



Milk Soy Protein Intolerance and Food Sensitivities in a Breastfed Baby

Excessive infant crying is a common reason to seek medical advice. Some common reasons for crying in a breastfed baby includes old fashioned colic, heartburn from spitting up, frustration from an over-active let-down during nursing, ingesting too much foremilk from an abundant maternal milk supply, and finally, a sensitivity to something the mother has ingested. It is worthwhile, although sometimes difficult, to sort out which one or more of these issues is causing the fussiness, because committing to a strict diet can be challenging. It is wise to systematically approach the problem, because treating several things at once may cause confusion as to which intervention made the baby happier!

A food sensitivity occurs when a protein the mother eats is digested and makes its way to her breastmilk and then to the baby's gut. If the baby is "hypersensitive" to a particular protein, symptoms develop. Such symptoms can be caused by an "intolerance" or an "allergy" to the foreign protein, and it is often difficult to differentiate between them. The management, however, is basically the same, which is to avoid the problematic protein. (Note that "lactose intolerance" is NOT the issue here. Lactose is milk *sugar*, and the issue to be discussed involves milk *protein*.)

Fussiness is a common symptom of food sensitivity. The baby fusses with hunger and wants to feed, but may be irritable during the feeding and more fussy afterwards. Stools remain soft even though she may frequently "grunt" as if she is having a hard time passing stool (this may represent inflammation in the gut). Stools may be infrequent, watery, mucousy and/or contain blood. Spitting up, skin rashes and nasal congestion are common in babies, but a food sensitivity may also cause such symptoms.

If food sensitivity is suspected, the culprit is probably a food that Mom eats a lot. The baby's symptoms are often "dose related," so if Mom simply eats less of that food, the baby is happier. In an extreme situation, labels must be examined in order to avoid the offending protein in processed foods, and an internet search can help identify restaurant foods which are OK to eat. If Mom is able to identify and eliminate the problem protein, the baby's symptoms should improve within 2-3 days, but it may take a week or two for the gut to heal enough for the symptoms to go away completely. If Mom accidentally eats the protein again, symptoms usually reappear in the baby within 6 or so hours.

The most common cause of food sensitivity is cow's milk protein, followed by soy protein, eggs, wheat, corn, beef and nuts. A first logical step is to thus avoid "obvious" milk products, such as milk, cheese, yogurt, pudding, butter, etc. If symptoms resolve or at least improve, Mom should continue avoiding these foods. If symptoms do not improve, Mom can progress to reading labels in order to avoid hidden milk protein ingredients. If symptoms are severe, some Moms may consider reading labels right away (instead of only limiting "obvious milk") in an attempt to improve symptoms as soon as possible. She can then slowly add small amounts of milk back into her diet, monitoring for the return of symptoms.

If eliminating cow's milk protein doesn't improve the baby's symptoms, reconsider other possible causes of symptoms, as noted above. It may also be worth-while to keep a diary of other foods and drinks consumed, noting symptoms in the baby that occur in the following 6 or so hours. If the problem food is identified, continue avoiding it for a few months, realizing that most babies eventually outgrow the sensitivity.

If a mother decides she cannot follow a restricted diet, an option is to substitute breastmilk with cow's milk and soy free formulas made with predigested proteins. They are very expensive and there is no guarantee the baby will be happier drinking them. Realize that the immune properties in breastmilk can help the baby's irritated gut heal faster, and breastmilk is the best thing to feed babies.

If the baby's symptoms are intolerable and/or the diagnosis of food sensitivity is still in question, an option is to do a trial of predigested formula. If the baby's symptoms improve on the formula, a diagnosis of food sensitivity becomes more clear and parents get a break from the crying. During this trial, Mom must start the diet which is free of the suspected proteins (most likely milk and soy), and she must pump her breastmilk regularly to maintain her supply. This expressed breastmilk should be clearly labeled, frozen and hopefully used when the baby outgrows the sensitivity. The baby's gut will hopefully heal within a few days on the special formula after no exposure to the problem protein(s). During the same time, Mom's diet is "cleaned up." At that point, the baby can resume nursing as long as the mother remains on a restricted diet. The risk of doing this trial is that the baby may not go back to the breast or the milk supply may decrease with exclusive pumping for a few days. Thus this trial is best reserved as a last resort when attempting to salvage breastfeeding.

There are a multitude of resources available to help mothers figure out how to follow a restricted diet. However, most mothers are exhausted at this point, so attached is some information to help you get you started.



How to Read Labels to find Milk and Soy Ingredients

Recheck ingredients regularly, as they change over time.

Key words which indicate milk protein: **Milk / Whey / Casein / Cream / Lact.....**

Key words which indicate soy protein: **Soy**

NOTE: Soy oils/fats are allowed, so **Soy Lecithin** is allowed!

AVOID FOODS THAT CONTAIN THE FOLLOWING INGREDIENTS

CONTAINS MILK PROTEIN:

- milk - fat/protein/hydrolyzed/solids/powdered/dry/evaporated/condensed/cultured/derivatives/acidophilous/lactaid/lacteeze
- buttermilk
- butter (solids/fat/oil/whipped/acid/esters)
- whipped cream
- sour cream, sour cream solids, sour milk solids
- half & half
- ghee
- diacetyl (artificial butter flavoring)
- Recaldent (teeth strengthener made from casein)
- cheese - cream/feta/ricotta/quark/cottage/curds
- custard, pudding
- yogurt, ice cream, milk sherbert
- malted milk / ovaltine
- casein -- hydrolyzed, hydrolysate, rennet
- caseinates -- ammonium, calcium, iron, magnesium, potassium, sodium, zinc

NOTE: "Non-dairy" products may contain casein.

- whey -- delactosed/demineralized
 - whey powder / protein concentrate
- NOTE: whey may be found in some spice blends, canned and dehydrated soup mixes, and crackers

- lactalbumin, including phosphate
- lactoferrin
- lactulose
- lactaglobulin
- lactose

NOTE: These words are tricky, but are allowed!

- lactate
- lactylate
- cocoa butter
- mono/diglycerides

MAY CONTAIN MILK PROTEIN:

- caramel/brown sugar flavoring
- chocolate
- natural and artificial flavoring
- high protein flour
- margarine
- nougat (candy)
- nisin (preservative)
- lactic acid starter culture
- non-dairy products / creamer
- Opta and Simplese (fat replacers)

CONTAINS SOY PROTEIN:

- soy protein/albumin, soy flour - often used as a meat extender, alternative, or protein boost
- textured vegetable protein (TVP) = soy protein
- natto - cooked/fermented soy beans
- tempeh - Indonesian soybean cake
- tofu = soybean curd
- edamame
- soy nuts, soy sprouts
- soy fiber - okara, soy bran, soy isolate fiber
- soy grits - a flour substitute
- soy milk - made into yogurt, cheese, tofu
- soy yogurt - sour cream or cream cheese substitute. Used to make non-dairy frozen desserts.
- soy cheese - substitute for sour cream/cream cheese
- miso - a condiment made from soy or rice used to flavor sauces, etc
- soy sauces - fermented soy bean juices
 - tamari - by product of Miso
 - shoyu - soy beans and wheat
 - teriyaki - sugar, vinegar, spices
- vegetable broth, gum, starch *may* contain soy
- natural flavors - may be a soy derivative
- hydrolyzed vegetable protein (HVP)
 - flavor enhancer, sometimes from soybeans
- monosodium glutamate (MSG)
 - may contain hydrolyzed protein

Milk Free Pantry.com shows pictures of food products. Foodfacts.com and Shopwell.com lists the ingredients found in almost all commercial food products. If not found, Google the product to find its ingredients.



Foods you CAN EAT on a milk and soy free diet.

Recheck labels regularly as ingredients may change.

(This list is current as of 8/13)

BREADS

Rotella Breads

Rotella Bread Crumbs

Big Sky Bread Company

Rudi's Organic Bakery

Oroweat Breads

Amana Whole Wheat and 12 Grain Bread

Bob's Red Mill Whole Wheat Bread Mix

Lakeland Whole Wheat English Muffins

Village Hearth English Muffins

Tortillas

Mission White Corn Tortillas

Mission Flour Tortillas

Cornbread

Gluten Free Pantry Yankee Cornbread Mix

Jiffy Corn Muffin Mix

Pizza Crust

Gluten Free Pantry French Bread & Pizza Mix

Mama Mary's Pizza Crust

PASTA - Most ok, watch for soy protein fillers

RICE

POTATOS - Betty Crocker Potato Buds

Gravy made without milk or bouillon.

CEREAL - Most dry cereals

Big Sky Bread Company granola

Back to Nature Granolas - Classic/Raisin

/Apple Strawberry/Apple Blueberry

Mother's - Toasted Oat Bran,

Cinnamon Oat Crunch

Quaker Oats Oatmeal

Hodgson Mill Oat Bran Hot Cereal, etc

Kashi - Autumn Wheat, Strawberry Fields,

7 Grain Honey Puffs, Cinnamon Harvest,

7 Whole Grain Flakes, Heart To Heart

Apple Cinnamon Instant Oatmeal

NOTE: Common breads contain milk, such as most sandwich breads, buns, rolls, biscuits, muffins, pancakes, waffles, sweet rolls and donuts. This includes bread crumbs, so most breaded meat, fish, and veggies are off limits.

SWEETS

General

Sugars - brown/granulated/powdered/confectioner's

Marshmallows

Baker's Semi Sweet Chocolate Chips

Hershey's Chocolate Syrup

Honey, molasses, sorghum

Jellies/jams/marmalades/preserves

Cookies / Crackers

Moon Pie

Graham Crackers: Keebler Honey Grahams

Honey Maid Cinnamon

Honey Maid Squares

Back to Nature Honey/Cinnamon Graham Sticks

Barnum Animal Crackers

Murray's Ginger Snaps

Archway Coconut Macaroons

Keebler Sandies Pecan Shortbread

Stella D'oro Cookies

Pillsbury Sugar Cookie Mix

Duncan Hines Cookie Mix

Cake / Frosting / Brownies / Pie

Angel food cake

Pillsbury Fudge Supreme Premium Walnut Brownie Mix

Pillsbury Dark Chocolate Brownie Mix

Pillsbury Cream Cheese Frosting

Pillsbury Pie Crust

Gluten Free Pantry Perfect Pie Crust Mix

Duncan Hines Brownies

Duncan Hines Frosting

Hodgson Mill Brownie Mix

Puddings / Sorbets

Edy's Whole Fruit Sorbet

Tapioca made with fruit juice

Hunts Snack Pack Lemon Pudding

Snack bars

LaraBar Snack Bars -

Fruit&Nut Cinnamon Roll, Apple Pie,

Fruit&Nut Cherry Pie, Chocolate Coconut Chew

Enjoy Life Snack Bars



Foods you CAN EAT on a milk and soy free diet.

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PROTEIN / MEAT

Meat prepared by baking, broiling or roasting with allowed ingredients are OK.

Kosher meat

Dilusso Deli meats

Dried peas, beans, lentils

Peanut butter

Eggs prepared without milk -

scramble with water or rice milk

- Tyson's Chicken Nuggets
- Van De Kamp's fish sticks
- Luzianne Creole Dinner Kit

NOTE: Processed meats often contain milk and/or soy, such as lunch meat, bologna, hot dogs, pepperoni, salami, sausage. Also, most meats which are canned/frozen/TV dinners/fish sticks contain milk and/or soy.

FRUITS / VEGETABLES

Creamed veggies contain milk/soy.

SOUPS

Broth

**Most bouillon contains soy protein

Most canned soups

NOTE: Creamed soup/chowder contains milk/soy

SEASONINGS / FLAVORINGS

Salt and Pepper

Plain herbs and spices

Spice blends without milk/soy

French's Fajita & Taco Seasonings

Vinegar

Ketchup and mustard

Pickles and olives

Vanilla extracts and other flavorings

These are free of milk, but contain soy:

- Worcestershire sauce
- Soy sauce

SALTY SNACKS

Popcorn

Pretzels - Newman's Own Hot Salt & Pepper Round Pretzels

Crackers

Nabisco Triscuits

Nabisco Wheat Thins

Zesta Saltines

Premium Saltines

Premium Oyster Crackers

Ritz Crackers

Back to Nature Crispy Wheat Crackers

Chips/Dip

Plain Potato Chips

Plain Corn Chips

Kettle Brand Chips

Fritos bean dip

NOTE: Many snack dips contain milk and soy.

BEVERAGES

Rice/Almond/Coconut Milks (Soy milk IS soy!)

Powdered fruit flavored drink mixes

Soda

Tea and Coffee

Milk free cocoa

MARGARINE / FATS / OILS

Vegetable cooking oils and hardened shortening

Smart Balance Margarine

Fleischmann's Unsalted Margarine Sticks

Fleischmann's Light Margarine Tubs

SALAD DRESSING

Annie's Organic Papaya Poppy Seed Dressing,

Tuscany Italian, Roasted Red Pepper,

Organic Green Garlic, French,

Walden Farms Dressings -

Italian, French, Raspberry

NOTE: Creamy salad dressings likely contain milk and/or soy.

MISCELLANEOUS

These are free of milk but contain soy:

Coffee Rich non dairy creamer (for baking)

Tofutti Sour Cream

What about eggs, wheat, corn, beef and nuts?

Cow's milk protein, followed by soy protein, are the most common causes of food sensitivity in a breastfed baby. If avoiding those ingredients doesn't improve the baby's symptoms, reconsider other possible causes of symptoms as noted previously. At the same time, it may be worth-while to keep a diary of foods and drinks consumed, noting symptoms in the baby that occur in the following 6 or so hours. **Eggs, wheat, corn, beef and/or nuts** are commonly identified as the problem, and thus labels need to be reexamined. Continue avoiding the identified problem food for a few months, realizing that most babies eventually outgrow the sensitivity. This elimination process can be approached in 3 ways:

1. Eliminate all suspected foods – after a week or so, add one food back into your diet every couple of days and monitor how your baby reacts.
2. Eliminate one food at a time – if symptoms improve after a few days without the suspected food, you may have found the problem. Slowly reintroduce it in small amounts and monitor how your baby reacts.
3. Eliminate ALL but a list of specific foods – after about 2 weeks on a restricted diet, systematically reintroduce food items back into your diet and monitor how your baby reacts.

Be careful about eliminating too many things from your diet. Everyone will know someone whose baby got better when the mother stopped eating a certain food. Our diets are too complex to be sure exactly what, if anything, is affecting the baby.

Keep in mind that proteins and other substances that appear in the mother's milk is not a bad thing, and in fact, they help desensitize your baby to these proteins. There is ongoing research regarding the prevention and management of food sensitivities/allergies, which can cause a great deal of confusion and sometimes unnecessary "rules" about what can and cannot be eaten by pregnant and nursing mothers and their babies.

AVOID FOODS THAT CONTAIN THE FOLLOWING INGREDIENTS (8/13)

Contains Wheat

- Bread crumbs
 - Bulgur
 - Cereal extract
 - Club wheat
 - Couscous
 - Cracker meal
 - Durum
 - Einkorn
 - Emmer
 - Farina
 - Fu
 - Hydrolyzed wheat protein
 - Kamut
 - Matzoh
 - Pasta
 - Seitan
 - Semolina
 - Spelt
 - Tabbouleh
 - Triticale/Triticum/
Triticosecale
 - Vital wheat gluten
 - Whole wheat berries
- SOMETIMES CONTAINS WHEAT**
- Caramel color
 - Dextrin/maltodextrin
 - Oats
 - Glucose syrup
 - Soy sauce (shoyu, tamari, teriyaki)
 - Food starch (gelatinized, modified, vegetable)
 - Artificial/natural flavoring
 - Hydrolyzed/texturized vegetable protein
 - Vegetable gum
 - Monosodium Glutamate (MSG)
 - Surimi
- Flour**
 - all purpose
 - bread
 - cake
 - durum
 - enriched
 - graham
 - high gluten
 - high protein
 - instant pastry
 - self-rising
 - soft wheat
 - steel ground
 - stone ground
 - whole wheat
- Wheat**
 - Grass
 - Germ
 - germ oil
 - bran
 - sprouted
 - protein isolate
 - bran hydrolysate
 - malt

Contains Eggs

- Albumin / Ovalbumin
 - Globulin / Ovoglobulin
 - Silici albuminate
 - Cholesterol free egg substitute (Eggbeaters)
 - Egg (dried, powdered, yolk, solids, white, wash)
 - Eggnog
 - Fat substitutes
 - Livetin
 - Lysozyme
 - Mayonnaise
 - Meringue/powder
 - Ovomucin/Ovomucoid
 - Ovotransferrin
 - Simplesse
 - Trailblazer
 - Vitellin / Apovitellin
 - Ovovitelia / Ovovitellin
 - Surimi
- SOMETIMES CONTAINS EGG**
- Artificial flavoring
 - Natural flavoring
 - Baked goods
 - Egg substitutes
 - Lecithin
 - Macaroni
 - Marzipan
 - Marshmallows
 - Nougat
 - Pasta

Contains Nuts

- Nut butters (cashew butter)
 - Nut meal, meat, paste, pieces, artificial
 - Natural nut extract (almond/walnut)
 - Artificial nuts
 - Almond
 - Butternut
 - Cashew
 - Chestnut
 - Coconut
 - Filbert/hazelnut
 - Gianduja
 - Marzipan/almond paste
 - Pecan
 - Pesto
 - Pistachio
 - Praline
 - Walnut
 - Pine nut (Indian, pignoli pignon pinon pinyon)
- SOMETIMES CONTAINS NUTS**
- Nut oils
 - Nut extracts: black/walnut hull extract
 - nut distillates/alcoholic extracts
- Nuts**
 - Beech
 - Brazil
 - Chinquapin
 - Ginkgo
 - Hickory
 - Macadamia
 - litchi/lichee/lychee
 - Nangai
 - Pili
 - Shea

Contains Corn

- Popcorn
 - Maize
 - Vegetable starch/paste/gum/protein
 - Malto/Dextrose / Dextrate
 - Polenta
 - Grits
 - Caramel corn / flavoring
 - Modified / Starch
 - Sorbitol
 - Hominy
- TRADITIONALLY CONTAINS CORN**
- Tamales
 - Nachos
 - Tacos
 - Tortillas
 - Masa harina
- Corn**
 - Meal
 - Flakes
 - Syrup
 - Solids
 - Flour
 - Niblets
 - Kernel
 - Alcohol
 - On the cob
 - Starch
 - Bread
 - Muffins
 - Sugar/Sweetner