

## Milk Restriction: Helping clients expand their diet

Written by Wendy Busse, M.Sc., RD



### Key Messages

- Dietitians can help their clients manage milk restriction and expand their diet to be as varied as possible.
- Milk restriction based on medically diagnosed hypersensitivity must be approached differently than self-restriction.
- Respectfully asking why self-restriction is occurring and dealing with misinformation is an important step in expanding clients' diets.
- Lactose intolerance can usually be managed without eliminating milk products, although this is highly personal.

Dietary restrictions for diagnosed or perceived food hypersensitivity are common. Dietitians play an important role in helping clients not only manage their food challenges but also expand their diet. Milk is one of the most common dietary restrictions and will be used as an example for this article.

### Consequences of over restriction

Dietary restrictions are often viewed as a natural, holistic and safe approach to improving health. However, the consequences of following restricted diets are often not fully appreciated or understood:

- **Inadequate nutritional intake and growth** – Nutrient deficiency is a concern, especially in children, when staple foods (such as milk or wheat) and/or multiple foods are restricted.
- **Difficulty socializing** – Food is a central part of most social occasions.
- **Stress** – Dietary changes are time consuming and can disrupt daily routines.
- **Cost** – Specialty or less common foods are often more expensive.
- **Relationship with food** – Dietary restrictions can create a negative relationship with food.

Helping clients consume a diet that is as varied as possible is important. Milk restriction based on medically diagnosed hypersensitivity must be approached differently than those that are self-restricted.

### Expanding the diet for self-restriction of milk products

When a client is self-restricting milk products, it is important to inquire respectfully about the reason for the restriction. For example, is the restriction based on misinformation about negative health effects, food hypersensitivity testing or recommendations from a health care professional? Did the client notice any benefit with the milk restriction?

Providing accurate information may be helpful, including information regarding these elements:

**Safety** – For example, the client may be avoiding milk products due to [misinformation](#). Providing accurate information regarding the [safety of the Canadian milk supply](#) can be helpful.

**Food hypersensitivity testing** – Most food hypersensitivity testing methods (such as IgG testing) have not been validated.<sup>1</sup> For clients who are not receptive to this information, the dietitian can suggest that tolerance may

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improve with time and encourage reintroduction of problematic foods after an elimination diet.

**Additional causes of symptoms** – It is common for clients to assume that symptoms are caused by something they ate or drank. Compared to other factors (e.g. stress, hormonal changes), we have complete control over what we eat or drink. Therefore, clients often want their symptoms to be diet related because they can eliminate the symptoms by identifying and excluding the dietary triggers. Helping clients appreciate that many factors may be related to their symptoms can reduce the sole focus on dietary restriction.

**Lactose intolerance** – Clients who self-restrict milk products due to digestive issues may be suffering from [lactose intolerance](#). Often they avoid all milk products, but in most cases, many can be included in the diet with certain modifications.<sup>2</sup> Lactose tolerance may improve when lactose-containing foods are:

- increased gradually into the diet
- limited to 12 g of lactose in a single dose (equivalent to one cup of milk)
- distributed evenly throughout the day
- eaten with meals rather than on an empty stomach

Other strategies for coping with lactose intolerance include choosing milk products with

- **lower lactose** content
  - Many cheeses (e.g. cheddar, mozzarella,

Parmesan, Swiss, Monterey Jack) are low in lactose.<sup>3,4</sup>

- Lactose-free milk and dairy products (e.g. yogurt, ice cream, cream cheese and sour cream) are available in grocery stores.
- Lactase drops can be purchased in a pharmacy and added to regular milk.
- Lactase tablets can be taken prior to eating lactose-containing foods to aid with lactose digestion.

- **live cultures**

- The live cultures in milk products such as yogurt and kefir produce lactase, which improves lactose digestion.

Individual tolerance to lactose varies greatly. Therefore, counseling for the reintroduction of milk products should be personalized and monitored.

Given accurate information, clients may be interested in expanding their diet. Reminiscing with the client about previous milk products they enjoyed can increase their interest in reintroducing these foods. However, clients who are uncomfortable reintroducing a food they believe will lead to negative health consequences should be respected.

### Expanding the diet for medically diagnosed milk hypersensitivity

If the milk restriction is based on a medically diagnosed hypersensitivity, dietary expansion must be directed by a physician. Clients should be encouraged to regularly follow up with the diagnosing physician to discuss liberalizing the restriction. It is important for the dietitian to obtain the precise diagnosis and physician's restriction instructions. In some cases, this requires direct communication with the physician. Common milk-related hypersensitivity conditions are summarized in Table 1.

**Table 1: Helping Clients Expand their Diet in Common Milk Hypersensitivity Conditions**

Condition	Description	Diagnosis	Role of Milk & helping clients expand
Lactose intolerance	Absent or decreased lactase in the small intestine (lactase is an enzyme that digests lactose). Lactose is not absorbed, so it is fermented in the large intestine, resulting in gastrointestinal symptoms (gas, bloating, diarrhea, etc.). May be permanent (usually genetic) or temporary (small intestine damage). <sup>5</sup>	Laboratory evidence of lactose malabsorption (e.g. hydrogen breath tests, intestinal biopsy, etc.) are the most objective measures; however, results do not always correlate with symptoms after lactose consumption. <sup>5</sup> In reality, lactose intolerance is most often diagnosed by symptom improvement with lactose restriction.	Lactose is found in milk and milk products or added to processed foods as an ingredient.  In most cases, lactose intolerant clients can include milk products in their diet (see management strategies under Expanding the Diet for Self-Restriction of Milk Products).  Also, if lactose intolerance is secondary to small intestinal damage (e.g. celiac disease), lactose tolerance will improve as the intestine heals.
IgE mediated (immediate) allergy	The immune system produces IgE antibodies to a specific protein (allergen) in milk. This causes a release of immune chemicals and inflammatory symptoms primarily involving the skin (hives and swelling), gastrointestinal tract (vomiting and diarrhea), respiratory tract (wheezing) and/or cardiovascular system (hypotension and shock). Anaphylactic reactions may be fatal. <sup>6</sup>	The gold standard for diagnosis is a blinded food challenge in the allergist's office. In clinical practice, diagnosis is most often based on a patient's history of immediate reaction to a particular food and laboratory evidence that the immune system has produced IgE antibodies to that food (skin testing or food specific serum IgE).	Milk is one of the <a href="#">priority allergens</a> as defined by Health Canada. <sup>7</sup>  Milk protein must be strictly avoided (including prevention of cross contamination). However, the allergist may assess tolerance to baked milk protein (e.g. in muffins). <sup>8</sup> Tolerance to milk protein may develop over time, so regular follow-up with an allergist is essential.
Eosinophilic esophagitis (EoE)	Eosinophilic (inflammatory white blood cell) infiltration of the esophageal lining leads to inflammation and narrowing. In recent years, food allergy is being recognized as a probable underlying factor. <sup>9</sup>	The disease is diagnosed through esophageal lining biopsy (increased eosinophils). The specific food triggers are diagnosed through allergen elimination and reintroduction.	The six food elimination diet (milk, egg, wheat, soy, peanuts/tree nuts and seafood—fish/shellfish) is commonly prescribed to determine trigger foods in EoE. If milk protein is identified as a disease trigger, it is eliminated moving forward. Further research is needed to determine if baked forms of milk can be tolerated in the EoE population. Unlike other types of cow's milk allergy, EoE does not appear to resolve over time.
Food protein induced enterocolitis (FPIES)	Most commonly diagnosed in infants as a reaction to milk or soy protein in infant formula. <sup>10</sup>	Diagnosis is based on symptoms, exclusion of other etiologies and improvement with exclusion.	Tolerance to offending dietary protein usually develops by three years of age. Food challenges may result in hypotension and hypovolemic shock. Therefore, challenges must be directed by a physician.



### Consider necessary degree of restriction when providing resources

Health care professionals often distribute strict allergen elimination information (e.g. prevention of cross contamination), without considering the client's necessary degree of restriction – potentially leading to over restriction. The majority of printed or online information addressing allergen restriction (such as the Health Canada Priority Allergen pamphlet on milk) is based on complete avoidance. Some clients (e.g. referred for a trial milk elimination to improve a chronic symptom) would not have to avoid foods with potential milk cross contamination. Education material must reflect (or be modified to reflect) the necessary degree of restriction.

### Bottom line

Dietitians can help clients manage milk restriction with different approaches depending on whether the restriction is self-imposed or diagnosed and prescribed by a physician. The dietitian's goals are to help manage food restrictions and to help clients have a healthy relationship with food. They can personalize counseling so that clients enjoy eating, have the most variety possible, feel good and live without fear of food.

For a complete list of references and to view past issues of our newsletter, visit [albertamilk.com/resources/nutrition-file-network/](http://albertamilk.com/resources/nutrition-file-network/)

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Wendy is a nationally recognized expert in food hypersensitivity nutrition care. She serves on the medical advisory board for Mastocytosis Canada. Her [private practice](#) focuses on pseudo food allergy and helping clients on food hypersensitivity restricted diets expand their intake and feel better about eating. Wendy has published [Food Allergy News](#) for the last four years – an electronic newsletter to keep dietitians up-to-date with new research and resources. She also provides online continuing education programs for dietitians – *The Art & Science of Food Hypersensitivity*.



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### Nutrition file

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