages, nutritional deficiencies
- Thyroid disease, Type 1 diabetes, dermatitis herpetiformis, Grave's disease, lupus

# How common is it?

- 1 out of 133 Americans
- 97% are undiagnosed
- 
- The average time to get diagnosed - 11 years

# Diagnosing Celiac Disease

- Blood test to check for antibodies
- If antibody test is positive, a biopsy of small intestine is necessary to confirm diagnosis
- Do not start gluten free diet until after biopsy

# What is the treatment?

- Follow a gluten-free diet for life - eliminate wheat, rye and barley, and commercial oats
- The diet is not black and white



# Gluten Free Diet

- The following grains are allowed: rice, corn, soy, potato, tapioca, beans, garfava, sorghum, quinoa, millet, buckwheat, arrowroot, amaranth, tef, nut flours

# Gluten Free Diet

- The following are not allowed: wheat, durum, semolina, kamut, spelt, rye, barley, triticale, malt or malt flavorings, malt vinegar
- The following MAY contain gluten: breadings, broth, soup bases, licorice, chocolate, corn and rice cereal, sauces, salad dressings, marinades, seasonings....

# Gluten Free Diet

- ...gravy, meat patties, sausages, hot dogs, imitation seafood, beer, self-basting poultry, soy sauce, communion wafers, medications, vitamins, playdough
- [www.glutenfreedrugs.com](http://www.glutenfreedrugs.com)

# Reading Labels

- Labeling laws - January 1, 2006
- Identify major allergens - milk, eggs, fish, shellfish, tree nuts, peanuts, soybeans, wheat
- Wheat free does not mean gluten free
- By August 2008 - foods can be labeled as gluten-free - voluntary

# Reading Labels

- What does 'gluten-free' mean? 20 ppm
- 20 mg of gluten/day - less than 1/8 tsp.
- 1 slice of bread contains 2,500 mg gluten

# Questionable Ingredients

- starch - gluten free (made from corn)
- modified corn starch - gluten free
- maltodextrin - gluten free
- spices - pure are gluten free
- caramel color - gluten free
- MSG - gluten free
- xanthum and guar gum - gluten free
- hydrolyzed soy protein - gluten free

# Questionable Ingredients

- Modified food starch - can contain gluten
- dextrin - can contain gluten
- seasonings - can contain gluten
- flavorings are OK if they don't contain hydrolyzed wheat protein
- hydrolyzed wheat protein - not safe
- wheat maltodextrin - not safe

# Questionable Ingredients

- In medications, starch and modified food starch can be made from wheat
- vanilla - gluten free
- yeast - gluten free
- brewer's yeast (by product of beer) - not gluten free
- When in doubt, call the company or don't use



# Cross Contamination

- Store gluten free products in separate labeled containers
- Separate containers for butter, peanut butter, mayo, jelly (squeeze bottles work well)
- Separate toaster, cutting board, utensils
- Avoid products from bulk bins
- Thoroughly wash pots, pans, utensils, thermometers

# Cross Contamination

- French fries in designated fryer - no coating
- Salad bars at school - not safe
- Flour dust stays in air for 24 hours - mixers
- Keep prep areas clean
- Metal needs to be washed in hot soapy water

# Cross Contamination

- Plastic strainers are hard to keep clean, best to have designated strainers
- Ovens are OK, but trays may not be, wash thoroughly
- Schools - have list of gluten free and other allergies
- Color code foods and substitutions

# Cross Contamination

- Give kids a similar substitution - review menu with family
- Get pre-made products

A strict gluten free diet is essential. Even a tiny amount of gluten can cause permanent damage. No symptoms does not mean no damage.

# Where to find products? - Fargo

- New store in Fargo - Sydney's Health Market - 302 27th Street North
- Cash Wise, Hornbachers, Asian Food Market, FM International Market, Swanson's Health Food, Tochi Products

# Where to find products? - Grand Forks

- Hugos, Amazing Grains, Nature's Country Store, Toucan International Market, and others

# Where to find products?

## Pre-made meals

- [Www.gooddayglutenfree.com](http://www.gooddayglutenfree.com)
- [www.glutenfreemeals.com](http://www.glutenfreemeals.com)
- [www.amys.com/special\\_diets/ceeliac.php](http://www.amys.com/special_diets/ceeliac.php) - some available locally
- Sydney's Health Market will take special orders



# Where to get help?

- On the internet - [www.redriverceliacs.org](http://www.redriverceliacs.org)
- Recommended book: The Gluten Free Diet, A Comprehensive Resource Guide by Shelley Case, RD
- Gluten Intolerance Education Conference, November 2 and 3, 2007 Courtyard by Marriott, Moorhead



Special thanks to Sandy Kohler from Red River Celiac Support Group for providing samples of products.