

# Food Sensitivities and Lifestyle Diets



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## Food Allergy

### Sensitivity

- The term "**sensitivity**" encompasses both **allergy** and **intolerance**.
- The **immune system** reacts to a typically non-harmful protein found in food.

### Allergic Reactions

- The top 10 foods that cause allergic reactions are: **eggs, milk, mustard, peanuts, seafood (fish, crustaceans, shellfish), sulfites, sesame, soy, tree nuts, and wheat**.
- Manufacturers must label if any of these ingredients (or gluten) are in a packaged food. Always check the ingredient list.
- Reactions can be mild or severe. Some food allergies are life-threatening.
- Symptoms vary by allergy type and from person to person. Symptoms can involve respiratory tract (eg. nose, eyes, throat), skin and mucous membranes (eg. hives, itching), digestive tract (eg. diarrhea, belching), nervous system (eg. irritability, migraine, hyperactivity). Symptoms may occur immediately or hours after. Proximity to intake typically dictates severity.

### Anaphylaxis

- Anaphylaxis** is a severe and rapid reaction.
- It does not occur in all allergies, or all people with the same allergy.
- Involves most of the body (eg. usually starts at mouth, moves to digestive system, then the rest of the body. This includes skin reaction, respiratory reaction and general nervous system). Death may occur within minutes.
- Use of an **EpiPen (adrenaline)** is integral to prevent death and lessen reactions.
- It can be caused by almost any food, however most commonly: **peanuts, nuts, shellfish, fish, cow's milk and eggs**.

### Oral Allergy Syndrome

- Oral allergy syndrome** is itching and/or swelling in or around the mouth and throat that occurs in some individuals with environmental allergies after eating certain raw fruit or veggies.
- If you know a girl with allergies to pollen, consider checking with her parents that there are not fruit or vegetables that cause trouble too.

# Food Intolerance

- Food intolerance** is a reaction which does not involve the immune system.
- Common food intolerances include: **lactose (found in milk and dairy products), wheat, gluten (found in wheat, rye and barley), dairy products, eggs, amines (eg. found in wine, aged cheese, vinegar, fermented foods) and food additives (eg. MSG, artificial colours, preservatives).**
- Symptoms are usually not life-threatening, can range in severity.
- They involve the same body systems as allergies.
- Anaphylaxis does NOT occur.

## Wheat and Gluten

- This includes **Celiac Disease**.
- Gluten** is a protein found in **wheat, rye, barley and triticale**.
- Wheat** includes all varieties: **dinkel, durum, emmer, einkorn, farro, kamut** (aka Khorasan, oriental or pharaoh wheat, semolina, spelt).
- Oats** do NOT contain gluten, but may be contaminated with gluten if they are processed in the same factory.
- Individuals with gluten sensitivity (an allergy or an intolerance) must avoid wheat, rye, barley, and triticale.
- Individuals with wheat sensitivity only need to avoid wheat and added gluten.

### Wheat Sensitivity

- Wheat sensitivity** refers to both wheat allergy and intolerance.
- Ingredients to watch for include:

-bread crumbs	-farina	-malt
-bran	-farro	-matzoh
-bulgur	-flour	-MSG
-cereal extract	-germ	-seitan
-coffee substitute	-gluten	-semolina
-couscous	-graham	-soy sauce
-dextrose	-granola	-spelt
-dinkel	-hydrolyzed	-starch
-durum	plant/vegetable protein	-triticale
-einkorn	-kamut	-vegetable gum
-emmer	-kharasan	-wheat

-Foods to be aware of or to question (and triple check labels of) include:

<ul style="list-style-type: none"> <li>-icing sugar</li> <li>-icing</li> <li>-candy</li> <li>-chocolate</li> <li>-licorice</li> <li>-marshmallows</li> <li>-pie fillings</li> <li>-ice cream</li> <li>-graham crackers / crumbs</li> <li>-granola bars</li> <li>-dates</li>   <li>-meat balls and patties</li> <li>-deli meats</li> <li>-sausages</li> <li>-hot dogs</li> <li>-imitation bacon bits</li> <li>-imitation seafood</li> <li>-vegetarian meat substitutes</li> <li>-flavoured tofu</li> </ul>	<ul style="list-style-type: none"> <li>-soy sauce</li> <li>-salad dressings</li> <li>-special mustards</li> <li>-gravy</li> <li>-packaged / canned sauces</li> <li>-seasoning mixes / blends</li> <li>-bouillon cubes / powder</li> <li>-miso</li>   <li>-packaged / canned soups</li> <li>-seasoned rice mixes</li> <li>-baked beans</li> <li>-canned black olives</li> <li>-cheese sauces</li> <li>-cheese spreads</li>   <li>-multigrain chips</li> <li>-flavoured snack foods</li> <li>-dry roasted nuts/seeds</li> </ul>	<ul style="list-style-type: none"> <li>-hot and cold cereals</li> <li>-granola</li> <li>-pasta</li> <li>-couscous</li> <li>-buckwheat noodles</li> <li>-bulgur</li> <li>-croutons</li> <li>-stuffing</li> <li>-matzoh</li> <li>-bread crumbs</li> <li>-battered or breaded foods</li>   <li>-cocoa mix</li> <li>-malted milk</li> <li>-coffee substitutes</li> <li>-flavoured coffees / teas</li> <li>-coffee substitutes (except pure chicory)</li> <li>-baking powder</li> <li>-cooking spray</li> </ul>
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## Gluten Sensitivity

### Celiac Disease

-It is a severe reaction to even minute amounts of gluten, which causes damage to the small intestine and/or skin reactions.

-Must strictly avoid all sources of gluten (including cross-contamination that can occur by using the same toaster, cutting board, butter dish, and bread knife. Unless it is non-porous and well-sanitized, gluten protein can be transferred.

-Even pure, non-contaminated oats may be a problem to some, but not to all people with celiac disease. The reason is unknown.

### Gluten Intolerance

-Severity varies from person to person.

-It does not destroy gastro-intestinal lining.

-Degrees of severity. Do not need to avoid all particles of gluten as with celiac disease.

-In addition to the ingredients listed under "Wheat Sensitivity", individuals with gluten sensitivity **must avoid**:

-barley -beer -brewer's yeast	-food colouring -malt (no question) -oats	-rye -Worcestershire sauce
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-**Naturally gluten-free foods** include: plain meats, poultry, fish, eggs, legumes, nuts, seeds, milk, yogurt, cheeses, fruit, vegetables, vinegars (except malt vinegar)

-**Naturally gluten-free grains, flours, and starches** include: amaranth, arrowroot, buckwheat, corn, flax, legume flours (beans, chickpea, lentil, pea), millet, nut flours (almond, hazelnut, pecan), potato, flour, potato starch, quinoa, rice, sorghum, soy, sweet potato flour, tapioca

## Dairy

### Lactose Intolerance

-Lactose is a naturally-occurring sugar in mammal milk (eg. goat milk, sheep milk, buffalo milk).

-The amount of lactose in dairy-type foods varies (eg. milk > yogurt > cheese).

-Symptoms are of the digestive system.

-Added to many processed foods.

-It is typically simple to determine on labels.

-There is no need to worry about words that look like lactose – sodium stearoyl-2-lactylate.

-Ingredients to watch for:

-cheese -cream	-lactose -milk (milk solids, malted milk, buttermilk)	-whey -yogurt
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-Foods to be aware of or to question (and triple check labels of) include:

-dips -flavourings -margarine	-powdered mixes (eg. gravy, sauces, hot chocolate, meal replacements)	-processed meats (eg. hot dogs, some deli meats) -soups -medications
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## Milk Allergy

-Individuals have an allergy to protein in milk products (cow's milk is more common than goat milk or sheep milk).

-Ingredients to watch for:

-butter (eg. butter flavour) -casein and caseinates (eg. ammonium caseinate) -cheese (eg. cheese flavour) -cream -curds -custard -dairy product solids -galactose	-ghee (clarified butter) -lactalbumin -lactate solids -lactitol monohydrate (eg. Splenda artificial sweetener) -lactoblobulin -lactose -milk (eg. milk solids)	-nisin preparation (milk bacteria derivative) -nougat -pudding -rennet, rennet casein -whey -yogurt (regular or frozen) -yogurt powder
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-**Lactic acid, lactate and lactylate** do not need to be avoided as they do not contain milk.

-Foods to be aware of or to question (and triple check labels of) include:

-flavourings (eg. natural flavour, artificial flavour, caramel flavour, brown sugar flavour)	-chocolate -high protein flour -some soy cheese	-margarine (contains whey) -non-dairy products (may contain casein)
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-Some substitutions:

-soy -rice -nut milks (almond milk, cashew milk, coconut milk)	-non-dairy creamers (eg. Coffee Mate) -non-dairy cheese (eg. Daiya tapioca cheese)	-non-dairy whipped topping (eg. Dream Whip)
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## Egg

-Foods to be aware of or to question (and triple check labels of) include:

<ul style="list-style-type: none"> <li>-baked goods (eg. pancakes, muffin mixes)</li> <li>-baking powders (some)</li> <li>-batters (eg. tempura)</li> <li>-beverages may use egg as a clarifier (eg. some root beers, wines, beers)</li> <li>-custard</li> <li>-egg nog</li> </ul>	<ul style="list-style-type: none"> <li>-ice creams (some)</li> <li>-instant cream of wheat</li> <li>-marshmallows</li> <li>-real mayonnaise</li> <li>-meat patties or meat loaf (if egg used as a binder)</li> <li>-meringue</li> <li>-mousse</li> <li>-nuts (some glazed or coated)</li> </ul>	<ul style="list-style-type: none"> <li>-oatmeal (instant and flavoured)</li> <li>-pasta</li> <li>-processed meats (eg. some sausages)</li> <li>-puddings (some)</li> <li>-salad dressings (eg. real Caesar, some others)</li> </ul>
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## Lifestyle Diets

### Halal Diet

-Halal diet is an Islamic religious diet.

-Foods that are not permitted include: pork and its by-products (eg. gelatin, lipase, pepsin), meat, and poultry from animals not slaughtered according to Islamic dietary law (eg. not certified Halal, alcohol and foods containing alcohol (eg. real vanilla extract, chocolate liqueur), foods containing blood and blood by-products.

-Some food manufacturers have a "Halal-certified" identification label or symbol.

### Kosher Diet

-Kosher diet is a Jewish religious diet.

-Foods that are not permitted include: pork and its by-products (eg. gelatin, lipase, pepsin), rabbit and its by-products, shellfish and their by-products, any meat and poultry from animals not slaughtered according to Jewish dietary law (eg. not certified Kosher).

-Milk and meat products must never be mixed.

-Most cheeses, grape juice, and wine must be certified Kosher.

-Some food manufacturers have a "Kosher-certified" identification label or symbol.

### Vegan

-Excludes meat, fish, poultry, dairy, eggs and products containing these foods and derivatives (eg. gelatin). May also exclude honey.

-Specific protein sources are typically legumes (dried beans, peas and lentils) including soy products (eg. tofu), seeds, and nuts.

## Vegetarian

- Omits meat and poultry, and often fish and/or dairy and/or egg.
- There are many types of vegetarian diets, depending on what is omitted from the diet.

-**Semi-vegetarians** or **Flexitarians** eat dairy products or eggs, a little fish and chicken. They do not eat meat.

-**Lacto-vegetarians** eat plant-based foods and dairy products. They do not eat meat, poultry, fish, and eggs.

-**Lacto-ovo-vegetarians** eat plant-based foods, dairy products, and eggs. They do not eat meat, poultry, and fish.

-**Ovo-vegetarians** eat plant-based foods and eggs. They do not eat meat, poultry, fish, and dairy products.

-**Pesco-vegetarians** eat a vegetarian diet and fish.

	Red Meat and Poultry	Fish	Eggs	Dairy
<b>Semi-vegetarian</b>	occasionally	occasionally	√	√
<b>Lacto-ovo-vegetarian</b>	X	X	√	√
<b>Lacto-vegetarian</b>	X	X	X	√
<b>Ovo-vegetarian</b>	X	X	√	X
<b>Pesco-vegetarian</b>	X	√	√	√
<b>Vegan</b>	X	X	X	X

-Protein-rich foods typically include legumes (dried beans, peas, and lentils) including soy products (eg. tofu), seeds, and nuts.

## Preventing Cross-Contamination in the Kitchen

### Goal

-Ensure that foods for those with food sensitivities do not become contaminated with food particles that need to be avoided, thus providing meals which are safe for people with food sensitivities.

## Ways to Prevent Cross-Contamination

- Create a contaminant-free workspace: make sure work surfaces, kitchen equipment, storage facilities etc. are thoroughly cleaned before preparing foods for those with sensitivities.
- Prepare food for those with sensitivities before the general meal.
- Use separate equipment/utensils if possible (cutting board, utensils, separate toasters, etc.). This is necessary in preparing food for individuals with Celiac disease (labeling gluten-free equipment can be helpful).
- After preparing contaminant-free foods, wrap them tightly and store them away from foods that contain contaminants.
- Use single serve condiments (butter, mayonnaise, jam, etc.) when possible to avoid contamination.
- Avoid buying from bulk bins.



## Sources Cited

Canadian Celiac Association. "NonCeliac Gluten Sensitivity." Accessed October 19, 2015.

Case, Shelley. "Diabetes, Celiac Disease and the GlutenFree Diet." November 1, 2010. Accessed October 10, 2015. Dietitians of Canada. "Eating Guidelines for LactoOvo Vegetarians."

Dietitians of Canada. November 27, 2014. Accessed October 19, 2015. Dietitians of Canada. "Eating Guidelines for Vegans." November 27, 2014. Accessed October 19, 2015.

Dietitians of Canada. "Food Sources of Lactose." February 08, 2013. Accessed November 3, 2015. <http://www.dietitians.ca/YourHealth/NutritionAZ/Lactose/Food-SourcesofLactose.aspx>

Dietitians of Canada. "Gluten Free Eating." 2009. Dietitians of Canada. [updated April 11, 2011; accessed October 29, 2015]. [http://www.glutenfreediet.ca/media/Gluten\\_Free\\_Eating\\_Apr\\_2011.pdf](http://www.glutenfreediet.ca/media/Gluten_Free_Eating_Apr_2011.pdf)

Health Canada. "Questions and Answers about the New Regulations to Enhance the Labelling of Food Allergens, Gluten, and Sulphites." August 16, 2012. Accessed October 19, 2015.

Joneja, Janice Vickerstaff. 2003. Dealing with Food Allergies. Boulder (CO): Bull Publishing Company.

Kashruth Council of Canada. "What Is Kosher." 2015. Accessed November 3, 2015.

Shehada, Abeer. "GLUTEN FREE DIET A Training Module for Food Service Staff." Lecture, September 1, 2010.

Skypala, Isabel, Carina Venter, and Rosan Meyer. "Food Allergy and Intolerances." British Dietetic Association. May 4, 2015. Accessed November 3, 2015.

Toronto Public Health. "Guide to Understanding Halal Foods." 2004. Accessed November 3, 2015.