

MILK-FREE DIET

When you have an allergy to milk, your immune system identifies milk as an allergen and creates antibodies, known as IgE, to guard against the allergen. Allergic people react to one or more of three milk components: protein, fats, and carbohydrates. These antibodies attach themselves to mast cells, which are located throughout the body. Each time you drink milk or eat products containing milk, the milk proteins attach themselves to the IgE antibodies, which trigger the mast cells to explode and release massive amounts of histamines and other chemicals. These chemicals cause the symptoms of an allergic reaction, which may include hives, swelling of the tongue and throat, difficulty breathing, abdominal cramping, vomiting, diarrhea, and/or dangerously low blood pressure. One should keep in mind that there can be a lag time between drinking milk and feeling ill.

When you have an intolerance to milk or milk containing products known as lactose deficiency people cannot digest the main carbohydrate (or sugar) in milk and dairy foods. Normally, fingerlike projections along the intestinal wall, called villi, secrete lactase, an enzyme specifically designed to digest lactose. But lactose-intolerant people produce little or no lactase. Milk passes through undigested, which may cause symptoms such as abdominal discomfort and or pain, bloating, gas pains and often diarrhea.

Until recently, milk allergy and lactose intolerance were regarded as totally separate problems. If you had both, it was considered a coincidence. Now, some doctors are convinced that, in many people lactase deficiency actually develops as the result of an allergic reaction to either milk or some other food. That's because food allergy usually causes intestinal inflammation, which mows down the villi and creates lactose intolerance. Doctors believe that 95 percent of the people who experience stomach distress after drinking milk have lactose intolerance secondary to an allergy of some kind.

WHAT ABOUT CALCIUM?

Milk and dairy foods are a primary source of calcium, a mineral that is important to good health. People who absolutely cannot consume milk and or dairy foods should watch their calcium intake, especially if pregnant or nursing. Other food sources significant in quantities of calcium include green vegetables (i.e. broccoli, spinach collard and mustard greens), sardines, shellfish, turnips, kale, dried beans, seeds (i.e. sesame), nuts (i.e. brazil and whole almonds), dried herbs and soy. Tums are also a source of calcium. You can also purchase foods fortified with calcium such as orange juice and margarine.

TREATMENT

Treatment for a food allergy is to strictly avoid the offending food. Even tiny amounts of exposure can cause severe reactions.

To prevent a potentially life-threatening allergic reaction, you must make every effort to not consume or come in physical contact with milk, milk products or ingredients that contain milk proteins.

Milk is commonly used in processed foods, a milk avoidance diet involves careful label reading.

COOKING TIPS

Cooking without casein is more challenging than cooking with it, but not impossible. Here are a few cooking tips for substituting ingredients and modifying recipes.

INGREDIENT SUBSTITUTIONS

- For butter substitute Fleischmann's unsalted margarine or Crisco. In baking, you can also substitute lard, which produces excellent baked results.
- For melted butter substitute oil or melted margarine.
- For milk used simply as a liquid, substitute water or Rice Dream. If you are baking, fruit juice can be added. Reduce the amount of sugar that the recipe calls for.
- For cream, try Farm Rich, available in the refrigerator section of many grocery stores.
- For milk used as a thickener, substitute pureed tofu. Be sure to puree the tofu completely.
- If you need to make a French-style roux (which calls for butter and flour) use margarine and any other liquid instead. You can thicken soups lightly this way, which permits you to make "cream" recipes without the cream. A Cajun style roux uses oil and flour, and is also an excellent thickener for liquids.
- For condensed or evaporated milk use Jello cookable pudding mix.

MAKING A MILK-SAFE KITCHEN

In some families with conflicting diets, you may need to have milk-full as well as milk-free foods on hand. Color-coding is the key to safety. Depending upon the severity of the allergy in your family, you may wish to keep separate "milk" and "no-milk" cooking utensils, flatware and so forth. If you do, make sure that you have one style of dish, etc, for milk and a different style for milk-free items. Place a sticker on the drawer or cupboard where these utensils are stored, with one consistent color for items containing/used for milk, and another color for everything else. You can use the same sticker system for packages of processed foods and for leftovers stored in the fridge or freezer. As you unload your groceries, add a sticker to the box so that even young children will know what they can and cannot eat.

It may not be necessary to separate plates and utensils in your home. However, certain items used in cooking, ones that are hard to clean thoroughly, may benefit from having milk-full and milk-free versions, kept in separate drawers. If your allergy is severe, you may also wish to have separate kitchen towels, sponges and pots/pans, and to wash them separately.

RECOMMENDED FOODS

<u>Food Group</u>	<u>Recommended Foods</u>
Meat and other Protein foods	Fresh or frozen lean meats and poultry Fresh or frozen fish Fresh eggs Peanut butter and tree nut butters Plain, unflavored, unseasoned dry or canned Legumes, nuts, and seeds Plain, unflavored tofu
Grains	Bread, pasta, and cereal products, unless they are Prepared with ingredients that contain milk Plain rice Pretzels and cracker, unless they are prepared with ingredients that contain milk
Vegetables	Plain, unflavored, and unseasoned fresh, froze, or canned vegetables 100%
Fruits	Fresh, frozen, dried, or canned fruits, unless they are prepared with ingredients that contain milk 100% fruit juices
Fats and oils	Margarine and vegetable oils Nuts and seeds Salad dressings with allowed ingredients Avacado
Meat, poultry, fish DRY BEANS, EGGS, AND NUTS	All unless they are prepared with ingredients THAT CONTAIN LACTOSE Note – To know whether a food is made with ingredients that contain lactose: <ul style="list-style-type: none">▪ Check ingredients lists. Avoid foods▪ Made with butter, cream, milk, mild▪ Solids, or whey▪ Also avoid products when the ingredients list states. “May contain milk”
Grains	All, unless they are prepared with ingredients that contain lactose

RECOMMENDED FOODS (CONTINUED)

<u>Food Group</u>	<u>Recommended Foods</u>
Fruits and vegetables	All, unless they are prepared with Ingredients that contain lactose
Fats and oils	Vegetable oils, oils from nuts and seeds
Desserts	Fruit ices, sorbet, and gelatin
Beverages	Coffee, tea, vitamite nondairy beverage
Other	All spices and herbs

Note: Milk contributes riboflavin, pantothenic acid, vitamin A, vitamin D, phosphorus, and calcium to the diet. However, you can obtain these nutrients from other foods. Beverages are good sources of calcium, vitamin A, and vitamin D. Sources of riboflavin, pantothenic acid, and phosphorus include lean meats, legumes, nuts and whole or enriched grain products.

FOODS NOT RECOMMENDED

<u>Food Group</u>	<u>Foods Not Recommended</u>
Milk and dairy foods	Avoid all milk and dairy foods except Those listed on the recommended food chart
Meat, poultry, fish, dry Beans, eggs, and nuts	Any prepared with ingredients that contain lactose
Grains, vegetables and fruits	Any prepared with ingredients that contain Lactose
Fats and oils	Butter, margarine and cream cheese
Desserts and beverages	Any prepared with ingredients that contain Lactose

Note: Avoid all foods made with ingredients that contain lactose. To find out whether a food has lactose:

- Check ingredients. Avoid foods made with butter, cream, milk, milk solids, or whey.
- Also avoid products when the ingredients list states, “may contain milk.”

2 - SAMPLE MILK FREE MENUS

Breakfast	1 cup oatmeal with slivered almonds, dried apricots, and brown sugar ½ cup lactose-free milk ¾ cup calcium-fortified orange juice
Snack	Small banana
Lunch	Tossed salad with mixed vegetables 2 tablespoons vinegar and oil salad dressing 3 ounces salmon 1 whole grain roll with a thin spread of hummus 1 pear
Snack	1 cup trail mix with toasted oat cereal, nuts, and raisins
Dinner	2 chicken fajitas with onions and peppers, sliced chicken breast, and salsa in a flour or corn tortilla ½ cup rice mixed with ½ cup pinto beans
Snack	1 slice whole grain bread 1 tablespoon peanut butter
Breakfast	Eggs (any style fry in oil not butter with bacon (not sausage) Calcium enriched orange juice, black, tea or coffee Cheerios dry or with juice added
Lunch	Sliced meat (such as roast beef or turkey breast, no processed meats unless marked Kosher on sourdough bread with real mayonnaise or mustard. Add lettuce and mango chutney for flavor. Salad made with Starkist tuna packed in water. Add pickle relish and real Mayonnaise. Serve plain or on sourdough bread. Peanut butter and jelly on sourdough bread.
Dinner	Baked fish with honey mustard sauce Lambchops, broiled and served with mint jelly Steamed vegetables served plain or with home-made vinaigrette Roasted or baked potatoes
Snacks Desserts	Sorbet (not sherbet) with fruit or Nesquick chocolate syrup Fruit (fresh or canned) Minute maid calcium enriched juice boxes