

Common Questions Regarding Dairy

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Does milk cause acne? Is dairy inflammatory? Will drinking milk cause early puberty?

In my years as a pediatric dietitian and working with families, I've gotten a lot of questions about dairy foods. From whether dairy causes early puberty to should families purchase organic or conventional milk, the questions abound.

Yet, there's a lot of misinformation circulating about milk and dairy foods. I've scoured the research to give you the best answers, and where there isn't a conclusion, I'm giving my professional perspective.

Let's set the record straight.

7 Common Questions about Dairy and Milk

As parents raise their kids, they want to make good food choices. And they want to understand why the choices they make are good ones. Here's the latest stance, based on the evidence to date, to some of the most common questions about milk and dairy foods.

1) Does dairy cause acne?

About 85% of 12 to 24 year-olds deal with acne, a common skin condition where pores become clogged with dead skin causing pimples, blackheads and cysts. Acne has many causes, including genetic predisposition, stress, personal hygiene, and diet. Hormone fluctuations, especially during puberty, may also increase the likelihood of acne.

Research hasn't identified what it is about dairy foods that could trigger or intensify acne, but there has been a body of observational research which points to an association, primarily tied to hormone regulation. It's important to note the science is not conclusive, however, some components of the diet may complicate acne. For example, ultra-processed foods like chips and cookies, and too many sweets, may contribute to breakouts.

If you suspect diet plays a role in acne, take a look at your diet. Consider taking a break from the likely triggers, such as ultra-processed foods or sweets. If acne clears up, you know your trigger.

In my experience, the balance of the diet, including primarily nutrient-rich, wholesome foods such as lean protein, vegetables, fruit, whole grains and dairy foods, matters most in growing children and teens.

2) Why do young athletes drink chocolate milk after a workout?

In a 2019 study from the *Journal of the International Society of Sports Nutrition* looked at of young athletes, chocolate milk (containing both carbohydrate and protein) was compared to a sports drink (containing carbohydrate) after resistance training. Researchers found that chocolate milk had a more positive effect on strength development and should be considered an appropriate post-exercise recovery supplement for adolescents. Other studies have found chocolate milk to be an ideal recovery drink for endurance training, as well.

Chocolate milk possesses a unique combination of nutrients, including carbohydrate and protein, that may benefit the athlete after a bout of intensive exercise. Carbohydrate from chocolate milk, in the form of lactose and added sugar, allows the muscles to quickly absorb glucose and store it as energy (glycogen). Protein from milk, particularly whey protein (and its by-product, leucine), enhances muscle recovery and promotes muscle building.

3) Is dairy inflammatory?

There's been quite a bit of buzz about chronic inflammation and the role of diet. We know certain medical conditions, like obesity, are associated with chronic, low- grade inflammation. If you read popular media, you might be convinced that dairy is inflammatory, but the research suggests the opposite.

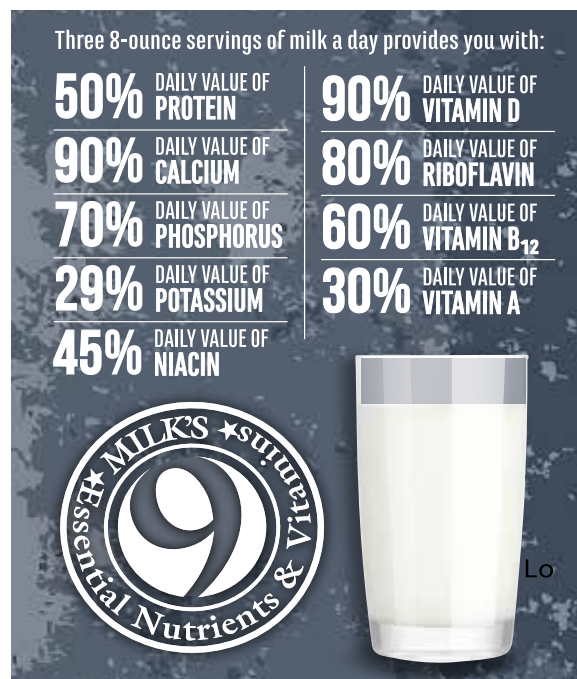
A 2019 systematic review of 16 clinical studies in the journal *Advances In Nutrition* looked at both healthy subjects and those with obesity and a co-morbid condition such as Type 2 diabetes. Researchers found consuming dairy products or milk did not appear to cause inflammation in the healthy subjects or in those with metabolic conditions, based on blood tests of inflammatory indicators. In fact, of these 16 studies, the majority of them showed dairy products and milk had an anti-inflammatory effect.

Another review study from 2017 and published in the journal *Critical Reviews in Food Science and Nutrition* looked at 52 studies on inflammation and dairy foods and found that consumption of dairy was associated with anti-inflammatory properties in humans. The authors dove deeper in to the different segments of study participants and found the following: Dairy foods, especially fermented dairy products like yogurt, were anti-inflammatory in individuals with metabolic conditions, especially obesity. In individuals with milk allergy, dairy foods were pro-inflammatory, which makes sense.

4) Why is dairy good for kids?

Most kids grow at a steady pace throughout childhood, and it's easy to see progress. But, there's a lot going on behind the scenes that we can't see. For example, bones get stronger, denser, and thicker during childhood. Strong, healthy bones in adulthood prevents the bone disease called osteoporosis.

Dairy foods such as milk, yogurt and cheese offer nine essential nutrients that support a child's health including, protein, calcium, vitamin D and potassium, to name a few.



Additionally, many kids like the taste of dairy foods, often consuming them in meaningful quantities to meet their nutritional requirements.

For children, consuming three servings of dairy a day can help them grow well, while getting the nutrients to support their health now, and in the future.

5) Does ice cream count as good nutrition?

Ice cream does contain nutrients like calcium and phosphorus, but it also houses quite a bit of added sugar and fat. In the scheme of food, I consider ice cream an indulgent one. Or what I like to call a "Fun Food."

Ice cream can be included in the diet, but it needs to be balanced with other nutritious, wholesome foods so it doesn't crowd out important nutrients for health. The key to eating ice cream is to keep it in balance with a wholesome, nutritious diet ... and enjoy it when you eat it!

6) Should my child drink organic milk?

According to a paper from the *American Academy of Pediatrics*, published in 2012, there is no significant difference between organic and conventional milk. In fact, nutritionally, there are few, if any differences.

Furthermore, there is no evidence that suggests conventional milk has higher amounts of hormones. Any hormone that might remain in conventional milk is not biologically

active in humans because through digestion, it is destroyed by acids in the stomach.

Organic foods are more costly, so it's really up to preference whether you purchase organic milk and dairy foods. Kids grow well, and are healthy, when drinking conventional or organic milk.

7) Does milk cause early puberty?

Today, the average age of puberty onset is twelve to 12 ½ years, but it can begin anywhere between 8 and 12 years in children. There is no known reason for the earlier timing of puberty, but experts believe it's tied to genetics, better overall nutrition, weight status, and differences in ethnicity.

The hormone in cow's milk, called bovine growth hormone (BGH), or bovine somatotropin (bST), helps the cow produce milk. As mentioned earlier, digestion kills the biological activity of these hormones, making them unlikely to influence the onset of puberty in children.

Furthermore, a 2015 study in the *Journal of Nutrition*, suggests that the regular consumption of milk in girls over the age of nine years isn't likely to affect the age of when girls start their period.

KEY TAKEAWAYS

- Diet may play a role in the appearance of acne in young adults.
- Chocolate milk has been shown to aid in muscle strength development and recovery after intense exercising.
- Research has demonstrated that dairy does not necessarily cause inflammation in humans and may even provide anti-inflammatory benefits.
- Dairy provides nine essential nutrients that support the development of strong, dense healthy bones during childhood that can help prevent bone disease in adulthood.
- There is no evidence real dairy milk has higher amounts of hormones than organic milk.

References

<https://www.jaad.org/article/S0190-9622%2815%2902614-6/fulltext>

<https://jissn.biomedcentral.com/articles/10.1186/s12970-019-0272-0>

https://academic.oup.com/advances/article-abstract/10/suppl_2/S239/5489433?redirectedFrom=fulltext

<https://www.tandfonline.com/doi/full/10.1080/10408398.2014.967385>

<https://pediatrics.aappublications.org/content/130/5/e1406>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4516774/pdf/jn214270.pdf>



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