



# DAIRY & INFLAMMATION

Wellness through Nature



## La Natura

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## What exactly are dairy products?

Dairy products are foods or drinks that are created from the milk of mammals, primarily cows, goats, and sheep. These products are rich in calcium and vitamin D but they also contribute to inflammation in the body, particularly those with lactose intolerance or sensitivity to dairy. This inflammation can contribute to diabetes, obesity, IBD and other auto-immune diseases.

## Common Dairy Products

### 1. Milk:

- The most basic dairy product, milk is consumed in various forms, including whole, skim, and flavoured varieties. It's often used as a base for other dairy products.

### 2. Cheese:

- Made by curdling milk using rennet or another acid, cheese comes in numerous varieties, each with its unique flavour and texture, from soft cheeses like Brie to hard cheeses like Parmesan.

3. **Yogurt:**
  - Fermented milk product that contains live cultures of beneficial bacteria.
4. **Butter:**
  - Created by churning cream, butter is a solid fat used in cooking and baking.
5. **Cream:**
  - The higher-fat layer skimmed from milk, cream is used in cooking and as a topping for desserts. It includes varieties like heavy cream, sour cream, and whipped cream.
6. **Ice Cream:**
  - A popular frozen dessert made from cream, sugar, and flavourings.
7. **Whey:**
  - A byproduct of cheese-making, whey is a protein-rich liquid that's often used in protein supplements and food products.
8. **Ghee:**
  - Clarified butter that has been cooked to remove water and milk solids, ghee is commonly used in Indian cuisine and is valued for its rich flavour.

## How does dairy cause inflammation in the body?

### Lactose Intolerance

One of the primary reasons dairy can cause inflammation is lactose intolerance. Lactose is the sugar found in milk, and individuals with lactose intolerance lack sufficient amounts of lactase, the enzyme needed to digest lactose. When lactose is not properly digested, it can lead to gastrointestinal symptoms such as bloating, diarrhea, and abdominal pain, which can cause inflammation in the digestive system.

### Casein and Whey Proteins

Dairy products contain proteins such as casein and whey. Some people may have sensitivities or allergies to these proteins, triggering an immune response that leads to inflammation. This reaction can manifest in various ways, including skin rashes, respiratory issues, or gastrointestinal distress.

### Saturated Fats

Many dairy products, especially those high in fat like cheese and whole milk, contain saturated fats. Diets high in saturated fats have been associated with increased markers of inflammation in the body. Consuming large amounts of saturated fats can lead to the production of inflammatory substances known as cytokines, which may exacerbate conditions such as arthritis.

### Gut Microbiome and Dairy

The gut microbiome plays a crucial role in overall health and inflammation. Some studies suggest that dairy consumption can alter the gut microbiota, potentially leading to increased inflammation for some individuals. This is particularly true for those with existing gut health issues or sensitivities to dairy components.



## Hormones & Additives

Commercial dairy products often contain hormones and additives used in the farming process. These substances can potentially disrupt the body's natural hormonal balance, leading to inflammation. Additionally, some individuals may be sensitive to these additives, further contributing to inflammatory responses.

Cow milk, a staple in many diets around the world, is often produced on a large scale. To enhance production, some dairy farms introduce added hormones into the cows' feed or directly through injections. While this practice can increase milk yield, it raises concerns about potential negative effects on human health.

### **Recombinant Bovine Growth Hormone (rBGH):**

This is one of the most commonly used hormones in the dairy industry. It is a synthetic version of the naturally occurring bovine growth hormone, which stimulates milk production in cows. While rBGH is approved for use in some countries, its safety and impact on human health remain subjects of debate.

## Potential Negative Effects on Human Health

### **1. Hormonal Imbalance:**

- Consuming milk from cows treated with rBGH may lead to an increase in levels of another hormone, insulin-like growth factor 1 (IGF-1), in the human body. Elevated IGF-1 levels have been linked to an increased risk of certain cancers, such as breast, prostate, and colon cancer.

## 2. **Early Puberty:**

- Some studies suggest that exposure to hormones in milk may contribute to earlier onset of puberty in children. This is concerning as early puberty is associated with a higher risk of health issues later in life, including hormone-related cancers and psychological effects.

## 3. **Allergenic Reactions:**

- Although rare, some individuals may experience allergic reactions or sensitivities to the added hormones in milk. Symptoms can range from mild skin rashes to more severe respiratory issues.

## 4. **Antibiotic Resistance:**

- Cows treated with rBGH often require more antibiotics due to increased susceptibility to infections like mastitis. The overuse of antibiotics in livestock can contribute to the development of antibiotic-resistant bacteria, posing a significant public health risk.

## 5. **Environmental Impact:**

- The use of hormones in dairy farming can also have indirect negative effects on the environment. Increased milk production demands more feed, water, and resources, contributing to environmental degradation and greenhouse gas emissions.



# Plant-Based Alternatives to Dairy

For those looking to reduce dairy consumption due to health reasons, ethical concerns, or dietary preferences, a variety of plant-based alternatives are available. These substitutes can provide similar textures and flavours while offering additional health benefits.

## 1. **Plant-Based Milks**

Plant-based milks are popular alternatives to cow's milk and come in various flavours and nutritional profiles:

- **Almond Milk:** Made from ground almonds and water, almond milk is low in calories and offers a nutty flavour. It's often enriched with calcium and vitamin D.
- **Soy Milk:** High in protein, soy milk is made from soybeans and water. It's a versatile substitute, commonly fortified with nutrients found in cow's milk.
- **Oat Milk:** Creamy and naturally sweet, oat milk is made from oats and water. It's a good source of fibre and often enriched with vitamins.
- **Coconut Milk:** Made from the white flesh of coconuts, coconut milk has a rich, creamy texture. It's popular in cooking and baking.
- **Rice Milk:** Made from milled rice and water, rice milk is sweet and hypoallergenic, making it suitable for those with nut or soy allergies.

## 2. Plant-Based Cheeses

Cheese lovers can explore various plant-based options crafted to mimic the texture and flavour of traditional cheeses:

- **Cashew Cheese:** Made from soaked cashews, this cheese is creamy and can be flavoured with nutritional yeast for a cheesy taste.
- **Almond Cheese:** Similar to almond milk, almond cheese is made from almonds and offers a mild, nutty flavour.
- **Soy Cheese:** Often made from soy protein, soy cheese is available in various styles, from mozzarella to cheddar.
- **Nutritional Yeast:** While not a cheese substitute on its own, nutritional yeast can be sprinkled on dishes to add a cheesy taste.

## 3. Plant-Based Yogurts

Plant-based yogurts provide a creamy texture and are often fortified with probiotics:

- **Coconut Yogurt:** Made from coconut milk, this yogurt is rich and creamy.
- **Soy Yogurt:** High in protein, soy yogurt is similar in texture to traditional yogurt and available in various flavours.
- **Almond Yogurt:** Light and slightly nutty, almond yogurt is a popular choice for those seeking a dairy-free option.

## 4. Plant-Based Butters

For spreading and baking, plant-based butters are available:

- **Margarine:** Often made from vegetable oils, margarine can be used as a direct substitute for butter.
- **Nut Butters:** Almond, cashew, and peanut butters provide creamy alternatives, especially for spreading.

## 5. Plant-Based Creams

For cooking, baking, and adding richness, plant-based creams offer tasty alternatives:

- **Coconut Cream:** Extracted from the thick part of coconut milk, it's perfect for desserts and creamy dishes.
- **Soy Cream:** A versatile, soy-based cream that can be used in both sweet and savoury recipes.
- **Cashew Cream:** Made by blending soaked cashews with water, this cream is thick and ideal for sauces and soups.



## Conclusion

Switching to plant-based dairy alternatives can be both delicious and nutritious. These substitutes not only cater to those with dietary restrictions but also align with ethical and environmental values. By incorporating these options into your diet, you can enjoy the benefits of reduced inflammation and support a more sustainable lifestyle.

And don't forget, if you need inspiration and vegan recipes ideas, check out La Natura on YouTube and also, head to our site where you can find FREE recipes and cookbooks!

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