



Cow's Milk Protein Intolerance (CMPI)

What is CMPI?

Cow's milk protein intolerance (CMPI) is defined as an abnormal reaction by the body's immune system in response to protein found in cow's milk. The immune system normally protects our bodies from harm caused by bacteria or viruses. In CMPI the immune system reacts unusually to the protein found in cow's milk. This reaction can cause injury in the stomach and intestines. In breastfeeding mothers, these proteins move into the mother's blood stream and into breastmilk.

What are the signs and symptoms of CMPI?

Signs and symptoms of cow's milk protein intolerance are very diverse. Most infants will show signs that involve the skin or the gastrointestinal system. GI symptoms can include vomiting, abdominal pain, blood in the stools, and diarrhea. Skin manifestations include hives and eczema. Babies can also present with coughing, wheezing, colic irritability, facial swelling, runny/congested nose, and poor growth due to poor absorption of nutrients.

What is the treatment?

If CMPI is suspected by your doctor, it is recommended to eliminate dairy and soy from the child's diet.

Formula-fed infants will likely be switched to a partially hydrolyzed hypoallergenic formula. These formulas are made up of broken-down proteins and can be digested without an immune reaction. For breastfed infants, mothers should eliminate dairy and soy products from their diet as well.

It is important to read ingredients on food labels and to avoid the following ingredients:

- | | | |
|--------------------|-------------|---------------|
| - Milk | - Milk | - Casein |
| - Milk solids | - Chocolate | - Whey |
| - Non-fat dry milk | - Cream | - Lactalbumin |

Once milk and soy are eliminated from the infant's diet, it can take up to 21 days for all traces of the protein to leave their system. It is recommended to wait two or three weeks to evaluate results, so it is important to be patient!

Although your child has been diagnosed with a Cow Milk Protein Intolerance, about 1 out of 2 babies will outgrow their intolerance by 1 year of age and 8 out of 10 babies will outgrow this intolerance by the age of three.

*See full ingredient lists to avoid in table below

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 sherbet
 - 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 Simplesse (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 soybeans
- 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
 - o Used to flavor sauces, etc.
- Soy sauces – fermented soybean juices
 - o Tamari - by product of miso
 - o Shoyu - soy beans and wheat
 - o Teriyaki - sugar, vinegar, spices
- Vegetable broth, gum, starch may contain soy
- Natural flavors – may be a soy derivative
- Hydrolyzed vegetable protein (hvp)
 - o Flavor enhancer, sometimes from soybeans
- Monosodium glutamate (msg)
 - o May contain hydrolyzed protein

Examples of Foods You CAN EAT on a Dairy/Soy-free Diet

PROTEIN/MEAT

- Meat prepared by baking, broiling or roasting with allowed ingredients
- 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

**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

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.

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/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:
 - o Worcestershire sauce
 - o Soy sauce

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

MISCELLANEOUS

- These are free of milk but contain soy:
 - o Coffee Rich nondairy creamer (for baking)
 - o Tofutti Sour Cream

Information for this handout was found on the following websites:

- <https://www.llli.org/breastfeeding-info/cmpi/#:~:text=If%20your%20baby%20has%20Cow's,and%2For%20a%20blocked%20nose.>
- <https://www.hamiltonhealthsciences.ca/wp-content/uploads/2019/08/CowMilkProteinAllergyWhatToEatBreastfeeding-trh.pdf>
- <https://www.hopkinsmedicine.org/health/wellness-and-prevention/milk-allergy-diet>
- <https://lincolnpedsgroup.com/files/Milk%20Soy%20Protein%20Intolerance%20and%20Food%20Sensitivity%20in%20a%20Breastfed%20Baby.pdf>