

DAIRY – YOU DECIDE

Dairy always sparks a lot of controversy. Some say pasteurized, low-fat dairy is healthy and should be consumed 2-3 times daily,¹ while others claim raw, full-fat dairy is a superfood.² And then others insist on no dairy at all.³ Around 60% of the world's population is somewhat lactose intolerant. Below is an overview of factors to consider when deciding whether or not dairy is right for you.



TYPE	PROS	CONS
NON-ORGANIC	<ul style="list-style-type: none"> • may be treated with antibiotics to kill potentially harmful bacteria • high in calcium, magnesium, protein, and other nutrients essential for bone health • high in protein and therefore very satiating 	<ul style="list-style-type: none"> • may contain harmful contaminants from antibiotics, growth hormones, and pesticides • cow feed may be genetically modified • high levels of retinol may weaken bones⁴ • may encourage prostate and ovarian cancer
ORGANIC	<ul style="list-style-type: none"> • free of synthetic hormones, antibiotics, chemical fertilizers, pesticides, and GMOs • cows must eat grass and have four months of pasture access⁵ • studies show higher vitamin E, omega-3, antioxidant, and beta-carotene levels 	<ul style="list-style-type: none"> • still contains naturally-occurring growth hormones • some types undergo UHT treatment (heating to 280° F) to kill bacteria, some of which may be beneficial⁶ • UHT treatment causes a different flavor due to lactose caramelization
PROCESSED*	<ul style="list-style-type: none"> • pasteurization and irradiation kill pathogens and bacteria that may be harmful⁷ • fortified with vitamins A and D which may aid calcium absorption 	<ul style="list-style-type: none"> • pasteurization and irradiation kill potentially-beneficial bacteria • homogenization ruptures fat molecules, causing the milk to turn rancid • high levels of retinol may weaken bones⁸

TYPE	PROS	CONS
RAW	<ul style="list-style-type: none"> retains beneficial bacteria tastes fresher contains enzymes such as lipase, which may aid in digestion contains original vitamins and minerals 	<ul style="list-style-type: none"> may contain pathogens and bacteria must be consumed within one week of bottling prohibited in many countries and areas of the U.S.
GRAIN AND SOY-FED	<ul style="list-style-type: none"> less time and space is needed for grazing, allowing higher quantities to be produced quickly 	<ul style="list-style-type: none"> high in omega-6 fatty acids (excessive omega-6 intake relative to omega-3 is not healthy) grains and soy create digestive problems in cows lower in vitamin D³
GRASS-FED	<ul style="list-style-type: none"> contains five times as much conjugated linoleic acid, which is shown to protect the heart and aid weight loss high in anti-inflammatory omega-3 fatty acids⁹ cows are grazing animals, and grass is their natural diet high in vitamin D³ 	<ul style="list-style-type: none"> requires more space and time for pasture-grazing
LOW-FAT AND SKIM**	<ul style="list-style-type: none"> lower in calories and fat, especially saturated fat, which contributes to high cholesterol 	<ul style="list-style-type: none"> some claim low-fat dairy products can deplete the body of vitamins A and D
FULL-FAT	<ul style="list-style-type: none"> fat may aid in digestion of fat-soluble vitamins 	<ul style="list-style-type: none"> high in saturated fat, which contributes to high cholesterol high in calories, may promote weight gain

* Processed milk may be pasteurized, irradiated, or homogenized before sale. Legally, milk in the U.S. must be pasteurized. Raw milk is not pasteurized, irradiated, or homogenized.

**Low-fat and skim milk are produced by separating the less-dense milk fat from the watery parts through the process of centrifugation.



NATURAL DIET

Many consider cow's milk to be one of the most ideal foods nature provides, particularly when prepared in traditional ways, such as culturing. Others question the idea of drinking the milk of another species. Humans, like other mammals, produce milk for a specific purpose – to feed their own offspring until they're ready for solid food. Milk from a cow is designed to make a newborn calf grow rapidly in only a few weeks, causing many to believe it's not ideal food for humans. Additionally, pregnant cows are often milked, resulting in human consumers drinking milk high in hormones.



ANIMAL TREATMENT

Some small farmers treat their cows humanely and allow a more natural relationship between mother cow and calf. However, large industrial milk factories often subject their cows to filthy living conditions. Animal mistreatment at factory farms is well documented. Some also question the ethics of impregnating a cow for milk production and taking her calf away shortly after birth (often for slaughter to sell veal) to maximize profits.



SUSTAINABILITY

Animal agriculture is a major contributor to global warming and pollution. In addition, vast amounts of natural resources are used for dairy production. Globally, agriculture accounts for 60% of nitrous oxide and 50% of methane emissions.¹⁰ The dairy sector contributes 4% to the total greenhouse gases worldwide.¹¹ Some argue that we could feed many more people at lower costs if resources were used to grow crops for human consumption, rather than for meat and dairy production. Others believe the benefits outweigh the drawbacks, which could be mitigated if the grazing land and animal waste is carefully managed. By seeking out and purchasing from small, local farms, you can help support the farms that are producing dairy responsibly.

1. *Health Benefits and Nutrients* <http://geti.in/1vK4xpj>

2. *FAQ–Dairy* <http://geti.in/1IPQBqw>

3. *The New Four Food Groups* <http://geti.in/1qpOixk>

4. *Calcium and Milk: What's Best for Your Bones and Health?* <http://geti.in/T5IDj0>

5. *USDA Issues Final Rule on Organic Access to Pasture* <http://geti.in/1aEu6LK>

6. *The Dangers of Raw Milk: Unpasteurized Milk Can Pose a Serious Health Risk* <http://geti.in/1fTu7mf>

7. *Why Does Organic Milk Last so Much Longer Than Regular Milk?* <http://geti.in/16tpLtJ>

8. *Calcium and Milk: What's Best for Your Bones and Health?* <http://geti.in/T5IDj0>

9. *Conjugated Linoleic Acid Content of Milk from Cows Fed Different Diets* <http://geti.in/18HsrYp>

10. *Mitigating the Greenhouse Gas Balance of Ruminant Production Systems Through Carbon Sequestration in Grasslands* <http://geti.in/1cTSKeU>

11. *Greenhouse Gas Emissions from the Dairy Sector* <http://geti.in/1BK6r3>