- Some great wheat-free snacks for your wheat-allergic child include oat cakes or rice cakes.


## Cooking

When cooking, it may be difficult to find recipes that do not call for flour. Here we have several suggestions for some cooking substitutes.

- Wheat-free flour - For 1 cup of flour, substitute 1 cup of any of these mixtures:
- 2 parts brown rice flour, 1 part soy flour, 1 part tapioca flour
- 6 parts white rice flour, 2 parts potato starch, 1 part tapioca flour
- $11 / 3$ cup ground rolled oats or $11 / 8$ cups oat flour
- Amaranth, arrowroot, buckwheat, corn, millet, oat, potato, rice, soybean, tapioca, and quinoa flour may also be used.
- Thickening substitutes
- Arrowroot
- Rice flour
- Potato flour
- Sago flour
- Tapioca
- Baking powders often contain wheat. In order to substitute for baking powder, blend $1 / 3$ cup of baking soda with $2 / 3$ cup cream of tartar and $2 / 3$ cup potato or arrowroot starch.


## Prognosis for Wheat Allergy

Although studies have not yet looked at this question in detail, it is generally believed that the prognosis for wheat allergy is very good. About $80-90 \%$ of children with wheat allergy will outgrow it by the age of five or six. Oftentimes it is outgrown even earlier, by the age of three.

## FOOD ALLERGY PROGRAM

The Food Allergy Program at Children's National Medical Center provides comprehensive services in the evaluation and management of a wide variety of food allergies, including IgE-mediated food allergy, gastrointestinal food allergy, and eosinophilic gastrointestinal disorders.

Food Allergy Program
Children's National Medical Center
111 Michigan Avenue, NW
Washington, DC 20010
Phone: 202-476-3016
Fax: 202-476-2280

## RESOURCES

For more detailed information about food allergies, visit:

- The Food Allergy and Anaphylaxis Network (www.foodallergy.org)
- The Food Allergy Initiative (www.faiusa.org)
www.childrensnational.org

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Wheat is a type of grain. There are four wheat proteins that are responsible for most wheat allergies: albumin, globulin, gliadin, and gluten. Wheat allergy is more common in children than adults, and is usually outgrown in childhood. About 20\% of children that are allergic to wheat are allergic to other types of grains as well. Wheat is also one of the most common food triggers of eczema. Wheat is found in many food products. It will take some practice (and research) to be able to find wheat-free foods, and initially it will seem like wheat is in everything! However, with time you will become a pro. We hope the information below will help as we go through how to recognize wheat-free foods, some common and unexpected sources of wheat, and wheat substitutes

## The difference between wheat allergy and celiac disease

Wheat allergy is commonly confused with celiac disease. Wheat allergy is an IgE-mediated response to wheat protein. Celiac disease is an autoimmune disorder of the small intestine that is caused by a reaction to gluten. People with celiac disease must avoid wheat, rye, oats, and barley because all of these grains contain gluten. Celiac disease can lead to serious problems such as malnutrition and intestinal damage if it is left untreated.


## Management of a wheat allergy

## Common sources of wheat

The only way to prevent a wheat allergic reaction is to avoid food products containing wheat. Wheat is found in a number of foods such as breads, cereals, pastas, baked goods, and crackers. The following ingredients indicate the presence of wheat:

- Bulgur
- Couscous
- Durum
- Emmer
- Einkorn
- Farina
- Flour (including all-purpose flour, enriched, cake, graham, high protein, high gluten, and pastry)
- Kamut
- Semolina
- Spelt
- Sprouted wheat
- Triticale
- Vital wheat gluten
- Wheat (bran, germ, gluten, grass, malt, starch)
- Whole-wheat berries


## Reading the Labels

It is important to read all food labels carefully to look for wheat. The Food Allergen Labeling and Consumer Protection Act requires all food products that contain wheat clearly list wheat on the ingredients label. Always check the labels, even if a product has been safe for your child in the past because ingredients often change unexpectedly. If you have any questions about a food product being wheat-free, don't hesitate to call the manufacturer and ask questions.

## Wheat substitutes

There are a number of wheat substitutes on the market today. Oftentimes, it takes some looking in order to find them. If you can't find them at your local grocery store, try a specialty grocery mart or a health food store.

## Breads

- These bread substitutes are usually found in a separate section of

Are the grocery store, away from the other breads.

- Wheat-free breads include breads made from rice, quinoa, amaranth, buckwheat, and potato.
- Rye bread is usually wheat-free, although still be sure to check the
other
grains okay?

Remember that
about $20 \%$ of children that are allergic to wheat are allergic to other types of grains as well. Since wheat substitutes use other grains in place of wheat, be sure to discuss with your allergist whether your child is allergic to any other grains and which substitutes are recommended. call the manufacturer to make sure there are no traces of wheat.

- Gluten-free breads are made with rice, soy, and non-wheat flours.


## Cereals

- Wheat-free cereals include corn flakes, rice flakes, kasha, porridge oats, quinoa flakes, millet flakes, and rolled oats.
- Hot cereals that are most likely wheat-free are oatmeal, grits, and millet.
- It is still important to check the labels on all of these cereals or call the manufacturers to make sure there is no wheat.

