

## Properties of Ghrita

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### Abstract

Ghrita is a class of clarified butter that originated in ancient India. It commonly used in Middle Eastern cuisine, cuisine of the Indian subcontinent, Southeast Asian cuisine, traditional medicine, and religious rituals. The texture, color and taste of Ghrita based on the quality of the butter, the milk source used in the process and the duration of time used up in boiling. Ghrita can be used both externally (lepa, tarpana etc.) and internally (medicinally). There are four types of Sneha described in ayurveda, out of them Ghrita is the best. It has a most important property, which is known as “Sanskaranuvartana”. Ghrita is mainly prepared by milk (obtained by churning curd). Ghrita is appetizing and satmya for every person from their childhood. It is also used in both Shodhana and Shamana treatment.

**Keywords-** Ghrita, lepa, traditional medicine, ayurveda, Satmaya, Shodhana, Shamana

### Introduction

*Ghrita* is an oily liquid or a semi solid at room temperature, granular in texture, color white to light yellow, odor rich, taste pleasant. It shall be free from animal fats, wax, mineral oil, vegetable oils and fats. According to *Acharya Charaka*, it has unctuous property<sup>[1]</sup>.

सर्पिः स्नेहयति ||च.सू.२७४||

### Etymology<sup>[2]</sup> -

The word *ghee* comes from *Sanskrit*; (*ghrta*) “clarified butter”, from *ghr*-“to sprinkle”.

**In Hinduism-** Fire ritual has been performed dating back over 5,000 years. They are thought to be auspicious for ceremonies such as marriage, funerals, etc. *Ghrita* is also necessary in Vedic worship of divine deities with *Aarti* called ‘*Diya*’ and for *Panchamrita*. In Mahabharata, kaurava were born from pots of *Ghrita*<sup>[3]</sup>.

**Flavor-** The main flavor components of *Ghrita* are carbonyls, free fatty acids, lactones, and alcohols. Along with the flavor of milk fat, the ripening of the butter and temperature at which it is clarified also affect the flavor [4].

**Nutrition-** Like any clarified butter, *Ghrita* is composed almost entirely of fat, 62% of which consists of saturated fats. It is also rich in oxidized cholesterol: 259 µg/g, or 12.3% of total cholesterol [5].

### Vernacular Name Of Ghrita

Table.1 Vernacular names of *Ghrita*[6]

Bengali	<i>Gava ghee, gava ghrít</i>
Urdu	<i>Gaya ka ghee</i>
Telagu	Neyyi, nei
Tamil	Nei
Punjabi	<i>Ghee</i>
Orriya	Gai ghia
Marathi	Toop
Malayalama	Pasu Ney, Pasu nei
Kannada	Tuppa
Hindi	<i>Gaya ghee</i>
Gujarati	<i>Ghee</i>
English	Clarified butter
Assami	<i>Ghee</i>

**Properties of normal Ghrita-** According to *Acharya Charaka* properties of *Ghrita* are<sup>[7]</sup>-

स्मृतिबुधयाग्निशुक्रौजःकफमेदोविवर्धनम् | वातपित्तविषोन्मादशोषालक्ष्मीज्वरापहम् ||

सर्वस्नेहोत्तमं शीतं मधुरं रसपाकयोः | सहस्रवीर्यं विधिभिर्घृतं कर्मसहस्रकृत् ||च.सू.२७/२३१-२३२||

*Ghrita* promotes memory, intelligence, *agni*, semen, *ojas*, *kapha* and *medas*; alleviates *vata*, *pitta*, poison, insanity, phthisis, inauspiciousness and fever. It is the best of all fats, is cold, *madhura rasa*, *madhura vipaka*, has thousand potentialities and so, if used properly according to prescribed methods, exerts thousand types of action.

**Properties of normal old Ghrita-** According to *acharya* Charaka properties of *ghrita* are<sup>[8]</sup>-

मदापस्मारमूर्छायशोषोन्मादगरज्वरान् | योनिकर्णशिरःशूलं घृतं जीर्णमपोहति || च.सू.२७/२३३||

Old *ghrita* alleviates intoxication, epilepsy, fainting, phthisis, insanity, poison, fever and pain in female genital tract, ear and head.

**Table.2 Properties of Ghrita-**

<i>Rasa</i>	<i>Madhura</i>
<i>Guna</i>	<i>Snigdha, mridu, shalakshana, guru, yogvahi, alpabhishtyandi, soumyama</i>
<i>Virya</i>	<i>Sheeta</i>
<i>Vipaka</i>	<i>Madhura</i>
<i>Dosha shamakata</i>	<i>Tridosha shamaka</i>
<i>Karma</i>	<i>Agnidipana, Anabhishtyandi, Ayushya, Balya, Cakshushya, Dipana, Hrudyā, Kāntipradā, Medhya, Ojovardhaka, Rasāyana, Rucya, Slesmavardhana, Snehana, Śukravardhaka, Tejobalakara, Tvacya, Vātapittaprasāmana, Vayaasthpaāna, Vishahara, Virya.</i>

**Pharmacological Properties of Goghrita** – It means the action of *ghrita* on the body.

**Table.3 Pharmacological properties of Goghrita<sup>[9-14]</sup>**

Sr.no.	Pharmacological properties	SS	CS	AH	DN	KN	BPN
1.	<i>Tejo vridhhi</i>	+	-	-	-	-	+
2.	<i>Nirvapana</i>	-	+	-	-	-	-
3.	<i>Ojo-vridhhi</i>	+	+	+	-	+	+
4.	<i>Mridukara</i>	-	+	-	-	-	-
5.	<i>Rasayana</i>	-	-	-	-	-	+
6.	<i>Sawaraprasada</i>	+	+	+	-	+	+
7.	<i>Chakshushya</i>	+	-	+	+	+	+
8.	<i>Varnaprasada</i>	-	+	-	-	+	-
9.	<i>Vayasthapanā</i>	+	-	+	-	+	+
10.	<i>Samriti vridhhi</i>	+	+	+	+	+	+
11.	<i>Aayushya</i>	+	-	+	+	-	+

12.	<i>Buddhi vriddhi</i>	+	+	+	+	+	-
13.	<i>Balakara</i>	+	-	+	+	+	+
14.	<i>Agni vriddhi</i>	+	+	+	+	+	+
15.	<i>Soukumarya</i>	+	-	+	+	-	-
16.	<i>Medo vriddhi</i>	+	-	+	+	+	+
17.	<i>Kanti vriddhi</i>	+	-	+	+	+	+
18.	<i>Brihmana</i>	-	-	-	-	+	-
19.	<i>Rochana</i>	-	-	-	-	-	+
20.	<i>Lavanya vriddhi</i>	+	-	-	-	-	+

**Table.4 Identity, purity and strength specific of *Go-ghrita* according to API-**

<b>Specific gravity at 25° C</b>	<b>1.01995</b>
<b>Moisture content</b>	<b>Not more than 0.5 per cent</b>
<b>Saponification value</b>	<b>Not more than 225</b>
<b>Iodine value</b>	<b>Not more than 35</b>
<b>Acid value</b>	<b>0.1 to 10</b>
<b>Color</b>	<b>White or light yellow</b>
<b>Odor</b>	<b>Rich</b>
<b>Taste</b>	<b>Pleasant</b>
<b>Appearance</b>	<b>Oily liquid or semi solid</b>

**Composition of *Ghrita*** <sup>[15]</sup>- *Ghrita* provides energy to body as it is more useful than the carbohydrates and proteins; one gm of *ghrita* gives 9.3 calories. The chemical composition of *Ghrita* is mentioned below;

**Table.5 Chemical composition of *Ghrita***

<b>Triglycerides</b>	<b>97.098%</b>
<b>Di-glycerides</b>	<b>0.25-1.4%</b>
<b>Monoglycerides</b>	<b>0.16-0.038%</b>
<b>Ketoacid glycerides</b>	<b>0.015-0.018%</b>
<b>Glycerylesters</b>	<b>0.011-0.05%</b>
<b>Free fatty acids</b>	<b>0.1-0.44%</b>
<b>Phospholipids</b>	<b>0.2-1.0%</b>
<b>Sterols</b>	<b>0.22-0.41%</b>
<b>Vitamin A</b>	<b>2500 I.U(per 100gm)</b>
<b>Vitamin D</b>	<b>8.5×10.7gm (per 100gm)</b>

Vitamin E	24×10.3gm(per 100gm)
Vitamin K	1×10.4gm(per 100gm)
Butric acid	4.5-6.0 %
Caporic acid	1.0-1.36%
Caprylic acid	0.9-1%
Capric acid	1.5-1.8%
Lauric acid	6-7%
Myristic acid	21-23%
Palmitic acid	19-19.5%
Stearic acid	11-11.5%
Arachidic acid	0.5-0.8%
Oleic acid	27-27.5%

### Importance of go ghrita-

- ✓ It is good for eyes as it increases vision, production of semen, increase *Agni*, increase retention power and beauty <sup>[16]</sup>.
- ✓ *Go Ghrita* is safer and healthier because it is composed of saturated fat.
- ✓ It helps in the fastening the digestive process.
- ✓ *Go Ghrita* has also antioxidants property which helps the body easily absorb the vitamins and minerals.
- ✓ *Go Ghrita* fight against cancer by increasing the availability of enzymes which are responsible for detoxification of cancer causing substances <sup>[17]</sup>.

**Conclusion-** It may be concluded that *ghrita* is natural and unique product which is most beneficial to all. It combats with many diseases and keeps healthy. Among the four types of *Sneha* (fats), *ghrita* is the best one due to its ability to assimilate effectively the properties of the ingredients added to it and without losing its own properties. It improves digestive power and other qualities are related to milk. *Ghrita kalpana* plays a very important role in the treatment of various diseases. So *Ghrita* consumption should be done daily.

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