

## NUTRITIONAL BENEFITS OF BUTTER MILK

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Buttermilk prepared in the traditional way is considered beneficial to health as it contains probiotic microbes and is sometimes referred to as "Grandma's probiotic". It is also soothing to stomach and skin. The fat content of buttermilk is far lower than milk or curd as fat is removed during churning. The probiotic nature of buttermilk is beneficial to the gut and improves immunity when taken regularly. In countries like India, it is a favorite traditional drink during summer. In India, flavoring ingredients like asafoetida, coriander leaves, ginger, curry leaves and sea salt are mixed with buttermilk to enhance its digestion-aiding properties. Buttermilk has nutritional value, rich in vitamins, protein, and calcium.

### TYPES OF BUTTERMILK

- **Traditional Buttermilk:** The liquid left after churning butter from fermented or cultured cream. Traditionally, milk was left to sit for a while to allow milk and cream to separate. During this time, lactic acid bacteria could ferment the milk facilitating the process of churning butter. The acidic environment also discourages growth of harmful microorganisms increasing shelf-life.
- **Acidified Buttermilk:** Buttermilk, with food-grade acid to increase acidity by adding lemon juice or vinegar to milk, and allowing it to sit for about 10 minutes.
- **Cultured Buttermilk:** This is buttermilk injected with the culture *Lactococcus lactis* previously known as *Streptococcus lactis*.
- **Powdered Buttermilk:** It is buttermilk in dried form and has a long shelf-life when stored at room temperature. Powdered buttermilk is often used for baking.

### NUTRITIONAL EFFECTS OF BUTTER MILK

- **Macronutrients** - A cup of low-fat buttermilk contains 8 grams of protein, 12 grams of carbohydrates and 2 grams of fat, including 1 gram of saturated fat.
- **Micronutrients** -A cup of buttermilk provides with 284 milligrams of calcium, 218 milligrams of phosphorus and 0.4 milligram of riboflavin, or 22 percent of the DV for these nutrients; and 370 milligrams of potassium, or 11 percent of the DV. Calcium is important for muscle and nerve function, as well as maintaining strong bones. Phosphorus is essential for maintaining cells and tissue and a regular heartbeat; riboflavin helps with nerve function and turning your food into energy, while potassium is important for digestive and heart functions.
- **Probiotics** - Buttermilk is made using live, active cultures of healthy bacteria, it contains probiotics. Probiotics help limit the amount of unhealthy types of bacteria in your digestive tract and may lower your risk for diarrhea and cancer.

### Vitamins rich butter milk

- **Vitamin D and Calcium** -Buttermilk benefits skeleton because of its calcium and vitamin D content. Vitamin D allows body to properly utilize the calcium from diet, and it also boosts immune system and supports healthy cell growth. Each cup of buttermilk contains 127 international units of vitamin D and 282 milligrams of calcium. It provides 21 percent of recommended daily vitamin D intake, as well as 28 percent of calcium requirements.
- **Vitamin B-12**-Vitamin B-12 in buttermilk essential to nervous system health. It nourishes myelin that helps to transmit nerve impulses, and make signaling compounds that relay signals between nerve cells. Vitamin B-12 also plays a role in red blood cell development, and prevents anemia. A cup of buttermilk provides 1.1 micrograms of vitamin B-12.
- **Vitamin A and Selenium**-Vitamin A and selenium nutrients in buttermilk benefit immune system. Vitamin A promotes white blood cell growth, while selenium activates enzymes that

mount an immune response against pathogens. Vitamin A also promotes healthy vision, while selenium aids in muscle metabolism and supports thyroid function.

## HEALTH BENEFITS OF BUTTERMILK

- **Reduces Body Heat**-Buttermilk is an excellent coolant that reduces the body heat in summer.
- **Boosts Immune System** - The high amount of lactic acid in the butter milk improves the immune system of the human body, preparing to fight against diseases.
- **Weight Maintenance** - Buttermilk is often included in weight loss diets due to its property of containing all essential nutrients required by body, whereas it does not contain fats and high amounts of calories.
- **Maintains skin** -Buttermilk is rich in lactic acid and the cosmetic industry has made extensive use of in its beauty products. It is good facial mask that softens, brightens and exfoliates the skin.
- **Fights anemia** -The vitamin B12 in the buttermilk helps in synthesizing the fatty and amino acids, in addition to fighting anemia, stress and promoting growth of nerve cells. B12 is also responsible for converting glucose into energy.
- **Good for bones** - The potassium and riboflavin in the buttermilk lowers blood pressure while the calcium improves bone health.
- **Probiotics Benefit Gastrointestinal Tract**-Buttermilk is rich in bacteria which are beneficial to the gastrointestinal tract. Such bacteria are called probiotics. Healthy bacteria are present in everybody's colon, and have a symbiotic nature with the body – for nutrition.
- **Riboflavin Helps Detoxify the Body**-Buttermilk contains riboflavin, which is essential for converting the consumed food to energy, important in the secretion of hormones and an aid indigestion. The body utilizes riboflavin to activate enzymes in the cells, hence driving energy production. It also aids liver function and assists detoxification of the body. Is has anti-oxidation properties.

## CONCLUSION

Buttermilk is a healthy, refreshing coolant that lowers body heat, especially when the temperature is soaring and the sun is beating down relentlessly. The tendency and potential that buttermilk components can positively influence human health and its contribution to a balanced daily diet is without doubt.

## REFERENCE

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