



GLUTEN FREE 101

WHAT YOU NEED TO KNOW



Celiac Disease FOUNDATION

Ask THE DIETITIAN
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GET ANSWERS!

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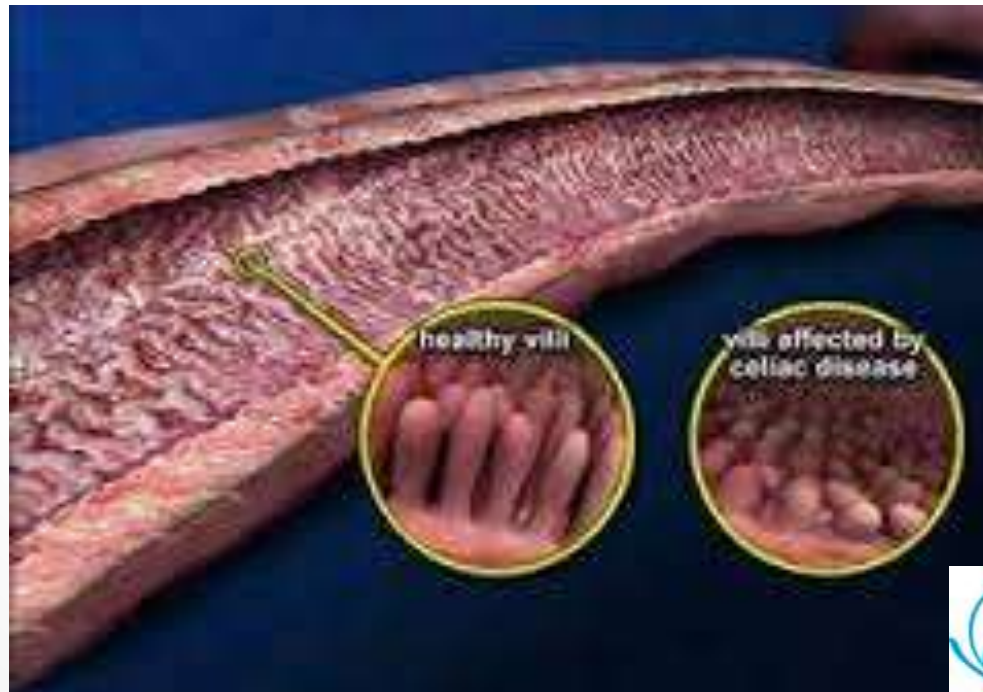
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Gluten-Free Diet Basics

1. What is gluten?
2. Reading food labels
3. Preventing cross-contact
4. Lifestyle changes
5. Gluten myths

Why?

- The gluten-free diet is currently the only treatment for celiac disease and non-celiac gluten sensitivity
- Eating even very small amounts of gluten will cause intestinal damage in celiac disease, whether or not symptoms are apparent



Why?

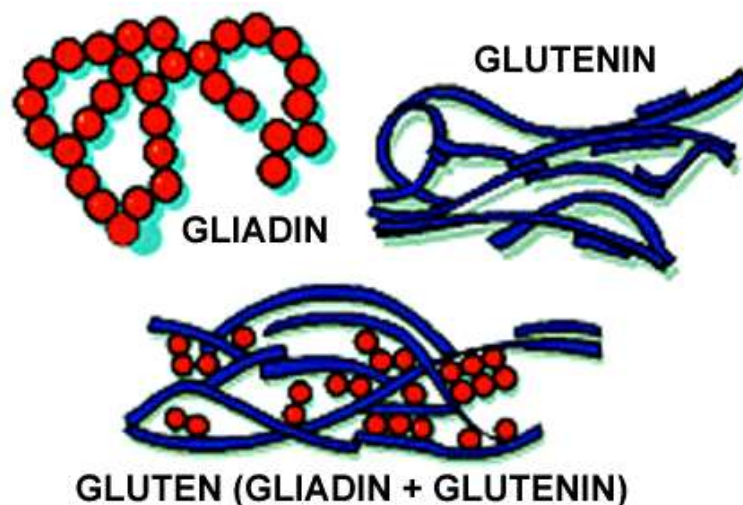
- Risks of not following gluten-free diet in celiac disease include:
 - development of more autoimmune diseases
 - malabsorption -> poor health, fatigue, hair loss
 - poor quality of life, missed work days
 - infertility
 - intestinal cancers or t-cell lymphoma
 - refractory celiac disease? dermatitis herpetiformis?

Keep in mind...

- Having symptoms don't always equal "gluten"
- Lack of symptoms doesn't always mean good diet compliance
- Research is evolving, and not complete
 - many issues have no evidence-based recommendations
- Level of sensitivity varies among individuals

What is gluten?

- Groups of proteins found in wheat, barley and rye
- Not just one molecule



- NOT the protein of other grains like corn or rice
- not glue, but acts like glue
- not glucose
-

Reading Food Labels

FDA Gluten-Free Label Regulation:

gluten free = free of gluten = no gluten = without gluten

1. no wheat, barley, rye, triticale or ingredients derived from these grains UNLESS:
2. ingredient is processed to remove gluten and final product is less than 20 ppm gluten
3. food is naturally gluten-free
4. AND unavoidable presence of gluten is below 20 ppm

FDA Gluten-Free Ruling

- not mandatory (i.e. products not labeled GF may actually be GF)
- no universal symbol or logo
- does not require testing to verify in advance
- “suggested” to apply to food service
- does not apply to “no gluten ingredients” label
- regulated via random inspections, and product recalls via consumer complaints



Gluten-Free Label Confusion

- Various third-party companies have their own copyrighted label, standards, and regulatory guidelines
- All fall within FDA definition, most are more stringent (i.e. <10 ppm, <5 ppm gluten)
- FDA does not require manufacturers to use third-party testing
- In recent study, no different in compliance between labeled gluten-free and “certified” gluten-free



Gluten
Free



Certified
GF
Gluten-Free

Gluten
Free!



gluten
free



GLUTEN *free*



GLUTEN FREE



GLUTEN FREE



VEGETARIAN

organic



SUITABLE FOR VEGETARIANS



WHEAT FREE



SOYA FREE



DAIRY FREE



GLUTEN FREE

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Reading Food Labels

Easy as 1-2-3!

- 1. Labeled Gluten-Free:**
any symbol or just words



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Reading Food Labels

Easy as 1-2-3!

1. **Labeled Gluten-Free:** any symbol or just words
2. Not labeled GF: → Check ingredients label for:
 - **Allergen label:** contains wheat
 - **Ingredients label:** malt, malt flavor, malt vinegar, malt extract, brewer's yeast, oats

Whole grain wheat is listed under Ingredients

INGREDIENTS: WHOLE GRAIN WHEAT, CINNAMON, MOLASSES, SUGAR, SALT, TRISODIUM PHOSPHATE, BHT ADDED TO PRESERVE FRESHNESS.

Allergy Statement

VITAMINS AND MINERALS: VITAMIN C (SODIUM ASCORBATE), CALCIUM CARBONATE, IRON AND ZINC (MINERAL NUTRIENTS), A B VITAMIN (NIACINAMIDE), VITAMIN B₆ (PYRIDOXINE HYDROCHLORIDE), VITAMIN D₃, VITAMIN B₂ (RIBOFLAVIN), A B VITAMIN (FOLIC ACID), VITAMIN B, THIAMIN MONONITRATE), VITAMIN A (PALMITATE), VITAMIN B₁₂

CONTAINS WHEAT INGREDIENTS

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Reading Food Labels

Easy as 1-2-3!

1. **Labeled Gluten-Free:** any symbol or just words
2. Not labeled GF: → Check ingredients label for:
 - **Allergen label:** contains wheat
 - **Ingredients label:** malt, malt flavor, malt vinegar, malt extract, brewer's yeast, oats
3. Not labeled GF: → Check manufacturing warning:

Avoid if product is **grain-based** and “may contain” or “made on shared equipment” with wheat/gluten

INGREDIENTS: Whole-grain sprouted brown rice protein concentrate, natural flavor, stevia.

ALLERGEN INFORMATION: This product is manufactured in a facility that processes other products which may contain soy, dairy, wheat, tree nuts, shellfish, fish, peanuts, and eggs and may contain traces of all of the above.

INGREDIENTS: Whole Grain Brown Rice Flour, White Rice Flour, Potato Starch, Sweet Rice Flour, Tapioca Flour, Xanthan Gum, Sea Salt.

Manufactured in an allergen-free facility
by Bella Gluten-Free, Denver, CO 80503

Always Safe Ingredients

- maltodextrin
- caramel color
- food starch – unless “**contains wheat**”
- hydrolyzed protein/ hydrolyzed vegetable protein (unless is “hydrolyzed **wheat** protein”)
- artificial flavors
- maltose
- dextrose
- all vinegar except **malt vinegar**
- pure vanilla extract/flavor
- glucose syrup

Never Safe Ingredients

- wheat
 - barley
 - rye
 - triticale
 - brewer's yeast
 - malt
 - malt vinegar
 - malt extract
 - malt flavor/ing
-
- oats in product not labeled g

Other names for “wheat”

- MUST include allergen label if FDA food
- bulgur
- couscous
- durum
- einkorn
- emmer
- faro
- kamut
- matzoh
- orzo
- semolina
- spelt
- seitan



Questionable Ingredients

but probably low risk

- Natural flavor – possible to be from barley
- Yeast extract – possible to be from brewer's yeast
- wheat/barley grass - make sure tested for gluten
- USDA foods with these ingredients:
 - food starch/ modified food starch
 - dextrose
 - dextrin
- Medications with these ingredients:
 - food starch/ modified food starch
 - gelatinized starch
 - dextrose
 - dextrin

USDA Foods

- USDA foods must list ingredients by “common name”, but are not required to declare allergens
- BUT 90% of them do!
- Examples:
 - meat
 - seafood
 - eggs
 - liquid eggs
- Questionable ingredients:
 - food starch/ modified food starch
 - dextrose
 - dextrin
 - flavoring, seasonings



Alcohol

- Most are regulated by TTB (Alcohol & Tobacco Tax & Trade Bureau)
- Not required to list ingredients OR allergens

TTB	FDA
malted barley & hops	malted barley, no hops or substitutes
alcohol content >7%	alcohol content <7%
beer	malted lemonade

- Distilled liquor OK – gluten not in final product
- Malted beverages NOT OK – gluten in final product
- Gluten-removed products – NOT safe for celiac
-

DIAGEO North America, Inc.; 6 Landmark Square, Stamford, CT 06901

DIAGEO

1-800-123-4567
WWW.DIAGEO.COM

Alcohol Facts



Serving Size 1.7 fl oz

Servings Per Container 15

Calories Per Serving 100

Alcohol Per Serving 0.6 oz

*Only those carbs that cause a noted effect on blood sugar.

Amount Per Serving

Total Fat 0g 0%

Sat Fat 0g 0%

Cholest 0g 0%

Total Carb 0g 0%

Net Carbs* 0g 0%

Protein 0g 0%

GOVERNMENT WARNING: (1) ACCORDING TO THE SURGEON GENERAL, WOMEN SHOULD NOT DRINK ALCOHOLIC BEVERAGES DURING PREGNANCY BECAUSE OF THE RISK OF BIRTH DEFECTS. (2) CONSUMPTION OF ALCOHOLIC BEVERAGES IMPAIRS YOUR ABILITY TO DRIVE A CAR OR OPERATE MACHINERY, AND MAY CAUSE HEALTH PROBLEMS.



BREWED WITH MALTED BARLEY, SPECIALLY CRAFTED TO REMOVE GLUTEN

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Prevent Cross-Contact

- Few evidence-based guidelines
- Thorough cleaning generally prevents cross-contact
- Recommend separate toaster, toaster oven, cutting boards, colander, strainer, fryer, bread maker, baking utensils, etc that are difficult to clean
- Cooking/frying at high temperatures does not “destroy” gluten
- Label condiment jars, switch to squeeze bottles, or no double-dipping policy
- Bake gluten-free items BEFORE gluten items, or wait at least 12 hours before sharing bread

Lifestyle Tips

- Choose restaurants with designated gluten-free menus
- Speak with chefs and managers rather than cashiers/waiters
- Always ask questions:
 - Does it contain flour? Soy sauce? Malt vinegar?
 - How do you prevent cross-contact with other foods?
 - Is it prepared in a shared fryer/pasta water/pan/cutting board/utensils/salad bowl?
 - Can you please change your gloves, clean the surface, use clean utensils, pans, cutting boards? Wrap in foil?
- Eat right before a meal if you're unsure – avoid hangriness!

Did you know...?

- Some restaurants add pancake batter or flour to their scrambled eggs
- Most licorice is made with wheat
- Sometimes caramel is made with wheat
- Soy sauce is not usually gluten-free – choose tamari
- Non-fat versions of foods may have added wheat

Gluten-Free Saves

At a restaurant...

- sauteed meat, seafood, or tofu without marinade
- baked potato with butter or sour cream
- steamed vegetables
- eggs over easy
- salad with beans, oil & vinegar

At a party, wedding, or catered event...

- Request a meal ahead of time or eat before you arrive

At a friend's house...

- fruit, nuts, cheese, popcorn, ice cream
- keep frozen food in their freezer

On a road trip...

- gas station hard boiled egg, cheese sticks, fruit, nuts, potato chips

In a rush...

- 2% latte, bars, nuts

Gluten Myths

- Blue cheese – little evidence
- Tea bags
- Wine barrels
- Licking envelopes
- Cross-reactivity with other grains, coffee, thyroid
- Make-up and skin care products – no research to show



	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Breakfast	Egg Omelet w/ Spinach, Tomato & Cheese GF Toast Orange	Cream of Rice Milk Blueberries Walnuts	GF Waffles w/ Syrup Egg Strawberries	GF English Muffin/ GF Bagel Almond/ Peanut Butter Banana	GF Cold Cereal/ Nutty Rice Cereal Greek Yogurt Mixed Berries	GF Breakfast Burrito w/ Egg, Bell Peppers, Mushrooms & Shredded Cheese Melon	GF Bagel Whipped Cream Cheese Lox/Other Protein Fruit Cup
Snack	String Cheese & GF Crackers	Hard Boiled Egg & Orange	Dried Apricots & Almonds	Yogurt & Berries	Peanut Butter & Apple Slices	GF Bar	Peanuts & Raisins
Lunch	Black Bean Turkey Chili Baked Potato/ GF Cornbread Broccoli Orange	Grilled Fish/ Chicken Tacos w/ Tomato, Lettuce, Onion, Shredded Cheese & Corn Tortillas	Falafel w/ Hum- mus/ Tahini Sauce, GF Pita, Cucumber, Tomato, Parsley, & Shredded Lettuce Grapes	Caprese Salad w/ GF Crackers / Caprese Panini Grapes	Tuna Salad w/ Mayo & Celery GF Crackers Shredded Lettuce Orange	Turkey Sandwich w/ GF Bread, Lettuce, Tomato, Avocado & Mustard	Roasted Chicken & Quinoa Salad w/ Asparagus, Sundried Tomatoes & Feta
Snack	Smoothie w/ Yogurt, Banana	Peanut Butter &	GF Cereal Milk	Nachos w/ Corn Chips, Shredded	Popcorn & String Cheese		

celiac.org/mealplan

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all your gluten-free
and allergy-free needs!

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Quiz Yourself!

- How much gluten do you eat gluten voluntarily?

None	1 point
Just a taste rarely	0 points
Just a taste often	0 points
A normal portion rarely or often	0 points

- When you eat out, do you tell the person who is cooking about your dietary needs?

Yes	1 point
No	0 points

- Do you check the labels of packaged foods?

Yes	1 point
No	0 points

Results

- 0 - 1 points = high risk of intestinal damage, positive antibodies
- 2 points = medium risk
- 3 points = low risk of intestinal damage, negative antibodies

Adapted from: Biagi et al (2012). A score that verifies adherence to a gluten-free diet: a cross-sectional, multicentre validation in real clinical life

[Celiac.org/Webinars](https://celiac.org/Webinars)

[Celiac.org/Ask](https://celiac.org/Ask)

