## Responses to 10 Additional Questions Asked During the 8/5 Webinar titled "Lactose Intolerance and Health Inequities Across Diverse Populations":

## 1. How can we make low lactase products more affordable?

There are a variety of dairy foods that are naturally low in lactose and even lactose-free that are budget friendly. Aged cheeses and yogurt with live probiotics are two readily available options. Shopping for generic or store brands are additional ways to get the same great taste from dairy as well as the 13 essential nutrients. Check out this additional resource - <a href="https://www.usdairy.com/getmedia/6e574c5d-9f03-48b3-af86-de68f9dd8035/science-summary-dairy-innovation-2021.pdf?ext=.pdf">https://www.usdairy.com/getmedia/6e574c5d-9f03-48b3-af86-de68f9dd8035/science-summary-dairy-innovation-2021.pdf?ext=.pdf</a>

## 2. Do you have a citation for the science of heating milk (or any dairy products) for the breakdown of lactose?

The effect of cooking or boiling milk will have insignificant effect on its lactose content. While cooking may reduce the amount of lactose in milk, it won't break it down completely, so starting with lactose-free milk may be the better option for a guarantee that it will be lactose-free.

**Reference**: Walstra, P., J. T. Wouters, and T. J. Geurts. 2005. Dairy Science and Technology. CRC Press, Boca Raton, FL.

3. Given so many nutrients are lost during cooking with milk, what does research offer regarding drinking raw milk?

Drinking raw milk is **not recommended** due to food safety and food borne illness concerns. Nutrients are not lost when cooking with milk, so long as you keep the cooking temperature under boiling (212 degrees Fahrenheit). Check out this additional resource - <a href="https://gonnaneedmilk.com/articles/milk-vs-pasteurized-milk">https://gonnaneedmilk.com/articles/milk-vs-pasteurized-milk</a>

4. Can you explain the role dairy plays with Inflammation in the body?

Here is a link to the recently updated National Dairy Council (NDC) Science Summary on Dairy and Inflammation - <a href="https://www.usdairy.com/getmedia/0ef808d2-625d-4757-9739-b6c4365e1fb8/science-summary-inflammation-2021.pdf?ext=.pdf">https://www.usdairy.com/getmedia/0ef808d2-625d-4757-9739-b6c4365e1fb8/science-summary-inflammation-2021.pdf?ext=.pdf</a>. Additionally, there is an upcoming webinar on this topic titled, "Taming the Flame: Dairy and Inflammation" hosted by the National Dairy Council on Tuesday, August 24<sup>th</sup>. Click here to learn more and register - <a href="https://dairy.zoom.us/webinar/register/WN\_JnOdnBgkQXGteGI7fqHjvg">https://dairy.zoom.us/webinar/register/WN\_JnOdnBgkQXGteGI7fqHjvg</a>.

5. If someone has had their colon /partial small intestine removed (ie. ulcerative colitis), will this alter problems/symptoms of lactose intolerance?

Injury to intestinal mucosal can cause secondary lactase deficiency. Ulcerative colitis is a common cause of secondary lactase deficiency. Check out this additional resource for more information: https://link.springer.com/article/10.1007/s42399-021-00792-9.

6. Is there a reference available for the suggested 12-14 g lactose/serving as usually being tolerated in those with lactose intolerance?

Most people with lactose intolerance can tolerate up to 12-15 g of lactose per day. For reference, one 8oz glass of milk contains 12 g lactose. Here is an additional resource for more information - https://link.springer.com/article/10.1007/s42399-021-00792-9.

7. Can you provide the references or studies that show that dairy may help decrease diabetes and cardiovascular disease?

This is the statement made in the webinar "Daily inclusion of low-fat and fat-free dairy foods is recommended in all three DGA healthy dietary patterns 3 servings in Healthy U.S. and Healthy Vegetarian, and 2 to 2.5 servings in Healthy Mediterranean. Following these healthy dietary patterns is associated with reduced risk of chronic diseases like cardiovascular disease and type 2 diabetes."

Here is the reference for this statement - <a href="https://www.dietaryguidelines.gov/sites/default/files/2020-07/PartD">https://www.dietaryguidelines.gov/sites/default/files/2020-07/PartD</a> Ch8 DietaryPatterns first-print.pdf

- 8. Could you please share again the rates of lactose intolerance for each population discuss on the webinar?
  - African American 80% have lactose maldigestion
  - Latinx American 50 -80% have lactose maldigestion
  - Asian American 95% have lactose maldigestion
- 9. Does avoiding dairy products during an acute case of lung/sinus congestion will decrease phlegm?

A <u>review</u> concluded milk does not lead to mucus production or the occurrence of <u>asthma</u>. Avoiding milk and other dairy foods is not a recommended treatment for asthma, and there is no reason to avoid milk when you are sick with the common cold. For medical advice specific to your needs, please consult your physician. Check out this blog post for more information - <a href="https://www.usdairy.com/news-articles/does-drinking-milk-cause-mucus">https://www.usdairy.com/news-articles/does-drinking-milk-cause-mucus</a>.

10. Can you share any information about A2 milk and how/if that is helpful for lactose intolerance?

A2 Milk contains the same quantity of lactose as conventional cow's milk. In order to receive the same health benefits and thirteen essential nutrients as cow's milk, those with lactose intolerance would benefit from consuming lactose-free milk. For additional information about A2 milk, here is a resource titled, "Understanding the Science Behind A2 Milk" - <a href="https://www.usdairy.com/news-articles/understanding-the-science-behind-a2-milk">https://www.usdairy.com/news-articles/understanding-the-science-behind-a2-milk</a>