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## 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 over all 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, Udara, 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 life style 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.<sup>[1]</sup> This time-tested life science emphasizes the importance of the right kind of food for the formation and sustenance of body.<sup>[2]</sup> 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.<sup>[3]</sup> 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.<sup>[4]</sup> 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.<sup>[5]</sup>

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* & *Ashtana Hridayam* (commonly known as *Bruhatrayee*). 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.<sup>[6]</sup>

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).<sup>[7]</sup>

In *Charak Samhita*, *Takra* is mentioned in *Agrya Dravyas* (The most preferable *Dravya* in its group). *Takra* by means of its different *Gunas* (Properties) acts as *Tridoshshamak* (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

**Table-1: Types of milk, properties and uses**<sup>[8]</sup>

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

Milk is a rejuvenative (*Rasayana*) and extremely beneficial to children, elderly people, the emaciated, hungry and weak.<sup>[9]</sup> However *Vagbhata* cautions that, uncooked milk produces

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, libidinal 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 *Kshatakshina*, *Pandu*, *Amlapita*, *Shosha*, *Gulma*, *Udar*, *Atisara*, *Jvara*, *Dhaha* and Specially in *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.

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

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.<sup>[10]</sup>

**Takra (Buttermilk):** *Takra* is obtained from curd (*Dadhi*) after churning well with water. *Takra* is sweet, sour, with astringent as subsidiary taste, *Ushnavirya*, light, rough, stimulates *Agni*, alleviates artificial poison, oedema, diarrhea, 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<sup>[11][12][13]</sup>. *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

#### Types of buttermilk (Takra) based on water content<sup>[16]</sup>

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

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

**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*.<sup>[18]</sup>

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

- *Shotha* (Swelling)
- *Grahanidosha* (Sprue)
- *Mutragraha* (difficulty in micturation)
- *Udara* (Ascites)
- *Aruchi* (Anorexia)
- *Snehvyapad* (Complication due to overuse of oil therapy)
- *Garavisha* (Low potency poison)

In *Udara* (Ascites) *Charaka* mention that *Takra* is very useful in following condition<sup>[20]</sup>-

- *Gaurav* (Heaviness in the body)

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.<sup>[14]</sup>

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

**Ruksha Takra:** *Udhrutasneha*- Buttermilk without cream.

**Eashatsnigdha Takra:** *Ardhodhrutasneha*- *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.

- *Arochak* (Anorexia)
- *Mandagni* (Low Digestive Fire)
- *Atisara* (Diarrhea)
- *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*.<sup>[21]</sup>

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

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

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

**Snigdha Takra:** It is used when *Vata* inceaes, *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*-<sup>[23]</sup>

**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* with various *Dravyas* in different kinds of *Udara* as<sup>[24]</sup>-

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

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

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

**Nichayaja Udar 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 Perriod 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<sup>[25]</sup>. 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*<sup>[26]</sup> (Piles) and *Grahanidoshaadhikara*<sup>[27]</sup> (Sprue).

- *Taka* is also used for *Pachana* (Digestive) & *Grahi* (Constipative) in the form of *Peya*.<sup>[28]</sup>
- *Taka* is also used in the complication of *Ghee* & *Oil*.<sup>[29]</sup>
- *Taka* is used in *Pramehachikitsa* along with *Haritakichurna*.<sup>[30]</sup>
- *Acharya Charaka* mentioned the importance of *Takra* in *Agyadravyas* as- Regular use of *Takra* is useful in *Grahanidosha*, *Shotha*, *Arsha* and complication of *Ghrita* (*Ghee*) Consumption.<sup>[31]</sup>

**Nutritional Values of *Takra*:** *Takra* is rich source of Potassium, Calcium, Phosphorus, Vitamin B<sub>12</sub> and Riboflavin. *Takra* is a good aid for those suffering from digestive problems.

*Nutritional Values of *Takra**<sup>[32][33][34]</sup>

S.NO.	Content	Quantity	% Value
1.	calories	-	100
2.	Total Fat	2.2 gm	4%
3.	Saturated Fat	1 gm	8%
4.	Cholesterol	10 gm	4%
5.	Sodium	260mg	10%
6.	Total Carbohydrates	10gm	4%
7.	Protein	8gm	15%
8.	Vitamin A	130.00IU	2%
9.	Vitamin C	5.00mg	4%
10	Calcium	-	30%
11	Thiamin	-	6%
12	Zinc	-	8%
13	Riboflavin	-	20%
14	Vitamin B-6	-	4%
15	Folate	-	4%
16	Vitamin B-12	-	10%
17	phosphorus	-	20%
18	Magnesium	-	8%
19	Potassium	370mg	-
20	Protein	16.55g	33.1%
21	Iron	0.25gm	1.4%

**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 B<sub>12</sub>. 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 *Grahani*. Arsha and Udara. Nutritional values also suggest that Takra also strengthen the immunity and helps to maintain the healthy by preventing diseases.

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