CRITICAL EVALUATION OF TAKRA (BUTTERMILK) IN AYURVEDA

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Abstract: Our eating habits, physical activities, rest and sleep pattern are the principal factors that influence health and overall wellbeing. An irregular eating pattern implies the intake of meal at different intervals of time, avoiding important meals and/or frequently indulging in fat rich fast food or junk meals are very much affecting the human health. Takra (buttermilk) is a dietary product and is being used by Ayurveda from centuries. Takra is a product obtained by curd (Fermented product of milk). In Ayurveda the usefulness of Takra is mentioned in many topics like Arsha (Piles), Udar (Asities), Grahani (Sprue) etc. Along with this Ayurveda also mentioned the importance of Takra in disturbed condition of Agni (Digestive Fire). Takra acts as Tridoshshamak by means of its different Gunas (Properties). Takra is light for digestion hence is preferable in patients suffering from the diseases having Mandagni (Low digestive fire).

Due to these specialty Takra remains a key component while thinking about the medicine and dietary supplementations for the patients of Agni Vikriti (Abnormal condition of digestive fire).

Keywords: Takra, Buttermilk, Arsha, Udar, Grahani

Introduction: Ayurveda (The science of life) is a well-known traditional Indian System of Medicine, which has been in practice for more than 2000 years. Ayurvedic treatments are holistic, personalized and include not just drugs but also diet, exercise and lifestyle prescriptions. It recognizes “health” as not the mere absence of disease but a state of complete homeostasis between the three humors (Doshas), seven tissues (Dhatu), three types of waste products (Mala), digestion and metabolism, pleasant senses, mind, and soul.[1] This time-tested life science emphasizes the importance of the right kind of food for the formation and sustenance of body.[2] Carak, says that the body is the product of food and humans attain pleasure and sorrow (health and disease) because of wholesomeness and unwholesomeness of the diet.[3] The drugs and regimen which do not adversely affect the body and mind are regarded as wholesome; those which adversely affect them are considered to be unwholesome. But this cannot be accepted as a general rule in absolute terms. The drugs and regimen in fact change their qualities, depending on the dosage, season, and method of preparation, habitat and combination with other useful and harmful drugs. So the natural qualities of drugs and regimen as well as the conditions like dosage etc. are both required to be well ascertained before the administration of the requisite therapy in order to achieve the desired effect.[4] wholesome (Pathya) and unwholesome (Apathya) food and drinks for a disease are generally found described at the end of the chapter dealing with that particular ailment. Pathya supports a medicine to bring back the homeostasis of humours (Doshas), which are vitiated during disease condition.[5] Ayurveda states importance of Agni (Digestive Fire) through its compendiums to keep healthy status of the body in a healthy condition. Agni, if disturbed, can create many kinds of disorders. It is interesting to see how Takra acts as primary digestive aid in the diseases associated with the Agni. Takra can also be used as a Pathy Ahara (Beneficial diet) to maintain healthy status of the body. In this article the efforts has been taken to rule out the
importance of *Takra* (Buttermilk) from *Carak Samhita, Sushruta Samhita* & *Ashtanga Hridayam* (commonly known as *Bruhatatrayee*). Milk and preparation from fermented milk such as curd, buttermilk and *Ghee* (clarified butter) from a part and parcel of daily diet in India. Sanskrit poets have gone to the extent to say that several *Hindu* Gods would not have suffered from several diseases if buttermilk had been made available in heaven.\(^6\)

Detailed properties and uses of milk and milk products have been described under separate chapter in classical Ayurvedic literature. At the same time contraindications or cautions of use of these products have also been stated. *Panchagavya*, the five products of cow namely milk, curd, *Ghee*, urine and dung have been an inseparable part of Hindu rituals. Cow’s milk, curd and *Ghee* have been considered important among five elixirs on earth (*Panchamrita-cow’s milk, curds, Ghee, sugar and honey*).\(^7\)

In *Charak Samhita, Takra* is mentioned in *Agyra Dravyas* (The most preferable *Dravya* in its group). *Takra* by means of its different *Gunas* (Properties) acts as Tridoshamak (It decreases *Kapha, Vata* and do not allow *Pitta* to aggravate). Due to this specific property it is very useful in the patients suffering from Agni Vikriti (Abnormal conditions of digestive fire) having different kinds of *Dosha Dushti* (Abnormal condition of *Dosha*) and having different kinds of *Prakriti* (Constitution). Hence *Takra* is an important component in treating the patients suffering from the diseases related with Agni.

**Properties and Actions of Milk and Milk Products:** Milk is generally sweet, unctuous, cool, lactogenic refreshing, nourishing, libido-stimulant, useful for intelligence, strength-giving, useful for mental faculties, invigorating, fatigue-dispelling, reliever of dyspnoea and bronchitis; it cures *Raktapitta* and helps healing of wound. It is wholesome for all living beings, and is alleviator and eliminator of *Dosha*. It quenches thirst and is appetizer. It is exceedingly useful in *Kshatakhina, Pandu, Amlapita, Shosha, Gulma, Udar, Atisara, Jvara, Dhaha* and *Pitta* and *Shotha*. It is also useful in diseases of female genital tract, male reproductive system, oliguria and hard stool. It is wholesome diet for those suffering from disease due to *Vata* and *Pitta*. The animal whose milk is therapeutically useful are sheep, she-gote, cow, she-buffalo, she-camel, she-elephant, mare and women. The properties and pharmacological action of milk of eight different animal have been mentioned in the classical *Ayurveda* texts. Depending on the animal source, the qualities of milk (such as taste, potency and post digestive action) vary.

**Table 1: Types of milk, properties and uses**\(^8\)

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Type of milk</th>
<th>Properties</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><em>Go Kshira</em></td>
<td>Sweetness, coldness, softness, unctuousness, density, smoothness, slimness, heaviness, slowness and clarity.</td>
<td>Increases life force (<em>Ojas</em>). Best among the rejuvenators and vitalizers (<em>Rasayanus</em>). Excellent pacifier of <em>Vata</em> and <em>Pitta</em>.</td>
</tr>
<tr>
<td>2.</td>
<td><em>Mahishakshira</em> (Buffalo Milk)</td>
<td>It is heavy, cold and more unctuous than the cow’s milk.</td>
<td>Useful in insomnia and rapid digestion.</td>
</tr>
<tr>
<td>3.</td>
<td><em>Ushtra Kshira</em> (Camel’s Milk)</td>
<td>It is ununctuous, hot, slightly saline and light.</td>
<td>Usefull for persons suffering from <em>Anaha</em> (Constipation), Parasitic infection, Oedema, Ascites, Piles and other diseases due to the vitiation of <em>Vata</em> and <em>Kapha</em>.</td>
</tr>
<tr>
<td>4.</td>
<td><em>Ekashapha Kshira</em> (Milk of one hoofed animals like horse or ass)</td>
<td>Hot, sour, saline, ununctuous and light.</td>
<td>Strength promoting, stabilizing, alleviator of <em>Vatika</em> diseases of extremities.</td>
</tr>
<tr>
<td>5.</td>
<td><em>Aja Kshira</em> (Goat’s Milk)</td>
<td>It is astringent as well as sweet in texture, cold, bowel-binding and light.</td>
<td>Useful for persons suffering from <em>Raktapitta</em>, diarrhea, consumption, coughing and fever.</td>
</tr>
<tr>
<td>6.</td>
<td><em>Avika Kshira</em> (Sheep’s Milk)</td>
<td>Hot.</td>
<td>Aggravates hiccup and dyspnoea, alleviates <em>Pitta</em> and <em>Kapha</em>.</td>
</tr>
<tr>
<td>8.</td>
<td><em>Manusha Kshira</em> (Human Milk)</td>
<td>Suitable to everyone, unctuous.</td>
<td>Vitalizer, Promotes strength, useful in hemmoraghes. Used as nasal drops to treat diseases oh head and neck and eye disorders.</td>
</tr>
</tbody>
</table>

Milk is a rejuvenative (*Rasayana*) and extremely beneficial to children, elderly people, the emaciated, hungry and weak.\(^9\) However Vagbhata cautions that, uncooked milk produces excess secretions and blocks the body channels (*Abhishyandi*), not easily digestible and therefore can cause diseases related to indigestion. Too much of boiling is also said to make it very
Critical Evaluation of Takra (Buttermilk) in Ayurveda

heavy to digest. Milk generally should not be given to those who are suffering from Kapha driven disorders. It is advised not to consume milk with sour fruits.[10]

**Takra (Buttermilk):** Takra is obtained from curd (Dadhi) after churning well with water. Takra is sweet, sour, with anstringent as subsidiary taste. Ushanavirya light, rough, stimulates Agni, alleviates artificial poison, oedema, diarrheea, disorders of Grahani, Panduroga, piles, splenomegaly, gulma, ascitis, anorexia, irregular fever, thirst, vomiting, excessive salivation, colic, fat, Kapha and Vata; is sweet in Vipaka, agreeable, eliminates dysuria and complications of oleation therapy and is non-aphrodisiac.[11][12] Acharya Sushruta told Takra is that from which fat is separated by churning etc. which has one-half water, is neither too thick nor too thin and sweet, sour and astringent in the taste. That which has full fat churned without adding water is known as ‘Ghole’. Ghole has properties of curd.[13]

**Type of Takra:** On the basis of cream content Acharya divided Takra in three different categories as[15]

- **Ruksha Takra:** Udhrutasneha- Buttermilk without cream.
- **Eashatsnigdha Takra:** Ardhudhrutasneha- Takra with half removed cream.
- **Snigdha Takra:** Anudhruta Takra – Takra with cream.

The medieval period lexicon, Bhavaprakash Nighantu details the different methods of buttermilk preparation based on the quantities of water used, while churning the curd along with the uses.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Types of buttermilk (Takra) based on water content[16]</th>
<th>Physical features and preparation</th>
<th>methods of preparation</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ghole</td>
<td>Churning the curd without adding water obtained creamy, semisolid product.</td>
<td>It is relishing and pacifies Vata-Pitta Doshas.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Mathita</td>
<td>Churning the curd without water but creamy portion is separated.</td>
<td>Pacifies Pitta-Kapha Doshas.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Udaswita</td>
<td>Curd is churned well with half the quantity of water</td>
<td>Gives strength and Amanashak but increases Kapha</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Takra</td>
<td>Solid and creamy portion is completely separated by churning with four parts of added water to curd. It is astringent, sour and sweet.</td>
<td>Increases digestion and prevents water loss from the body. Best diet for those suffer from abdominal disorders.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Chachika</td>
<td>Curd is churned twice to remove solids (creamy portion) completely with adding larger amount of water</td>
<td>Pacifies Pitta and Vata and increases the Kapha. Cold and light. Eliminates thirst and tiredness, increases digestion.</td>
<td></td>
</tr>
</tbody>
</table>

**Indication of Takra:** Takra is recommended in cold seasons, deficiency of digestive power, diseases caused by Kapha, obstruction in channels and vitiated Vata.[17]

**Contraindication of Takra:** Takra should not be given in case of wound, hot season (Autumn and Summer), debilitated persons and fainting, giddiness, burning sensation and disorders of blood and Pitta.[18]

**Importance of Takra:** Charaka Samhita mainly underlines the importance of Takra by various quotes. Charak mentioned that Takra is very useful in following condition[19]

- Shotha (Swelling)
- GrahaniDosha (Sprue)
- Mutragrah (difficulty in micturation)
- Udara (Ascites)
- Aruchi (Anorexia)
- Snigdyapad (Complication due to overuse of oil therapy)
- GaraviShra (Low potency poison)
In Udara (Ascites) Charaka mention that Takra is very useful in following condition[20].
- Gaurav (Heaviness in the body)

- Arochak (Anorexia)
- Mandagni (Low Digestive Fire)
- Atisara (Diarrheea)
- Vata-Kapha Pradhan Vyadhi

In Arsha (Piles) topic the usefulness of Takra is mentioned in Vata- Kapha Pradhan Arsha. Further he stated that there is no other medicine on Vata- Kapha Pradhan Arsha as that of Takra.[21]

Charak stated that Takra can be used in three different manners on Dosha & Agni conditions[22].

**Ruksha Takra:** It is used when Kapka inceaes, Bala decrease and Mandagni

**Slightly Snigdha Takra:** It is used when Pitta increase, Bala decrease and Mandagni

**Snigdha Takra:** It is used when Vata increase, Bala decrease and Mandagni

The specialty of Takra is not limited with Udara & Arsha, but it has been proved a great importance in GrahaniDosha also. GrahaniDosha is a condition related with Agni Vikriti. In this condition Takra is useful by means of its-
• **Deepan** (Stimulates the power of digestion)
• **Grahi**
• **Laghavatva Property** (Lightness in the body)

**Use of Takra According to Dosha**[^23]

**Vata Dosha**: Sour buttermilk should be taken mixed with rocksalt.

**Pitta Dosha**: Sweet one mixed with sugar should be taken

**Kapha Dosha**: It should be added with *trikatu* and *Yavakshar*

Acharya mentioned *Takra* as useful treatment in the patient of *Ashtodara*. They also mentioned to use Takra of various Dravyas in different kinds of *Udara* as[^24].

**Vataj Udar Roga**: *Pippali + Lavana + Takra*

**Pittaja Udar Roga**: *Sharkara + Madhuka + Takra*

**Kaphaj Udar Roga**: *Yavani + Saindhava + Ajaji + Trikatu + Takra*

**Nichayaja Udra Roga**: *Trikatu + Kshara + Lavana + Takra*

**Pleehodara Udar Roga**: *Madhu+Taila+Vacha+Shunthi+Shathava+Kushtha+Saindhava+Takra*

**Jalodara Udar Roga**: *Trikatu + Takra*

**Badhhodara Udar Roga**: *Hapusha + Yavani + Ajaji + Saindhava + Takra*

**Chhidrodara Udar Roga**: *Pippali+Kshaudra+Takra*

**Takra Sevan Kal** (Time Period of Buttermilk Consumption): The physician acquainted with the specification of the strength of the patient as well as the nature of the season should give butter-milk for either 7 days or 10 days or 15 days or 30 days. They also warned not to overuse *Takra* after 30 days[^25]. They also described that the time and procedure of administration should not discontinue butter-milk all of a sudden. Butter–milk should be administered up to one month, and thereafter, it should be gradually withdrawn. It should be withdrawn gradually in the same quantity in which it was increased (in the beginning). While reducing butter-milk, the patient total food intake should not be reduced. Adoption of this procedure will-

• Promote and maintain his energy
• Maintain the strength of his digestive power
• Promote his strength, plumpness as well as complexion

**Other Uses of Takra**: *Takrarishtam- Kalp* prepared from *Takra* including various other ingredients is known as “*Takrarishtam*”. *Takrarishtam* is discussed in two different topics with different contains- *Arshaadhikara*[^26] (Piles) and *Grahanidoshaadhikar*[^27] (Sprue).

• *Taka* is also used for *Pachana* (Digestive) & *Grahi* (Constipative) in the form of *Peya*.[^28]

• *Taka* is also used in the complication of *Ghee & Oil*.[^29]

• *Taka* is used in *Pramehachikitsa* along with *Haritakichurna*.[^30]

• Acharya Charaka mentioned the importance of *Takra in Agryadrvyas* as- Regular use of *Takra* is useful in *Grahanidosa, Shotha, Arsha and complication of Ghrita* (Ghee) Consumption.[^31]

**Nutritional Values of Takra**: *Takra* is rich source of Potassium, Calcium, Phosphorus, Vitamin B12 and Riboflavin. *Takra* is a good aid for those suffering from digestive problems.

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>Content</th>
<th>Quantity</th>
<th>% Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>calories</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Total Fat</td>
<td>2.2 gm</td>
<td>4%</td>
</tr>
<tr>
<td>3</td>
<td>Saturated Fat</td>
<td>1 gm</td>
<td>8%</td>
</tr>
<tr>
<td>4</td>
<td>Cholesterol</td>
<td>10 gm</td>
<td>4%</td>
</tr>
<tr>
<td>5</td>
<td>Sodium</td>
<td>260 mg</td>
<td>10%</td>
</tr>
<tr>
<td>6</td>
<td>Total Carbohydrates</td>
<td>10 gm</td>
<td>4%</td>
</tr>
<tr>
<td>7</td>
<td>Protein</td>
<td>8 gm</td>
<td>15%</td>
</tr>
<tr>
<td>8</td>
<td>Vitamin A</td>
<td>130.00IU</td>
<td>2%</td>
</tr>
<tr>
<td>9</td>
<td>Vitamin C</td>
<td>5.00mg</td>
<td>4%</td>
</tr>
<tr>
<td>10</td>
<td>Calcium</td>
<td>-</td>
<td>30%</td>
</tr>
<tr>
<td>11</td>
<td>Thiamin</td>
<td>-</td>
<td>6%</td>
</tr>
<tr>
<td>12</td>
<td>Zinc</td>
<td>-</td>
<td>8%</td>
</tr>
<tr>
<td>13</td>
<td>Riboflavin</td>
<td>-</td>
<td>20%</td>
</tr>
<tr>
<td>14</td>
<td>Vitamin B-6</td>
<td>-</td>
<td>4%</td>
</tr>
<tr>
<td>15</td>
<td>Folate</td>
<td>-</td>
<td>4%</td>
</tr>
<tr>
<td>16</td>
<td>Vitamin B-12</td>
<td>-</td>
<td>10%</td>
</tr>
<tr>
<td>17</td>
<td>phosphorus</td>
<td>-</td>
<td>20%</td>
</tr>
<tr>
<td>18</td>
<td>Magnesium</td>
<td>-</td>
<td>8%</td>
</tr>
<tr>
<td>19</td>
<td>Potassium</td>
<td>370mg</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>Protein</td>
<td>16.55g</td>
<td>33.1%</td>
</tr>
<tr>
<td>21</td>
<td>Iron</td>
<td>0.25gm</td>
<td>1.4%</td>
</tr>
</tbody>
</table>
Conclusion: Buttermilk detoxifies body and cleanses the intestine, relieves constipation and helps to replenish intestine flora. It has less fat compared to milk and is rich in calcium, potassium and Vit B₁₂. Takra is very useful in the diseases associated with the Agni Vikriti. By means of its Rasa, Virya, Vipaka & Guna acts as Tridoshaghana. It is found very useful in Vata-Kapha Pradhan condition. Besides the usefulness of Takra in Grahanî. Arsha and Udara. Nutritional values also suggest that Takra also strengthen the immunity and helps to maintain the healthy by also preventing diseases.

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