

Effects of Buttermilk on Health

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ABSTRACT

Ayurveda gives great importance to *Takra* (Buttermilk) as diet as well as medicine as it is a part of balanced diet and it is considered as a wholesome diet to maintain health. As it facilitates proper digestion and absorption process, it maintains proper metabolism. It is indicated in various disorders related to gastrointestinal system and in metabolic disorders. Due to saturation or ageing of *strotas* during old-age, the control systems of the body do not get adequate nutrients, which causes aging symptoms such as reduction of memory (dementia), reduced vision, wrinkles on the skin, graying of hair, etc.

But those who take buttermilk regularly, slow aging, keep their arteries flexible for a longer time. Thus buttermilk is an elixir (*param-amrutam*) which keeps '*Jara*' (oldage) and '*Vyadhi*' (disease) away. The ayurveda treats buttermilk as an excellent food to keep cholesterol related problems miles away.

Introduction

Buttermilk refers to a number of dairy drinks. Originally, buttermilk was the liquid left behind after churning butter out of cream. This type of buttermilk is known as *traditional buttermilk*. In Ayurveda, buttermilk is used both to maintain health and as a treatment against diseases. There are reasons behind these uses of buttermilk for health. It is easy to digest, has astringent properties and a sour taste. It improves digestion and alleviates the feeling of puffiness. It is a natural treatment against swelling, irritation and digestive disorders, gastrointestinal ailments, spleen maladies, anaemia and lack of appetite as it Contains All Essential Macronutrients¹

SYNONYMS²–

Chaas is the name by which this beverage is known in the Gujarati and Urdu languages, and in some regions of Hindi-speaking north India. It is known as *Mattha* in other parts of Hindi-speaking north India, as *Mor* in Tamil, as *Mooru* in Malayalam, as *majjige* in Kannada and Telugu, as *taak* or *tak* in Marathi and as *ghol* in Bengali²

Originally, buttermilk referred to the liquid left over from churning butter from cultured or fermented cream. Traditionally, before cream could be skimmed from whole milk, the milk was

left to sit for a period of time to allow the cream and milk to separate. During this time, naturally occurring lactic acid-producing bacteria in the milk fermented it. This facilitates the butter churning process, since fat from cream with a lower pH coalesces more readily than that of fresh cream. The acidic environment also helps prevent potentially harmful microorganisms from growing, increasing shelf-life. However, in establishments that used cream separators, the cream was hardly acidic at all. On the Indian subcontinent, the term "buttermilk" refers to the liquid left over after extracting butter from churned cream. Today, this is called *traditional buttermilk*. Traditional buttermilk is still common in many Indian, Nepalese, and Pakistani households, but rarely found in Western countries. In Southern India and in the states of Punjab, Gujarat and Rajasthan, buttermilk topped with sugar, salt, cumin, asafoetida, or curry leaves is a common accompaniment in every meal.³

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Nutrition⁴

One cup (237 mL) of whole milk contains 157 calories and 8.9 grams of fat whereas one cup of buttermilk contains 99 calories and 2.2 grams of fat. Buttermilk contains vitamins, potassium, calcium, and traces of phosphorus⁴

BENEFITS

1. Contains All Essential Macronutrients:⁵

Buttermilk is a complete food. It is nutritive and contains all the elements necessary for a good balanced diet. It has proteins, carbohydrates, minimal lipids, vitamins and essential enzymes and makes for a complete meal anywhere, anytime. It should be included in all diets and be consumed daily. As over 90 percent of buttermilk is water, its consumption helps to maintain the water balance of the body. It is absorbed slowly from the intestines as its contents are mostly combined with proteins. It is better to drink buttermilk than any other flavored drink or just plain water. Fermented buttermilk is sour to taste, but biologically is very nutritive for the human body and tissues.

2. Has A Cooling Effect On The Digestive Tract:^{5,6}

Buttermilk has a tendency to wash down spicy food and soothes the lining of the stomach when consumed after a piquant meal. The additives of ginger, cumin powder and other condiments also relieve the stomach of any irritation that may have been caused due to the food. Buttermilk is instrumental in reducing body heat. It is well-liked by women, both pre- and post-menopausal, as it reduces body heat and alleviates many symptoms these women suffer from. For those looking for reprieve from hot flashes, buttermilk is a great way to counterbalance these bothersome symptoms. Even men who have a high metabolic rate and body temperature can avail of the advantages of buttermilk to reduce body heat.

3. Encourages Digestion And Treats Stomach Ailments:⁵

Buttermilk has a fair amount of acid in it which works against bacteria and helps clear stomach and aids in digestion. All the condiments added to buttermilk make very good digestive agents. Ginger, pepper and cumin all make excellent digestive properties. As they are carminative substances, they expel gas from the stomach. Consumed together they have a cooling and digestive effect on the gastrointestinal tract. A preparation of buttermilk drunk regularly also helps gastrointestinal conditions. Some of the digestive ailments cured by buttermilk include:

- Irregular bowel movements
- Irritable bowel syndrome
- Cancer of the colon
- Stomach infections

4. Effective Against Dehydration:^{5,6}

Made from yogurt with added salt and spices, buttermilk is an effective therapy to prevent dehydration. It is full of electrolytes and is one of the best drinks to fight against the heat and loss of water

from the body. In summer, it is truly a drink to relish. Hence buttermilk benefits in summer by reducing summer-related issues, such as prickly heat and general uneasiness.

5. Provides Calcium Without The Fat: ^{5,6}

Very often people believe that as it is called buttermilk, it must be full of fat and calories. However, it has less fat than even normal whole milk. Milk contains an important ingredient – calcium. Milk also is loaded with fats. Sometimes lactose intolerant persons (those who have to refrain from consuming milk) have no other source of natural calcium. These people can have their required intake by consuming buttermilk. It will not cause any adverse reaction as the lactose has been transformed to lactic acid by the healthy bacteria present in buttermilk. Calcium supports cell communication and the contraction of muscles. Proper nutrition plays an important role in preventing and treating bone disorders such as osteoporosis. Buttermilk provides calcium and nutritional supplements without the added calories. Getting the required calcium in your meal plan helps slow bone loss as one grows older. It provides sustenance for new bone development and keeps off osteoporosis. As a result of all these qualities, including buttermilk into one's daily diet is a sound choice for the health-aware consumer.

6. Rich In Vitamins: ^{4,5,6}

Buttermilk is a treasure trove of vitamins such as B complex vitamins and Vitamin D. This makes buttermilk a good choice to overcome weakness and anemia caused by vitamin insufficiency. Vitamin D present in buttermilk strengthens the immune system, making it less susceptible to infections. One serving of this drink gives you over 21 percent of the suggested daily intake.

7 . Assists In Lowering Cholesterol: ^{5,6}

A natural remedy for lowering and controlling blood cholesterol is buttermilk. Its constituents are very effective in keeping cholesterol under check. Even Ayurveda texts have extolled the virtues of consuming buttermilk for good health.

8 . Strengthens Body's Skeletal Frame: ⁷

Made by watering down yogurt, buttermilk contains all the goodness of milk and more. It is a rich source of calcium, an essential building block for the bones and skeletal system of the body. It also helps the teeth become strong. You can give your child buttermilk for strong and healthy bones and teeth. The calcium in this drink gets absorbed by the bone tissue and helps in maintaining bone density. It also provides nourishment to the tissues of the heart and other organs, including nerves and muscles.

9 . Raises Immune Levels By Warding Off Illnesses: ⁷

This drink is rich in lactic acid bacteria. This bacterium boosts the immune system and helps the body fight off detrimental pathogens present in everyday foods. Many benefits of buttermilk are related to keeping illnesses at bay by acting on bacteria. As it has almost half the amount of calories than whole milk and also significantly lower fat content, it can be consumed without hesitation by weight watchers, those suffering from obesity related issues and diabetes. It also helps keep blood pressure in check. Special proteins in buttermilk regulate the blood pressure and the high levels of elements such as calcium, potassium and magnesium help in lowering blood pressure. However, do not add excess salt as it diminishes the good properties of this nutritive drink. As a probiotic, it is active against vaginal infections and infections of the urinary tract. Candida infections are a common problem in diabetic women and consumption of buttermilk regularly has shown a decrease in such incidences.

10. Natural Therapy Against Ulcers: ^{7,8}

Several case studies have been documented to prove that drinking buttermilk is a natural therapy against ulcers. As buttermilk helps neutralize acids in the stomach by coating the stomach lining, it prevents heartburn and keeps the acids from moving up into the oesophagus. This drink is great for people suffering from GERD. Overall, because of its cooling effect, ulcers too are prevented from erupting.

11. Can Be Used To Treat Haemorrhoids:^{7,8}

Here comes one of the most effective health benefits of buttermilk. If you are suffering from haemorrhoids and have tried several medications with no suitable results, then try adding a cup of buttermilk to a mixture of rice and banana. Consume it twice a day to get some respite from haemorrhoids.

12. Aids In Building Body Mass:⁸

Buttermilk also increases protein intake. Every cell in the body comprises of proteins. All tissues depend on proteins to repair damage and maintain themselves. As this drink is amply rich in proteins, which is essential for building muscles, buttermilk is the drink of choice for many body builders. It provides vitamins for good body health and is nutritious without adding unnecessary calories. Protein is the key for robust bones, tough muscles and healthy skin. This makes buttermilk indispensable in any diet regimen.

Indication of Takra in combination with different Drugs⁹

Even though *Takra* is considered as *tridosahara* it can be used along with combination of different drugs to enhance its *doshahara* property.

1. In *Vataja* disorders *Takra* along with *saindhavalavana* (rock salt).
2. In *pittaja* disorders *Takra* along with *sharkara* (sugar).
3. In *kaphaja* conditions *Takra* with *kshara* (alkali) and *trikatu* (*pippali*, *shunti*, *maricha*).

4. Along with *hingv* (asafoetida), *jeeraka* (cumin seeds), *saindhavalavana* (rock salt) in *grahani* (mal absorption syndrome), *arshas* (haemorrhoids), *atisara* (diarrhoea), *rochana*, *pustiprada*, *balya*, *bastishulavinashana*.

Contraindication for *Takrasevana*^{9,10,11}

Even though *takra* is considered as *tridoshashamaka* and *amrutasamana*, it is contraindicated in few conditions. It is mainly contra indicated in *pitta* and *vata* associated conditions. Few contraindications mentioned in classics are, *Kshata* which refers to *urakshata*, *Ushnakala* referring to *greeshmartu*, *Durbala*, *Murcha*, *Bhrama*, *Daha* and *Raktapitta*.

DISCUSSION^{9,10,11}

Buttermilk has characteristically sour taste. Increased acidity of buttermilk is primarily due to lactic acid produced by lactic acid bacteria; while fermenting

lactose, the primary sugar in milk. The tartness of buttermilk is due to acid in the milk. As the bacteria produces lactic acid, the pH of the milk decreases and casein, the primary milk protein, precipitates, causing the curdling or clabbering of milk. This process makes buttermilk thicker than plain milk. Probiotics and Prebiotics combined maintain growth of bacteria in the colon. Prebiotics refers to the indigestible food which passes into the colon unabsorbed by the upper intestinal

tract where they act as a medium for growth of the good bacteria. Probiotics refers to the good bacteria living in the colon and their helpful activities often leading to the good health of the intestine. Buttermilk has probiotic qualities that help to regulate the functions of gastrointestinal system. This is because probiotics

introduce healthy bacteria into body, particularly into the digestive tract, where bacteria are essential for the breakdown and absorption of foods and their nutrients.

Factors like unhealthy food habit, repeated intake of antibiotics can decimate the healthy bacteria in the intestines, allowing unhealthy bacteria to flourish. A

regular source of probiotics like buttermilk is important, as it will help to maintain normal gut

flora to support optimal digestion and overall health.

CONCLUSION

BUTTERMILK A KEY TO GOOD HEALTH

As *Takra* helps in proper digestion as it has *tridoshahara* property .

And it is mainly indicated in disorders related to gastrointestinal tract. Since buttermilk contains almost all vitamins, minerals, energy,protein, it can be considered as a part of balanced diet to maintain the health. As it contains probiotic which facilitates proper digestion and absorption process, it maintains proper metabolism to keep the person free from diseases....

So Drink a glass of Buttermilk and stay happy and refreshing .

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