Friday Favorites: Why Do Milk Drinkers Live Shorter Lives on Average? Transcript

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Milk, Galactose, and Bone Health

[music] In my video on milk and bones, I discussed this set of studies following a 100,000 people from two decades finding a 60% higher risk of hip fracture among women who drank a lot of milk. The researchers suggested it might be due to the galactose, which is a breakdown product of the milk sugar lactose based on the fact that people with high levels in their blood because they were born with an inability to detoxify the stuff can end up with weakened bones. But that's not all galactose can do. Galactose is what scientists use to cause accelerated aging in lab animals. Since it's so successful at mimicking aging by inducing degenerative changes in the brain, heart, lungs, liver, kidney, etc. Lifehortened animals showed neurodeeneration, mental retardation, and cognitive dysfunction, diminished immune responses, and a reduction of reproductive ability.

Milk Intake and Mortality Studies

And it doesn't take much. just the human equivalent of one to two glasses worth of milk a day. However, humans aren't rodents. For example, we've known for nearly a century that you can cause cataracts in rats by feeding them lots of lactose or galactose. But the epidemiological data is mixed as to whether dairy is doing the same in people. The Swedish studies didn't just look at bone though, but milk and mortality. More milk was associated with more death in women.

Three glasses of milk a day was associated with nearly twice the risk of dying prematurely. The medical journal editorial accompanying the study emphasized that, you know, given the rise in milk consumption around the world, the role of milk and mortality needs to be established definitively.

Now, [snorts] with the then largest ever study on milk intake and mortality suggesting such adverse effects, Harvard researchers stepped in with three of their cohorts to form a study twice as big to see if the earlier findings were just a fluke.

Dairy Type, Fat, and Inflammation

Following more than 200,000 men and women for up to three decades, they confirmed the bad news. Those who consume more dairy live significantly shorter lives. Every half serving more of regular milk a day was associated with 9% increased risk of dying from cardiovascular disease, 11% increased risk of dying from cancer, and 11% increased risk of dying from all causes put together. This is all the more remarkable since milk drinking is typically associated with healthier habits like more exercise and less smoking and drinking. Though they did try to control for all these factors. Of course, it does matter what you eat instead. This Harvard analysis published in the New England Journal of Medicine found that swapping dairy for meat, red meat, poultry, or fish would not be expected to you do your body any favors.

And you would be expected to live longer eating dairy than eggs or processed meat. It's only when you swap dairy for plant-based sources of protein that they find a significant drop in mortality risk.

When all the milk mortality studies are put together, it appears the excess mortality risk is limited to regular as opposed to low-fat like skim milk. This suggests it may be more of a saturated fat issue. Though that doesn't explain why soured or fermented milk appears to have the opposite impact.

Galactose, Aging, and Antioxidants

So maybe it's both the butter fat and the galactose. A randomized crossover study of low-fat dairy, fermented dairy, and unfermented dairy found that study subjects had significantly higher IL6 inflammation levels during unfermented regular dairy weeks compared to when they were switched to either the fermented or low-fat dairy

products. The fermentation process can [clears throat] eliminate some of the glactose. As we age, our ability to detoxify glactose declines by as much as 40%. which would make it even more important to avoid dairy later in life if indeed galactose is the culprit.

But if glactose does its dirty work through oxidation and inflammation, might increased fruit and vegetable intake help mediate some of the harm in animals, glactose induced aging can be slowed by fruit and vegetable consumption. [snorts] For example, feeding rats blueberries can decrease the brain damage induced by the milk sugar.

Might it be able to help with the higher levels of oxidative stress and inflammation found among human milk drinkers? Unfortunately, women drinking three or more glasses of milk a day had more than twice the risk of hip fractures compared to women drinking less than a glass a day, regardless of whether they were eating more or less fruits and vegetables. But those high milk consumers consuming five or more servings of fruits and vegetables, they did reduce their chance of dying prematurely to just 60% greater than those drinking less milk.

Industry Influence and Dietary Guidelines

So antioxidant- richch foods may be able to modify the elevated death rate associated with high milk consumption. Highly influential advocacy organizations such as the US National Osteoporosis Foundation or the Europe-based International Osteoporosis Foundation continue to push dairy drugs and calcium supplements despite the counterveailing evidence that I've reviewed.

Why do they keep pushing dairy drugs and supplements? Perhaps because their objectivity is compromised by the influence of their commercial sponsors that include companies that market, you guessed it, dairy drugs and supplements.

Most recent reviews on dairy and osteoporosis and the English language medical literature were found to be written by those with ties to the dairy industry. The primary justification for inclusion of dairy in federal nutrition recommendations is based on purported bone benefits that are not supported by the available evidence. What if dietary guidelines were fashioned without commercial influence? In 2019, Canada decided to exclude industry reports and stick to the science in the formation of their new dietary guidelines. What a concept. Major changes include the new emphasis on plant-based food intake, limiting junk, and the removal of the dairy food group.

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