

GLUTEN (GLIADIN) INTOLERANCE DIET

(Wheat-, Spelt-, Rye-, Triticale-, Barley, Kamut-Free)

Background

Gluten is a water-insoluble protein fraction present in some cereal grains. One of gluten's component proteins, **gliadin**, is the cause of some individual's intolerance or sensitivity reactions to grains such as wheat, spelt, rye, triticale, oats, barley and kamut.

The intestinal cell becomes damaged following gluten (gliadin) ingestion, the resulting condition is a ***primary chronic intestinal malabsorption that typically and most severely involves the part of the small intestine that comes directly off the stomach (i.e. the duodenum etc.).*** This pathological process can be acute, subacute or insidious (occurring gradually over time). The intolerance usually presents in the first three years of life (usually when solid foods are first introduced) and may reappear again at any time. However, it may appear for the first time at any age. Even a small amount of ingested gluten may induce a reaction that can be delayed for 1-2 months.

Many of these patients are also lactose intolerant with milk ingestion producing symptoms similar to those from gluten (gliadin). Early intolerance to cow's milk lactose may increase sensitivity to gluten (gliadin) later in life. It has therefore been suggested that gluten (gliadin) intolerance can be a sequel to lactose intolerance.

Dietary treatment involves the avoidance of all dietary gluten (gliadin)—see dietary lists below. It is also a good idea to also avoid all dairy products since lactose intolerance is frequently concurrent with this condition. *Note: this dietary treatment does not take into account other food allergies that may be unique to the individual concerned. See your clinician for further information regarding nutrition and your individual medical condition.*

Be a strict label reader! Many dairy and gluten products are hidden in other foods. Watch out for ingredients like cereal, starch, flour, thickeners, emulsifiers, gluten, stabilizers, hydrolyzed vegetable proteins, etc.

The general rule of thumb is eat fresh homemade food.

FOODS TO WATCH FOR AND AVOID:

Gluten is found in all wheat, spelt, rye, triticale, oats (look for certified Gluten free), barley and kamut, which includes most breads and pastas. Cereals containing bran, graham, wheat germ, malt, bulgur, millet or teff. All dairy products, some commercial chocolate-flavored beverages, some non-dairycreamers, cheese-like products made from oat gum which may contain gluten. Prepared meats (hot dogs, luncheon meats, chili con carne, Swiss steak, meat loaf, most pre-basted turkey. White sauces, creamed soups or vegetables—any sauces containing grain thickeners or dairy. Commercially processed beans. Thickened or prepared fruits, some pie fillings. Cakes, cookies, most baked goods unless certified Gluten free. Infant and junior dinners containing flour thickeners. Caramel coloring and MSG may also not be well-tolerated.

Dairy includes milk, cream, butter, cheese, yogurt, goat's milk, buttermilk, whey, or anything else made from milk, and any food in which any of these are used. Sodium caseinate, calcium caseinate, lactic acid, lactose, and any lactylate, caseinate, or similar substances are milk derivatives. These are very common in "non-dairy" creamers and milk or cheese substitutes. Chemical names to look for are calcium diphosphate and tricalcium phosphate; these appear to be dairy. Also watch for calcium propionate which is added to foods to prevent molding on breads, tortillas, etc. Lacto ferrin is now added to meat as a preservative to decrease E coli growth.

Calcium additives that don't appear to be dairy include calcium carbonate, calcium aspartate, calcium orotate and calcium citrate.

Watch for foods sautéed in butter, "ButterBall" turkeys, and cheese salad dressings. Rice, soy, and nut milks are available as alternatives as well as imitation ice creams made from these non-dairy products. Most rice or soymilks contain dairy-based calciums for enriching purposes. See the resource list for recommended products or recipes to make your own.

Resources

1. Hunter, Beatrice Trum. Gluten Intolerance. 1987. Keats Publishing.
2. Marz, Russell B. Medical Nutrition From Marz, 2nd edition. 1999. Omni-Press.
3. Websites:
 - www.glutenfree.com
 - www.celiac.com
 - www.csaceliacs.org

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