#### **REVIEW ARTICLE**

# Medicinal Properties and Therapeutic uses of *Takra* (Buttermilk) and its Preparations

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#### Abstract

*Takra* or Buttermilk is prepared by churning the curd / yoghurt. It is a good after-drink especially after consuming food made of pulses, vegetables and grains. It stimulates the power of digestion and has special importance in the treatment of many disorders like hemorrhoids, IBS and other abdominal disorders. It is either administered alone or in combination with different herbs. As buttermilk has immense health benefits and destroys various maladies, its usage is recommended in Ayurveda. When buttermilk is used judiciously, it alone can prevent and treat various disorders. Buttermilk resembles the moon, jasmine and conch shells by its hue. Buttermilk is ambrosia to humans as it provides nourishment and strength. The preparation of buttermilk, its properties, benefits and forms of administration in different health problems are well explained in Ayurveda texts.

#### Keywords

Buttermilk, Buttermilk Uses, Takra



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#### **INTRODUCTION**

*Takra* or Buttermilk is prepared from curd and has acquired different names as per the method of preparation. The best buttermilk, which is advised in Ayurveda, is the one, which is prepared by separating fat from the curd by churning and then adding equal quantity of water to it. This buttermilk is neither too thick nor too thin and has the following properties and actions<sup>1, 2</sup>.

- *Rasa (Taste) Madhura* (Sweet), *Amla* (Sour), *Kashaya* (Astringent)
- Guna (Properties) Laghu (Light)
- Vipaka (Taste after digestion)-Madhura (Sweet)
- Veerya (Potency) Ushna (Hot)
- Doshakarma (Action on Doshas)-Kapha and Vata Pacifying; Does not aggravate Pitta
- Karma (Actions) Dipana (Appetizer), Agni vardhaka (Increases digestive fire)
- Indications Shotha (Edema), Gara (Sub-acute toxin accumulation), Atisara (Diarrhea), Grahani (IBS), Pandu (Anemia), Arsha (Hemorrhoids), Pliha (Splenomegaly), Gulma (Growth / swelling in the abdomen).
- *Effect on three Doshas* It is sour in taste, which is likely to cause aggravation of *Pitta*, but because of its sweet after taste, it does not cause

aggravation of *Pitta*. Therefore, it neither aggravates nor alleviates *Pitta*. As it is not unctuous and has astringent taste, hot potency and the property to dilate the channels, it is useful for counteracting the aggravated *Kapha*. Because of its density, sweet and sour taste, it is useful for pacifying aggravated *Vata*.

General use of Buttermilk Buttermilk is beneficial for all three Doshas in combination with suitable herbs / adjuncts. Buttermilk that is sour and mixed with dry ginger and rock salt is beneficial in Vata aggravation. Buttermilk, which is sweet and mixed with sugar, is good for Pitta and buttermilk that is mixed with salt and Trikatu is the best to pacify aggravated Kapha. Acharya Charaka states that buttermilk when taken regularly is the best medicine for Grahani (IBS), Shotha (Edema), Arshas (Hemorrhoids) and Ghrit vyapat (disorders arising out of excessive ghee intake). Buttermilk freshly churned and consumed does not cause burning sensation during the process of digestion. Such burning sensation takes place only if the buttermilk is kept for sometime after churning when it becomes sour.

#### VARIETIES OF BUTTERMILK

*Bhavamisra* has classified buttermilk into five types based on the method of preparation<sup>3</sup>: -

- Ghola (Yoghurt) obtained by churning curd without adding water and without removing butter. It pacifies Vata and Pitta dosha.
- Madita (Churned curd) prepared by churning curd and removing butter but without adding water. It pacifies *Kapha* and *Pitta dosha*.
- Takra (Buttermilk) obtained by adding 1/4<sup>th</sup> quantity of water to *Madita*. It pacifies *Vata* and *Kapha dosha*. It has the same properties as explained in the above paragraph.
- Udasvit obtained by adding <sup>1</sup>/<sub>2</sub> the quantity of water to Madita. It increases Kapha dosha.
- 5. *Cachika* obtained by adding large quantity of water to *Madita*. It pacifies *Vata dosha* and increases *Kapha dosha*. *Acharya Charaka* and *Vagbhata* have mentioned three types of buttermilk while explaining the treatment of hemorrhoids.
- 1. Buttermilk from which fat is completely removed
- 2. Buttermilk from which half of the fat is removed

3. Buttermilk from which fat is not at all removed

## USE OF BUTTERMILK IN *GRAHANI* DOSHA (IBS)

*Grahani Dosha* (IBS) is caused due to the suppression of *Agni* (Power of digestion). For patients suffering from *Grahani Dosha* (IBS), buttermilk is an excellent drink because it stimulates the power of digestion, has light to digest and bowel binding properties<sup>4</sup>. *Vagbhata* advises buttermilk as a drink when *Ama* (Undigested material / toxins) is present in *Grahani* (IBS)<sup>5</sup>.

#### Benefits of Takrarishta in Grahani (IBS)

Takrarishta is a sour, fermented preparation from buttermilk; Yavani, Amalaki, Pathya, black pepper and five types of salts. Takrarishta is advised in Grahani dosha (IBS), Shotha (Edema), Arshas (hemorrhoids), Gulma (Abdominal tumors), Krimi (Parasitic infestation). Meha (Obstinate urinary disorders including diabetes) and Udara Roga (Obstinate abdominal disorders including ascites). Takrarishta stimulates power of digestion<sup>6</sup>.

## Buttermilk recipes for the treatment of *Grahani Roga* (IBS)

- In Grahani Roga (IBS), powder of drugs of Pachana (digestive), Grahi (bowel binding) and Dipana (carminative / that which improve digestive power) groups along with buttermilk or buttermilk alone is beneficial<sup>7</sup>. Dalhana explains that Pachana Gana is Haridradi gana, Sangrahi gana is Ambasthadhi gana and Dipaniya gana is Pippalyadi gana.
- *Takrarishta* (Fermented preparation of buttermilk) or sour Buttermilk is advised in *Grahani* (IBS) caused due to aggravated *Kapha*. Though freshly prepared buttermilk is astringent in taste and good for pacifying *Kapha*. But for stimulating digestive fire, sour type of buttermilk is beneficial and hence it is recommended in *Grahani* (IBS) caused due to aggravated *Kapha*<sup>8</sup>.
- All recipes of buttermilk described in Jathara (Ascites) and Arshas (Hemorrhoids) is useful for Grahani dosha (IBS).

## USE OF BUTTERMILK IN ATISARA (DIARRHEA)

In diarrhea, buttermilk is advised as a drink as well as light food is advised with buttermilk. Following are the recipes with buttermilk mentioned in different textbooks of Ayurveda for the treatment of diarrhea<sup>9,</sup> 10, 11, and 12

- Buttermilk added with powder of *Chitraka* or powder of tender fruits of *Bilwa* cures *Jatara Amaya* (diseases or the abdomen) including diarrhea.
- Thick gruel prepared with curd or buttermilk processed with *Bilva*, *Musta*, *Lodhra*, *Dhatakipushpa* and dry ginger cures *Pakvatisara* (Diarrhea which is devoid of *Ama dosha* / undigested food material).
- Consuming buttermilk with honey and sugar every day before meal helps in *Raktatisara* (Dysentery with blood discharge).
- *Khala* (buttermilk boiled with spices / herbs) added with paste of tender fruits of *Bilva* and equal quantity of paste of sesame seeds, mixed with water of curds, which is sour and fat cures *Pravahika* (Tenesmus).
- *Khala* (buttermilk boiled with herbs / spices) prepared with *Vidanga*, *Kapitha*, dry ginger, black pepper

and *Changeri* mixed with buttermilk and *Kolamla* is effective in the treatment of diarrhea of *Kapha* origin.

- Powder of *Patha*, *Mocharasa*, *Ambhoda*, *Dhataki*, *Bilwa* and dry ginger consumed mixed with jaggery and buttermilk is effective in diarrhea though very severe.
- Bida lavana, tender fruits of Bilva and dry ginger macerated with a sour juice, added with scum of curds / whey, then fried in a mixture of oil and ghee and consumed is beneficial in case of scanty stools.
- Ghola (Buttermilk obtained by churning curd without adding water and without removing butter) added with asafetida, cumin and rock salt is the best to pacify Vata dosha. It is nourishing, strength promoting and improves taste. It is ideal for patients suffering from diarrhea, hemorrhoids as well as bladder pain.

## USE OF BUTTERMILK IN UDARA ROGA (OBSTINATE ABDOMINAL DISORDERS INCLUDING ASCITES)

Buttermilk, which is not very thick, which is sweet (not sour) in taste and which is free

from fat is useful for the patient suffering from *Udara Roga* (obstinate abdominal disorders including ascites).

Different recipes of Buttermilk in *Udara Roga* (obstinate abdominal disorders including ascites)

- Narayana Churna is a therapeutic medicine in powder form, best administered with buttermilk for Udara Roga (obstinate abdominal disorders including ascites)<sup>13</sup>.
- In *Sannipatika* type of *Udara Roga* (obstinate abdominal disorders including ascites), caused by the aggravation of all three *Doshas* buttermilk along with *Tryushna* (*Trikatu*), alkalies and rock salt is advised.
- In Vata type of Udara Roga (obstinate abdominal disorders including ascites) caused by the aggravation of Vata dosha, buttermilk with Pippali (long rock is and salt pepper) recommended.
- In *Paittika* type of *Udara Roga* (obstinate abdominal disorders including ascites) caused by the

aggravation of *Pitta Dosha*, buttermilk that is sweet (freshly churned and sweet) and added with sugar and powder of *Madhuka* is advised.

- In Kaphaja type of Udara Roga (obstinate abdominal disorders including ascites) caused by aggravation of Kapha dosha. buttermilk added with Yavani, rock salt, Ajaji and Trikatu mixed with honey is advised. This buttermilk should be slightly warm and it should not contain much of fat.
- In *Plihodara* (abdominal distension caused by enlargement of spleen) buttermilk should be taken along with honey, oil and the powder of *Vacha, Sunthi, Satahva, Kushta* and rock salt.
- In *Jalodhara / Udakodara* (distension of abdomen due to fluid secretion) buttermilk prepared from well-formed curd should be taken along with the powder of *Trikatu*.
- In *Baddhodara* (distension of abdomen due to intestinal strangulation), buttermilk added with *Hapusha*, *Yavani*, *Ajaji* and rock salt is useful.

• In *Chidrodhara* (abdominal distension caused by intestinal perforation) buttermilk should be along with *Pippali* (long pepper) and honey.

### USE OF BUTTERMILK IN ARSHAS (HEMORRHOIDS)

In Ashtanga Hridaya, use of buttermilk is explained in well the treatment of hemorrhoids. Buttermilk should be used for drinking either at the end or middle of meals. This helps downward movement of feces. flatus and thereby subsiding hemorrhoids and increasing Agni (Digestive fire).

Acharya Charaka has explained the following three types of buttermilk in the treatment of hemorrhoids<sup>14</sup>.

- *Ruksha Takra* (No fat buttermilk) obtained by churning the curd and removing the fat completely. This is useful in hemorrhoids caused by the predominance of *Kapha*, if the power of digestion is extremely weak and physical strength is low.
- *Eshatsnigdha Takra / Ardhodghrita Sneha* (Moderate fat buttermilk) obtained by churning the curd and removing only half the fat. This is

useful in hemorrhoids caused by the predominance of *Pitta*, if the power of digestion is moderate and physical strength is moderate.

• *Snigdha Takra / Anudghrita Sneha* (Full fat buttermilk) obtained by churning the curd without removing fat. This is useful if the hemorrhoids are caused by the predominance of *Vata* and if the power of digestion and physical strength are much better.

Above three varieties of buttermilk should be administered depending upon the nature of *Doshas* involved in causation of the disease, strength of digestive fire of the patient and his strength.

# Buttermilk preparations in Arshas (Hemorrhoids)

All patients should take buttermilk in the morning. Again during the day, buttermilk or recipes of buttermilk are indicated depending upon the strength of the digestive fire of the patient<sup>15</sup>.

- If the power of digestion is weak, only buttermilk should be given again in the evening.
- If the power of digestion is slightly better, then the patient should be

buttermilk in given only the morning, and in the evening, he should be given Takravalehya prepared adding (linctus by buttermilk to the roasted flour of fried paddy). After the buttermilk taken in the morning is digested, Takrapeya (thin gruel prepared by adding buttermilk) should be given in the evening along with rock salt.

If the power of digestion is still better, then morning meal remaining the same (only buttermilk), the patient should be given Takraudana (rice mixed with buttermilk) added with fat / ghee or boiled rice mixed with more of buttermilk followed by buttermilk as postprandial drink in the evening. Also he may be given vegetable soup or meat soup along with buttermilk in the evening. Alternatively, vegetable soup as well as meat soup prepared by boiling with buttermilk can be given to him. The buttermilk therapy should be given for either 7 days or 10 days or 15 days or 1 month depending upon the strength of the patient, time / season and nature of the disease. According to *Jatukarna*, the quantity of buttermilk should be gradually

increased and decreased. Maximum limit of buttermilk therapy is one month. Thereafter the quantity of buttermilk should be decreased gradually in the same ratio as was followed for increasing it in the beginning. While decreasing the quantity of buttermilk, the quantity of remaining food taken by the patient should be gradually increased to maintain the total quantity of food intake. That is, the food ingredients should be increased in same quantity in which the buttermilk is reduced. Adoption of this procedure will promote and maintain his energy and maintain the strength of the digestive power and promote his strength, plumpness as well as complexion.

### Administration of Buttermilk in Arshas (Hemorrhoids)

Buttermilk when administered with different herbs is effective in the treatment of hemorrhoids. *Acharya Charaka* and *Vagbhata* have mentioned the following recipes<sup>16, 17</sup>.

- Haritaki is advised with buttermilk. This acts as a laxative.
- 2. *Tarpana* (refreshing drink prepared with roasted corn flour) mixed with

buttermilk added with either *Kapitha* or *Bilva* or *Cavya* and *Chitraka* or *Bhallataka* or *Bilva* and *Nagara* or *Yavani* or *Chitraka* is recommended.

- 3. *Chitraka*, *Hapusha* and *Hingu* mixed with buttermilk are effective.
- 4. Buttermilk added with *Panchakola* is advised.
- 5. Thick gruel prepared by boiling with either Sati and Palasha or Pippali (long pepper) and dry ginger made sour by adding buttermilk and sprinkled with the powder of black pepper is useful for the patient suffering from hemorrhoids.
- 6. The inside wall of an earthen jar should be smeared with the paste of root bark of *Chitraka* and in this jar curd should be prepared. Intake of this curd or buttermilk prepared out of this cures hemorrhoids.
- Kalaseya (Buttermilk well churned) is the best for all types of hemorrhoids and in all seasons. It gives strength and removes the Doshas and wastes.
- Powder of rock salt, Vahni, Kalinga, Yava, Chirabilwa, Mahapichumanda, well mixed with churned buttermilk when consumed

for 7 days helps in treating hemorrhoids.

- 9. For swelling and pain in the rectum, poor digestion and disorders of the abdomen buttermilk should be administered with *Hingvadi Churna* or with *Kalinga*, *Magadha*, *Chitraka* and *Surana*.
- 10. Administration of buttermilk mixed with the powder of roots of *Kovidara* along with suitable food is effective in the treatment of hemorrhoids.
- 11. Buttermilk or curd kept overnight in a pot smeared the interior of which is inside with paste of *Chitrakamula*, is recommended for intake the next morning, for the treatment of hemorrhoids. Similarly those prepared with paste of *Bharngi*, *Asphota*, *Amrita* and *Panchakola*.
- 12. Buttermilk kept overnight in a pot smeared inside with the paste of fruits if *Kshudra Brhati* and well churned the next morning and consumed helps in the treatment of hemorrhoids.
- 13. Eating the fruits of *Pilu* for one month with buttermilk is effective in the treatment of hemorrhoids.
- 14. Buttermilk mixed with pomegranate juice, *Ajaji*, *Yavani*, jaggery and dry

ginger or *Patha* helps in downward movement of flatus and feces.

### Yapana Yoga (Recipes for continuous use) in Arshas (Hemorrhoids)

*Acharya Susrutha* has explained various recipes of buttermilk for continuous long-term use for the treatment of hemorrhoids. They are as below<sup>18</sup>.

- Buttermilk added with powder of Bhallataka and Saktu Mantha (Groat) and devoid of salt.
- Buttermilk either sour / not sour placed in a pot smeared inside with the paste of roots of *Chitraka* may be used for drinking / consumed along with food.
- Partaking buttermilk daily as food.
- Buttermilk mixed with paste of *Kutaja* and roots of *Vandaka*.
- Buttermilk processed with *Bhrangi*, *Asphota*, *Yavani*, *Amalaka* and *Guduchi*.
- Buttermilk processed with *Panchakola*, *Vidanga* and Haritaki.
- Intake of buttermilk alone as much as desired, without any other food for one month. This also helps in weak digestive power.

# Benefits of *Takrarishta* in *Arshas* (Hemorrhoids)

Buttermilk kept in a pot smeared inside with ghee is mixed with powder of Hapusha, Kunchika, Dhanya, Ajaji, Karavi, Sati, Pippalimula, Chitraka. Pippali, Gaja Pippali, Yavani and Ajamoda and allowed to ferment. When it becomes not very sour but of perceptible sour and pungent tastes, it should be consumed as much as desired. This recipe is called *Takrarishta*, which is very delicious. This drink should be taken in appropriate dose during the beginning, middle and end of meals, to overcome thirst. It stimulates digestion, improves appetite, promotes complexion, helps in downward movement of Kapha and Vata dosha, cures swelling, itching and pain of the rectum and increases strength<sup>19, 20</sup>.

# Buttermilk in *Raktarshas* (Bleeding Hemorrhoids)

Onion cooked with buttermilk, *Upodika* along with sour vinegar prepared from *Badara* or soup of red lentil made sour by adding buttermilk helps to stop bleeding in bleeding hemorrhoids<sup>21</sup>.

### Buttermilk as an after drink in Sushkarshas (Dry Hemorrhoids)

Buttermilk is an excellent after drink for patients suffering from hemorrhoids caused by the predominance of aggravated *Vata* (that is Dry hemorrhoids), having weak digestive power and dryness. Buttermilk helps in downward movement of flatus and stools<sup>22</sup>.

# Importance of Buttermilk in Arshas (Hemorrhoids)

Hemorrhoids in anus, once cured by the administration of buttermilk do not recur. When sprinkled over the ground buttermilk burns all the grass thereon, likewise, buttermilk therapy alone cures dry type of hemorrhoids and kindles digestive fire. There is no medicine better that buttermilk for the treatment of hemorrhoids caused by the predominance of aggravated *Vata* and *Kapha* dosha. Depending upon the *Dosha* involved, it should be taken along with fat (for *Vata*) or in ununctuous form (for *Kapha*)<sup>23</sup>.

## USE OF BUTTERMILK IN SOTHA (EDEMA)

Well-churned buttermilk, which is not sour, is the best after drink for edema. It is also to be noted that curd is considered as unwholesome in edema<sup>24</sup>. It is probably because unlike buttermilk, curd is heavy to digest and takes longer time for digestion, increases *Kapha*, *Pitta* and *Medas*; also when curd is consumed at night, it has a tendency to block the micro channels of circulation, hence not recommended for use in edema. Buttermilk when administered with suitable herbs is effective in the treatment of edema<sup>25</sup>.

- If a patient of edema suffers from poor digestive fire, difficulty in passing stools, and stools having symptoms of *Ama dosha* (undigested material), being heavy and split particles, buttermilk added with *Vyosha, Sauvarchala* salt and honey or jaggery and *Abhaya* / jaggery and dry ginger followed by intake of buttermilk as an after drink is recommended.
- Chitraka ghrita (Medicated ghee), prepared by cooking paste of Chitrakamula and buttermilk is an excellent recipe for diabetes, hemorrhoids, edema, diarrhea and swelling / growth in the abdomen caused due to aggravated Vata dosha. It promotes digestive power.
- If a person is suffering from edema caused due to aggravation of *Kapha*

dosha and if there is obstruction of micro channels of circulation, poor digestion, loss of taste and abdominal rigidity, *Kshara Churna* (alkali preparation) mixed with buttermilk should be consumed daily.

## USE OF BUTTERMILK IN *GULMA* (SWELLING / GROWTH IN ABDOMEN)

Buttermilk is considered as wholesome drink in *Gulma* (Swelling / growth in abdomen). Following preparations mixed with buttermilk are effective in *Gulma* (Swelling / growth in abdomen)<sup>26</sup>.

- *Ksharagada* (alkali preparation) consumed with buttermilk is effective in the treatment of swelling / growth in abdomen, hemorrhoids, ascites, parasitic infestation, mis peristalsis, scrotal enlargement, IBS, renal calculus, diseases of vagina and disorders of semen.
- Buttermilk sprinkled with powder of *Yavani* and made saline by adding rock salt stimulates power of digestion and helps in downward movement of *Vata, Kapha* and urine.

# USE OF BUTTERMILK IN *CHARDI* (VOMITING)

In vomiting caused due to aggravated *Kapha Dosha*, buttermilk is advised as drink. Buttermilk cooked by adding *Trikatu* or Neem is also beneficial<sup>27</sup>.

# USE OF BUTTERMILK IN *PRAMEHA* (DIABETES)

The beverage *Srikukkuta* (sour buttermilk processed with residue of sesame and mustard seeds, after extracting the oil) is suitable in diabetes<sup>28</sup>.

## USE OF BUTTERMILK IN *MUTRAKRICHRA* (DYSURIA)

*Bhavamisra* has advised the use of *Ghola* (Buttermilk obtained by churning curd without adding water and without removing butter) mixed with jaggery in dysuria<sup>29</sup>.

### USE OF BUTTERMILK IN PANDU ROGA (ANEMIA)

Buttermilk is an ideal after drink in anemia. The following two recipes when administered with buttermilk are effective in anemia<sup>30, 31</sup>.

• *Ghola* (Buttermilk obtained by churning curd without adding water

and without removing butter) mixed with *Chitraka* is advised in anemia.

- Powder of *Vyosha, Agni, Vella, Triphala, Musta, Ayoraja* (Iron fillings) consumed along with buttermilk helps in the treatment of jaundice, anemia, heart diseases, skin diseases, hemorrhoids and diabetes.
- Pills made from *Mandura* boiled in cow's urine and added with *Tapya*, *Darvi*, *Cavya*, *Granthika*, *Devadaru*, *Vyosha*, *Agni*, *Vella*, *Musta*, *Triphala* is administered and buttermilk is advised for consumption as food. This helps to bestow health in people suffering from anemia, skin diseases, poor digestion, edema, stiffness of thighs, loss of taste, hemorrhoids, jaundice, diabetes and disorders of spleen.

### CONTRAINDICATIONS FOR THE USE OF BUTTERMILK

Although buttermilk is beneficial in various disorders, its use is prohibited in summer season. It is unwholesome for people who are emaciated, who suffer from hemorrhage, burning sensation, fainting and giddiness<sup>32</sup>.

### CONCLUSION

Buttermilk is like ambrosia for patients suffering from heaviness, anorexia, flatulence, suppression of the power of digestion, diarrhea and diseases caused by aggravated Vata and Kapha<sup>33</sup>. Buttermilk cleanses the channels of circulation as a result of which Rasa (the end product of digestion) reaches the tissue elements appropriately. This produces proper nourishment, strength, complexion and exhilaration, and cures hundreds of diseases including those caused by Vata and Kapha  $dosha^{34}$ .

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