

Gluten-free, casein-free diet for autism spectrum disorder

What is a gluten-free, casein-free diet?

Often called a GF/CF diet, this eating plan avoids foods that contain gluten (found in many breads and cereals) and casein (found in milk products). Eliminating gluten and casein may help to change symptoms and behaviors of autism. Some parents have started their child with autism on a version of the GF/CF diet for a different reason, and later noticed improvement in behavior, social skills, and learning.

Will a gluten-free, casein-free diet help my child?

Studies are just beginning. It will be years before we know if the diet really works. More testing is needed to show any risks of the diet and whether there are children who should not be on it.

A GF/CF diet is not easy to follow. Gluten and casein are a big part of our usual diet. Because the diet does not contain milk products, or many breads and cereals, your child may not get enough:

- calcium
- fiber
- vitamins A, D, and B complex
- calories

Be sure to ask your doctor about calcium and vitamin supplements, and keep regular appointments to watch for proper growth.

Before starting this diet, please discuss it with your child's doctor. Tests should be done for celiac disease and gluten sensitivity before starting the diet. Once the diet is started, the test results may not be accurate.

How do I start the GF/CF diet?

Start the diet slowly. Don't try to take out all gluten- and casein-containing foods at once. Add new gluten-free and casein-free foods gradually, about one food every 3 to 7 days. If a new food causes a problem, you will know which one it was. It may take 3 months to become fully gluten- and casein-free.

Buy small amounts of the new foods. Buy them in bulk only when you know your child likes them.

Read all food labels. Gluten and casein are found in many forms and go by many different names.

Keep a food and behavior journal. Write down what your child eats and any behavior changes that occur. If there is a connection between certain foods and behaviors, keeping a journal will help identify it.

Because calcium and vitamin D are limited on this diet, encourage other calcium-rich beverages, such as:

- calcium-fortified orange juice.
- calcium-fortified potato milk.
- calcium-fortified rice milk.
- calcium-fortified soy milk.

This sheet provides lists that will help you identify sources of gluten and casein.

Foods that contain gluten

Breads and cereals made with:

Abyssinian hard wheat
Barley
Barley flour
Barley malt
Barley hordeum vulgare
Bleached all-purpose flour
Bran
Bread flour
Brown flour
Durum flour
Enriched flour
Fu (dried wheat gluten)
Gluten flour
Graham flour
Granary flour
Hard wheat
High protein flour
High gluten flour
Kamut wheat
Oat flour
Rye
Spelt
Wheat
Wheat flour
White flour
Whole meal flour
Vital gluten

Other sources of gluten:

Alcoholic beverages
Avena
Beer
Bouillon cubes or powder
Bread crumbs
Bulgur (bulgur wheat/nuts)
Broth (packaged)
Cereal extract
Cereal binder
Chilton

Couscous
Cracker meal
Croutons
Dextrin
Durum
Edible starch
Einkorn wheat
Filler
Galactose
Ghee
Glutamate
Glutamic acid
Gravy cubes
Gravy mixes (unless homemade with cornstarch)
Herbs with wheat fillers
Hordeum
Hydrolyzed oat starch
Hydrolyzed plant protein (HPP)
Hydrolyzed vegetable protein (HVP)
Malt
Non-dairy creamer (coffee creamer)
Oats
Pearl barley (Job's Tears)
Nougat
Seitan
Simplese
Semolina
Soba noodles
Teriyaki sauce
Triticale
Udon
Vegetable starch

These foods may contain gluten.

If the item is not labeled GF/CF, check with the manufacturer.

Baking powder
Baking soda
Chorizo sausage
Gelatinized starch
Ground spices
Hot dogs
Lactic acid

Luncheon meats
Modified food starch
Natural flavoring
Sausages
Soy sauce (shoyu)
Surimi
Miso
Monosodium glutamate
MSG
Rice malt
Rice syrup
Vitamins

Check for gluten-free baking soda, baking powder, vanilla, xanthan or guar gum at health food stores or via online sources:
www.bobsredmill.com and
www.missrobens.com

Foods that contain casein

Milk:

Acidophilus milk
Buttermilk
Condensed milk
Evaporated milk
Dry milk
Goat milk
Low fat milk
Malted milk
Milk chocolate
Milk powder
Milk solids
Non-fat milk
Powdered milk
Skim milk
Whole milk

Other sources of casein:

Artificial butter flavor
Butter
Butter fat
Butter flavoring
Butter oil
Caseinate

Cheese (hard and soft)
Cottage cheese
Cream
Cream cheese
Custard
Curds
Delactosed whey
Half and half
Ice cream
Lactoglobulin
Lactose
Lactalbumin
Lactate solids
Lactulose
Pudding
Rennet casein
Ricotta cheese
Sherbet
Sour cream
Sour cream solids
Whey
Yogurt

These foods may contain casein.

If the item is not labeled GF/CF, check with the manufacturer.

Brown sugar flavoring
Bavarian cream flavoring
Caramel coloring
Chorizo
Coconut flavoring
Hot dogs
Luncheon meats
Natural chocolate flavoring
Sausages

What can my child eat?

Many foods do not contain gluten or casein, such as:

- chicken, fish, meat
- fruits, vegetables
- potatoes, rice, infant rice cereal
- cereal and pasta labeled “gluten-free”

Guten-free flours:

Amaranth flour
 Buckwheat flour
 Corn meal flour (and polenta)
 Garbanzo bean flour
 Garfava flour
 Lentil flour
 Millet flour
 Nut flours (such as almond, cashew)
 Potato starch flour
 Potato flour
 Quinoa flour
 Rice flour (brown or white)
 Sorghum flour (Jowar)
 Sweet potato flour
 Tapioca flour or tapioca starch
 Teff flour
 Yucca (cassava flour)

Milk substitutes:

Almond milk
 DariFree® potato milk
 Rice milk
 Soy milk

Butter substitutes:

Use non-dairy margarine such as:

- Hains® safflower margarine
- Mazola® unsalted corn margarine
- Willow Run® margarine

If a recipe calls for 1 cup of margarine or butter, you can substitute ¾ cup of oil:

- canola
- coconut
- olive
- safflower
- sunflower

What else do I need to know?

Gluten is also found in many non-food items, but some brands are gluten-free.

Contains gluten	Gluten-free
Lip balm	Burt's Bees®
Laundry detergent	Arm and Hammer® Baking Soda detergent
Soap, shampoo	Johnson & Johnson® Sensitive body wash
Spices (ground)	McCormick's®
Sunscreen	Banana Boat® Children's
Toothpaste	Tom's Toothpaste of Maine®

Stickers, stamps, and envelopes have gluten in the glue. Some medicines and antibiotics contain gluten, so check with your doctor or pharmacist before giving them.

Be careful not to mix GF/CF foods with other foods when using household appliances such as toasters, ovens, microwaves, and waffle irons. Use a separate toaster. When using ovens or microwaves, keep GF/CF foods in separate containers from other foods.

Questions?

This sheet is not specific to your child but provides general information. If you have any questions, please call nutrition services at your hospital.

Minneapolis, (612) 813-6865
 St. Paul, (651) 220-6216

For more information, you can visit:

www.gfcfdiet.com
www.twincitiesrock.org (celiac disease)

Online gluten-free food suppliers:

www.ener-g.com
www.glutenfreemall.com

For more reading material about this and other health topics, please call or visit the Family Resource Center library, or visit our Web site: www.childrensmn.org.