

BETTER LIVING THROUGH BUTTER MILK

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ABSTRACT

Takra has been given importance as diet and also medicine in *Ayurveda*. It is considered as wholesome diet to maintain health. In *Ayurveda* we have vast explanation regarding types, preparation, properties and different formulations of *Takra* for various diseases in classics. Buttermilk is very useful in the disease associated with *Agni vikruthi*. It has *tridosahara* property. Nutritional values also suggest that buttermilk strengthens the immunity and helps to maintain the health by preventing disease. *Takra* has been used both to maintain health and also as a treatment. *Takra* restores its preferential place as *ahara*, *aoushadha*, *sahapana* and *anupana* in both person for *swastha* and *atura*.

Keywords: *Takra*, Buttermilk, Health, disease

INTRODUCTION

Ayurveda is a science, which does not only consist of compounding *churna's* or *vati's* but deals with processes of life, which must be understood thoroughly by all. Diet plays a pivotal role both in healthy and diseased condition. Healthy life starts with healthy food. *Takra* being an ideal diet in diseases and forms an important item of daily diet in every Indian home, which is nutritious and inexpensive. All Ayurvedic texts extol its good properties, to the extent of saying that "*Takra* is not available to

Indra at heaven". So here lies the importance of *Takra*. Hence an attempt has been made to analyze the usage of *Takra* in healthy and diseased conditions, its method of preparation along with various formulations, its nutritive values, indications, contraindications. *Takra* as *ahara*, *aoushadha*, *sahapana* and *anupana* are dealt here.

DEFINITION:

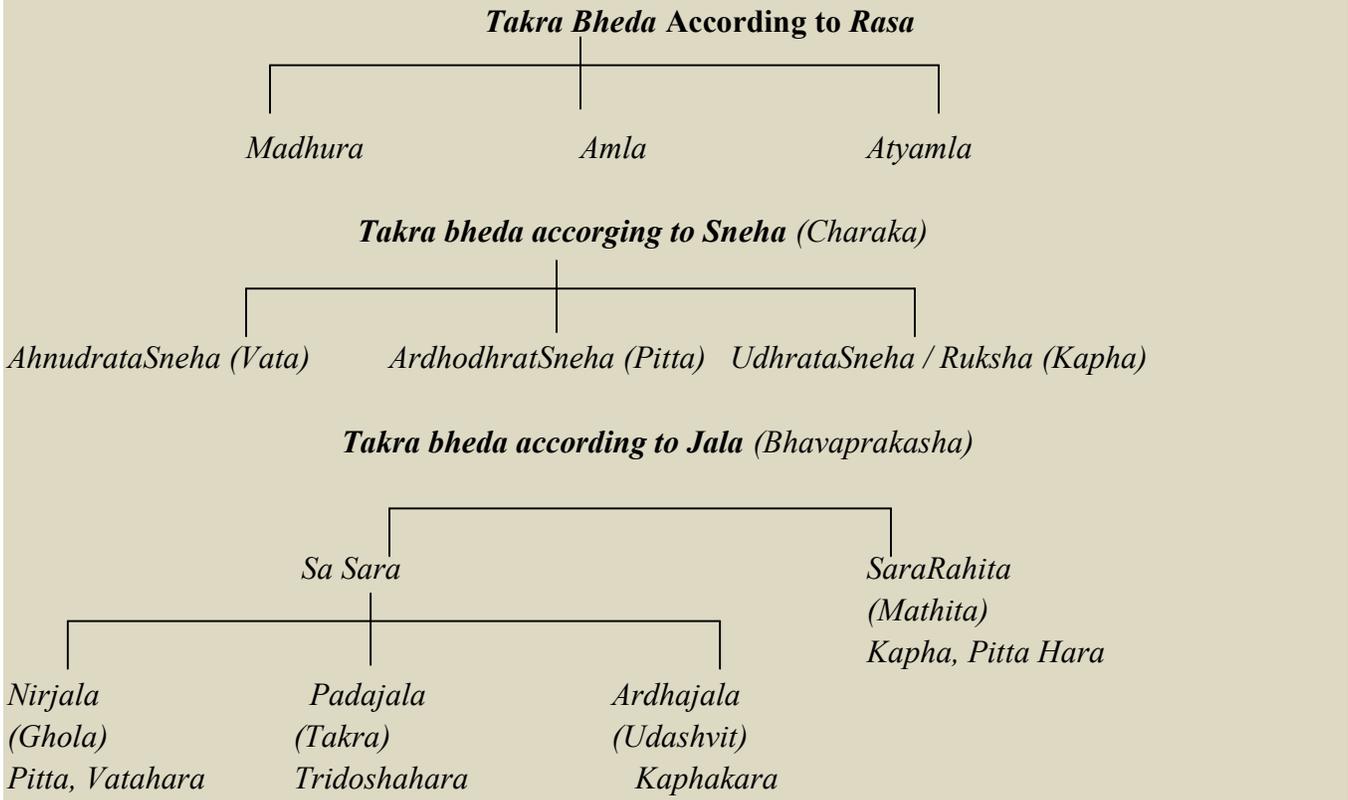
"*MathitamdadhiTakramityuchyate*"

“Takrapadajalaproktam”

According to Charaka, *Takra* is a thin liquid obtained from churning of curds with four parts of water. Traditionally, butter milk is the liquid left over after making of butter. *Takra* should be devoid of fat content, should not be too thick or

too thin in consistency and should have *madhura, amla and kashaya rasa*. The formation of buttermilk is based on the fermentation by the starter bacteria which turn Lactose (milk sugar) into lactic acid. As lactic acid is formed, the pH of the milk drops and it gets tart.

TYPES OF TAKRA



In the current era these are studied under butter, buttermilk, buttermilk solids, buttermilk powder, churned buttermilk, cultured buttermilk etc.

“Manthanatgunadhanamyatha”

Even though told in classics, but exactly how churning works is still unknown. The current theory says-by churning some air is incorporated into the liquid producing bubbles and fat globules.

Properties of Takra

- Rasa - Madhura, Amla. (S.S)
Kashaya, Amla, Madhura (B.P)
Amla, Kashaya (K.K)
- Anurasa- Kashaya
- Guna - Laghu, Ruksha, Vikasi
- Veerya - Ushna.
- Vipaka - Swadupaka.

Acidity of butter milk also explains its long refrigerator shelf life; acid is a natural preservative because it inhibits the growth of pathogenic bacteria.

TABLE 1: Nutritive values of Butter milk per 100ml quantity

Butter milk	Calories	Protein	Fat	C. hydrate	Ca	P	Fe	VitA	Thiamine	Nicotinic acid	Ribo flavin	VitC
Cow	18KCal	0.9g	1g	1.4g	0.04g	0.04g	0.1mg	51IU	0.02mg	0.05mg	0.05mg	0.45mg
Buffalo	33Cal	1.2g	2.5g	1.4g	0.04g	0.04g	0.1mg	46IU	0.01mg	0.05mg	0.05mg	0.45mg

Calcium content of buttermilk is less compared to milk, it may be due to the fact that on breaking the oil in water emulsion during the preservation of buttermilk, free fatty acids are released into aqueous phase which complex with calcium to form insoluble salts.

TABLE 2: Composition of Cultured Buttermilk

Water	90%
Milk sugar lactose	05%
Casein	03%
Fat	02%

In low fat buttermilk, some of the lactose is converted by the bacteria into lactic acid which

yields sour taste, it is easier to digest. Live bacteria organisms thought to provide healthful and digestive benefits.

Takrabhyasa

Takrabhyasa means ‘*Takrasyasatamsevanam*’ as *aupakrama*, Continuous usage of *Takra* cures *grahanidosha* (abdominal disorder), *shopha*, (oedema) and *garbha vyapath* (*Bleeding disorder*). *TakraSevanaVidhi* has to be done according to different *kala*, in *sheetakala*, *takra* with *ajaji* and *lavana* is beneficial for *pana*. In *ushnakala* i.e. in *greeshma* and *sharad rututakra* is not advisable.

TABLE 3: *Doshanusara Prayoga of Takra:*

<i>Vatavikara</i>	<i>Pitta vikara</i>	<i>Kaphavikara</i>
<i>AmlaTakra</i>	<i>SwadhuTakra</i>	<i>KashayaTakra</i>
<i>Shunti and saindhava</i>	<i>Sita</i>	<i>Vyosha and kshara</i>

TABLE 4

Indications			
<i>Aruchi</i>	<i>Pandu</i>	uraemia	
<i>Arsha</i>	<i>Pleeha</i>	Kitibha	
<i>Atisara</i>	<i>Praseka</i>	<i>Grahanidosha</i>	<i>Trishna</i>
<i>Agnimandhya</i>	<i>Prameha</i>	<i>Gulma</i>	<i>Udara</i>
<i>Bastishoola</i>	<i>Kaphajaroga</i>	<i>Ghritavyapat</i>	<i>Jwara</i>
<i>Chardi</i>	<i>Koshtastavata</i>	<i>Medoroga</i>	<i>Vatamaya</i>
<i>Gara</i>	<i>Shopha</i>	<i>Mootragraha</i>	<i>Vibandha</i>

TABLE 5:

Contra Indications
<i>Bhrama (Fainting)</i>
<i>Daha (thirst)</i>
<i>Rakta pitta</i>
<i>Durbala</i>
<i>Moorcha</i>
<i>Kshata (tiredness)</i>
<i>Trishna (thirst)</i>
<i>Ksheenashukra</i>

TABLE 6: Functions of *Takra*

• <i>Srotoshodhaka</i>	• <i>Preenana</i>
• <i>Tridoshahara</i>	• <i>Mootra pureesha samshodhaka</i>
• <i>Pathya</i>	• <i>Sangrahi</i>
• <i>Deepana</i>	• <i>Hrudya</i>
• <i>Rochana</i>	• <i>Avrushya</i>

• <i>Varnya</i>	• <i>Balya</i>
• <i>Kaphavatanulo mana</i>	• <i>Netrarujapaham</i>
• <i>Gives nirdhishta bala varna & upachaya</i>	• <i>Pranaprada</i>

- A) Antioxidant activity → Buttermilk solids was determined in a model emulsion system by modified thiocyanate method. Butter milk solids possess significant antioxidant activity, thereby suggesting potential use as a value-added ingredient for stabilizing food matrices against lipid peroxidation reactions.
- B) Iron binding activity → 1. Ferrous (Fe_2^+) is reduced and biologically active form of iron and is involved in many oxidation reactions of food

nutrients. Fe^{2+} has a marked affinity to Butter milk Solid. Therefore in *panduchikitsa Takra* is mentioned as *anupana* for many *yogas* like *mandooravataka*, *lohaparpati*, *punarnavadimandoora*, which shows the importance of iron binding activity

2. Ferric (Fe_3^+) helps in lipid oxidation; hence the *medhohara* property of *Takra* can be established.

C) Scavenging of hydroxyl radical → by antiand prooxidant activity.

E) In diarrhea and intestinal worms → buttermilk helps to overcome harmful intestinal flora. Acid in buttermilk also fights against germs and bacteria. It can be mixed with a pinch of salt and embliia respectively.

TABLE 7: TAKRA PRAYOGA

In <i>adhmana</i>	<i>Takra</i> with <i>jeeraka</i>
In <i>atisara</i>	<i>Takra</i> with <i>bilva</i>
In <i>shwasa, kasa</i>	<i>Takra</i>
In <i>mootrakruchra</i>	<i>Takra</i> with <i>guda</i>
In <i>panduroga</i>	<i>Takra</i> with <i>chitraka</i>
In <i>srotorodha & kaphavata vikaras</i>	<i>Amrutasamana</i>
In <i>Udara</i>	<i>Only Takra</i>
In <i>Vatodara</i>	<i>Takra</i> with <i>pippali</i> and <i>lavana</i>
In <i>Pittodara</i>	<i>Takra</i> with <i>Yashtimadhu</i> and <i>Sharkara</i>
In <i>Pleehodara</i>	<i>Takra</i> with <i>madhu, tilataila, vacha, shunti, shatahwa</i>
In <i>Baddhagudhodara</i>	<i>Takra</i> with <i>jeeraka, ajamoda, saindavalavana</i>
In <i>Arshas</i>	<i>Takra</i> with <i>lavana</i>
In <i>Migraine</i>	<i>Regular Takra in take</i>
In liver diseases and alcoholic liver diseases	<i>Takra</i> helps to regain normal appetite and digestion. For faster relief 1gm of <i>Bhringaraja</i> or <i>Kala megha</i>

With the specification of the strength of the patient as well as the nature of the season should give *Takra* for either 1 week, 10 days, 15 days or for 1 month. If *kayagni* is very weak, then he should be given only *Takra* both in morning and evening. After the *Takra* is digested the patient should be given *Takrapeya* with *sneha* as post

prandial drink. As food he may be given vegetable soup or *mamsa rasa* along with *Takra*.

VARIOUS FORMULATIONS OF TAKRA

Takrarishta, Takravati, Takramamsa, Takraavalehika, peya, odhana, bhojana, Takramla, Shad yooshana, Shad guna Takrataila, Maha shad guna Takrataila.

Takraharitaki, Takrabasti & dhara can also be done.

DISCUSSION

Buttermilk is a complete food and it contains all essential macronutrients. It encourages digestion and treats stomach ailments. It is also effective against dehydration. It provides calcium without fat and strengthens body's skeletal frame. It also raises immune level by warding off illness, rich in vitamins .its natural therapy against ulcer and piles. Its probiotics and prebiotics combined maintain growth of bacteria and maintain health.

CONCLUSION

- *Takra* is an ideal and economical diet and medicine for all classes of people.
- *Takra* is most beneficial in *mahasrotoashritavikaras*, *vatakaphavikaras* and not advisable in *pitta vikaras*.
- *Takrabhyasa* can ward off the diseases like *grahanidosha and arshas*.
- Iron binding activity of buttermilk revalidates the concept of using *Takra* as *anupana* in many of the *yogas* indicated in *pandu*.
- The lipid oxidation property of buttermilk helps to understand its usage in *medoroga*.
- *Takra* being a *shreshtasrotoshodhakadravya* can be used extensively in many of the conditions with the *samskara* or *samyoga* of *oushadhidravysas*.

Buttermilk a key to good health, so drink a glass of buttermilk and stay happy and refreshing.

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