

PHYSICO- CHEMICAL STUDY OF PANCHATIKTA GHRITA PREPARED WITH MURCCHITA AND AMURCCHITA GHRITA

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Abstract: *Swarasa* (juice), *Kalka* (paste), *Kwatha* (decoction), *Hima* (cold infusion) and *Phanta* (hot infusion) are considered as five fundamental preparations mentioned in Ayurvedic pharmaceuticals. The preparations like *Avaleha Kalpana* (confections), *Vati Kalpana* (tablet), *Sneha Kalpana* (fat preparation), *Asava Arista* (hydro-alcoholic preparation) etc. are considered as secondary preparations. *Ghrita Kalpana* (ghee preparation) is one among secondary Ayurvedic dosage forms explained under the heading of *Sneha Kalpana* (fat preparations) in classical texts. *Murcchana Samskara* (fat processing) is one of the *Samskara* (procedure) mentioned in Ayurvedic classical books. *Murcchana Samskara* is a unique process mentioned in *Bhaishajya Ratnavali* for both *Taila* (oil) and *Ghrita* (ghee) to reduce *Amadosa* (toxin), *Durgandhata* (bad odour) etc. and to enhance the *Viryata* (potency) of *Sneha*. Now-a-days most of the Ayurvedic pharmaceutical companies do not follow the method of *Murcchana* (procedure) as it increases the cost of preparation and time consumption will be more. In this study *Panchatikta Ghrita* is taken as one of the examples to prove the importance of *Murcchana* (procedure). It is prepared with *Murcchita Ghrita* (processed ghee) and with *Amurcchita Ghrita* (unprocessed ghee) as per authentic text of Ayurvedic pharmaceuticals. To know the significance of *Murcchana Samskara* (fat processing), all the four samples were subjected for the physico-chemical analysis. Increase in refractive index, specific gravity, saponification value, iodine value, loss on drying value, ester value, decrease in acid value and viscosity indicates better dissolution of medicaments in *Murcchita Ghrita* (processed ghee). Results obtained from the analytical parameters are discussed and it gives scope for further study.

Keywords: *Ghrita murcchana* (processing of ghee), Iodine value, *Sneha kalpana* (fat preparation), *Sneha murcchana* (fat processing), Saponification value.

INTRODUCTION

Swarasa (juice), *Kalka* (paste), *Kwatha* (decoction), *Hima* (cold infusion) and *Phanta* (hot infusion) are the five fundamental preparations mentioned in Ayurvedic pharmaceuticals [1]. Among these *Swarasa* (juice) is the most potent and heavy for digestion and *Phanta* (hot infusion) is the least potent and light for digestion. *Kwatha Kalpana* (decoction) is considered as one of the potent preparation and is lighter for digestion compared to *Swarasa* (juice) and *Kalka* (paste); it is the most widely used form of medicine in Ayurveda. *Taila Paka* (oil preparation), *Ghrita Paka* (ghee preparation),

Kshira Paka (milk preparation), *Avaleha* (confections), *Arishta* (hydro-alcoholic preparation) re-considered as the *Upakalpana* (secondary preparations).

Sneha Kalpana (fatty preparations) is one of the commonly prescribed Ayurvedic dosage form in day to day practice. Although, lot of varieties of oils and fats are described in classical Ayurvedic texts, the most common amongst them are *Taila* (oil) and *Ghrita* (ghee) *Kalpana* (preparations). *Sneha Kalpana* (fatty preparations) is a pharmaceutical procedure to prepare oleaginous medicine from substances like *Kalka* (bolus of the drugs) and *Drava* (liquid material). They are prepared in specific

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proportions by subjecting them to uniform heating pattern and duration to fulfill certain pharmaceutical parameters as per the requirement of the therapeutics.

Among the *Sneha* (fat) mentioned in Ayurvedic classical texts, *Ghrita* (ghee) is the most easily available and is *Satmya* (wholesome) to all human beings, used extensively in the form of food and medicine. Any form of impurities present in the *Ghrita* (ghee) will be removed by the process of *Ghrita Murcchana* (processing of ghee). With this process, *Ghrita* (ghee) gets proper qualities, *Varna* (colour) and *Gandha* (odour) and it also ensures the therapeutic properties in *Aushadhi Siddha Ghrita* (medicated ghee) [2].

Before the preparation of *Aushadhi Siddha Ghrita* (medicated ghee), *Ghrita* (ghee) is supposed to undergo one particular *Samskara* (procedure) called *Sneha Murcchana* (processing of ghee or oil) as mentioned in *Bhaishajya Ratnavali*. It is applicable for both *Ghrita* (ghee) and *Taila* (oil). The main aim of *Sneha Murcchana* (processing of ghee) is to remove the *Durgandha* (bad odour), *Amadosa* (toxin), *Ugrata* (pungency), the bad characteristics of *Sneha* (fat) and enhance the *Virya* (potency) of *Ghrita* (ghee) and *Taila* (oil) [3].

If medicated *Ghrita* (ghee) is prepared without *Ghrita Murcchana* (processing of ghee), it may not contain standard qualities and not give expected results. Therefore to obtain standard qualities and anticipated effects, *Ghrita Murcchana* (processing of ghee) is required to get the physical stability, chemical and therapeutically useful properties in *Aushadhi Siddha Ghrita* (medicated ghee).

The term analysis means detailed examination of the drug. It reveals important aspects regarding the standardization of the drug. Without analytical study, research of a drug is incomplete. It provides some standards to judge its quality and also helps to interpret the pharmacokinetics and pharmacodynamics of the drug.

MATERIALS AND METHODS

Materials - Ingredients

The ingredients and their ratios for *Ghrita Murcchana* as per *Bhaishajya Ratnavali* are shown below in **Table-1**.

Raw drugs required for the preparation of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* were collected from Teaching Pharmacy of Sri Dharmasthala Manjunatheshwara College of Ayurveda, Hassan. Preparation of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* were conducted at *Rasashastra* and *Bhaishajya Kalpana* practical laboratory, Sri Dharmasthala Manjunatheshwara College of Ayurveda, Hassan as per the reference of *Bhaishajya Ratnavali*. Analytical study was conducted at S.D.M. Center for Research in Ayurveda and Allied Sciences, Udipi and Carekeralam, Koratty, Kerala, India.

For the preparation of *Murcchita Ghrita*, 250 g of each of *Amalaki* (*Emblica officinalis*), *Haritaki* (*Terminalia chebula*), *Bibhitaki* (*Terminalia bellerica*), *Haridra* (*Curcuma longa*), *Mustaka* (*Cyprus rotandus*), *Matulunga* (*Citrus medica*), were added in the form of *Kalka* (paste) to 6000 g of *Ghrita* (ghee) and 24 litres of water. The boiling was carried out on *Mandagni* (mild fire) for 17 hours in 2 days till confirmative tests like forming of wick when paste is rolled, absence of crackling sound when put on fire, subsiding of froth, characteristic odour, colour and taste were obtained. The final product of *Murcchita Ghrita* (processed ghee) obtained was 5280 g.

For the preparation of *Panchatikta Kwatha* (decoction), 800 g each of *Vasa Patra* (*Adathoda vasica*), *Nimba Kwatha Curna* (*Azhardirakta indica*), *Guduchi Kwatha Curna* (*Tinospora cordifolia*), *Kantakari Kwatha Curna* (*Solanum sarattense*) and *Patola Kwatha Curna* (*Trichosanthis cucumerina*) were added in 32 litres

Table 1: Showing the ingredients and their ratios for *Ghrita Murcchana* by *Bhaishajya Ratnavali*

Ingredients	Latin name	Family	Part used	Quantity
Amalaki	<i>Emblica officinalis</i>	<i>Euphorbiaceae</i>	Pericarp	1 pala (48 g)
Haridra	<i>Curcuma longa</i>	<i>Zingiberaceae</i>	Rhizome	1 pala (48 g)
Musta	<i>Cyprus rotandus</i>	<i>Cypraceae</i>	Rhizome	1 pala (48 g)
Haritaki	<i>Terminalia chebula</i>	<i>Combretaceae</i>	Pericarp	1 pala (48 g)
Bibhitaki	<i>Terminalia bellerica</i>	<i>Combretaceae</i>	Pericarp	1 pala (48 g)
Matulunga	<i>Citrus Medica</i>	<i>Rutaceae</i>	Fruit	1 pala (48 g)
Goghrita	-	-	-	1 prastha(768 g)



Fig. 1: Drugs used for *Ghrita Murcchana*

Fig. 2: Drugs used for *Panchatikta Ghrita*

Fig. 3: *Murcchita Ghrita* Fig. 4: *Panchatikta Ghrita*

of water. Boiling was carried out on *Mandagni* (mild fire) for 6 hours and 8 litres of *Panchatikta Kwatha* (decoction) was obtained as the final product.

Panchatikta Ghrita was prepared by using *Kalka* (paste) made up of 166 g each of *Amalaki* (*Embelica officinalis*), *Haritaki* (*Terminalia chebula*), *Bibhitaki* (*Terminalia bellerica*), 2000 g of *Murcchita Ghrita* (processed ghee) and 8 litres of *Panchatikta Kwatha* (decoction). Boiling was carried out on *Mandagni* (mild fire) for 10 hours in 2 days period till confirmative tests were achieved. 1720 g of *Panchatikta Ghrita* was obtained as the final product (Figure 1-4).

Panchatikta Ghrita was prepared as per the reference of Ayurvedic Formulary of India and all the samples of *Ghrita* (ghee), *Murcchita Ghrita* (processed ghee), *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) and *Amurcchita Ghrita* (unprocessed ghee) were subjected for analysis using the following 12 parameters as per the references available in protocol for testing of ASU drugs published by Central Council for Research in Ayurvedic Sciences (Ministry of AYUSH) Government of India:-

01. Colour
02. Odour
03. Refractive index at 25°C
04. Specific gravity
05. Saponification value
06. Acid value
07. Iodine value
08. Loss on drying at 105°C
09. Viscosity
10. Ester value
11. Rancidity
12. Peroxide value

OBSERVATIONS AND RESULTS

Organoleptic evaluation

Organoleptic evaluation is used most effectively to resolve unsatisfactory product problems. It refers to evaluation of the drug by colour, odour, taste, consistency, size, shape, texture, etc. It is a technique of qualitative evaluation based on the study of sensory profiles of the drug. Organoleptic evaluation means conclusions drawn from studies resulted due to impressions on organs of senses. Organoleptic characters are very useful parameters to determine and compare the quality of the samples. In this study parameters like colour, taste and consistency were considered (Table-2).

PHYSICO-CHEMICAL ANALYSIS

The results of physico-chemical evaluation of *Ghrita* (ghee) samples are depicted in Table-3.

DISCUSSION

Murcchana Samskara (process) converts the yellow colour of *Ghrita* (ghee) into dark yellow in case of *Murcchita Ghrita* (processed ghee). This colour is due to the drugs used in the *Murcchana Samskara* (processing of ghee) like *Haridra* (*Curcuma longa*) which contains Curcumin as a colouring agent. Yellow colour of the *Ghrita* (ghee)

Table 2: Showing organoleptic characteristics of *Ghrita* (Ghee) samples

Parameters	<i>Ghrita</i> (Ghee)	<i>Murcchita Ghrita</i> (Processed Ghee)	<i>Panchatikta Ghrita</i> prepared with <i>Amurcchita Ghrita</i> (unprocessed Ghee)	<i>Panchatikta Ghrita</i> prepared with <i>Murcchita Ghrita</i> (Processed Ghee)
Colour	Light yellow	Dark yellow	Green	Dark green
Odour	Characteristic Odour of ghee	Aromatic odour	Bitter odour	Sour, astringent odour
Taste	Characteristic taste of ghee	Astringent Taste	Bitter	Sour, astringent taste
Consistency	Liquid	Viscous	Less viscous	Viscous

Table 3: Showing the results of physicochemical evaluation of *Ghrita* (Ghee) samples

Parameter	<i>Ghrita</i> (unprocessed Ghee)	<i>Murcchita Ghrita</i> (processed Ghee)	<i>Panchatikta Ghrita</i> prepared with <i>Amurcchita Ghrita</i> (unprocessed Ghee)	<i>Panchatikta Ghrita</i> prepared with <i>Murcchita Ghrita</i> (processed Ghee)
Refractive index ^[4]	1.45656	1.45656	1.45656	1.45706
Specific gravity at 25 ^[5]	0.90576	0.91096	0.91036	0.91046
Saponification value ^[6]	243.452	295.63	255.80	295.202
Acid value ^[7]	2.256	1.046	2.472	1.469
Iodine value ^[8]	7.184	7.654	7.231	7.6
Loss on drying ^[9]	0.530	0.713	0.557	0.823
Viscosity at 29 ⁰ C ^[10]	63.696	58.878	61.617	60.314
Ester value	241.196	294.584	253.328	293.733
Rancidity	Not rancid	Not rancid	Not rancid	Not rancid
Peroxide value	Absent	Absent	Absent	0.84%

was converted into green in case of *Panchatikta Ghrita* prepared with *Amurcchita Ghrita* (unprocessed ghee). The colour was imparted by *Kwatha Dravya* (drugs used for preparation of decoction) like *Vasa* (*Adathoda vasica*) and *Nimba* (*Azhardirakta indica*). Yellow colour of the *Ghrita* (ghee) was converted into dark green in case of *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee). The colour was imparted by *Murcchita Ghrita* (processed ghee) and *Kwatha Dravya* (drugs used for preparation of decoction) like *Vasa* (*Adathoda vasica*) and *Nimba* (*Azhardirakta indica*).

The characteristic odour of *Ghrita* (ghee) was converted into aromatic odour in case of *Murcchita Ghrita* (processed ghee) due to the drugs used in *Murcchana* process (processing of ghee) like *Musta* (*Cyperus rotundus*) and *Haridra* (*Curcuma longa*). The characteristic smell of *Ghrita* (ghee) was converted into bitter in case of *Panchatikta Ghrita* prepared with *Amurcchita Ghrita* (unprocessed ghee) due to the incorporation of *Kwatha Dravya* (drugs used for preparation of decoction) like *Vasa* (*Adathoda vasica*), *Nimba* (*Azhardirakta indica*) and *Patola* (*Trichosanthus cucumerina*). The characteristic smell of *Ghrita* (ghee) converted into sour, astringent odour in case of *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) is due to the incorporation of drugs used in *Murcchita Ghrita* (processed ghee) and *Kwatha Dravya* (drugs used for preparation of decoction) *Vasa* (*Adathoda vasica*), *Nimba* (*Azhardirakta indica*) and *Patola* (*Trichosanthus cucumerina*).

The characteristic taste of *Ghrita* (ghee) was converted into astringent in case of *Murcchita Ghrita* (processed ghee) due to the drugs used in *Murcchana* process (process) like *Musta* (*Cyperus rotundus*) and *Haridra* (*Curcuma longa*). The characteristic taste of *Ghrita* (ghee) was converted into bitter in case of *Panchatikta Ghrita* prepared with *Amurcchita Ghrita* (unprocessed ghee) due to the contact of *Kwatha Dravya* (drugs used for preparation of decoction) like *Vasa* (*Adathoda vasica*), *Nimba* (*Azhardirakta indica*) and *Patola* (*Trichosanthus cucumerina*). The characteristic taste of *Ghrita* (ghee) was converted into sour, astringent taste in case of *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) due to the contact of drugs used in *Murcchita Ghrita* (processed ghee) and *Kwatha Dravya* (drugs used for preparation of decoction) like *Vasa* (*Adathoda vasica*), *Nimba* (*Azhardirakta indica*) and *Patola* (*Trichosanthus cucumerina*).

Viscous consistency of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* is due to dissolution of bio constituents into *Ghrita* (ghee) from the drugs used for preparation and removal of water.

Refractive index of *Ghrita* (ghee) depends on the chain length. With increase in chain length, refractive index of *Ghrita* (ghee) increases. There was no change in the refractive index of *Ghrita* (ghee) and *Murcchita Ghrita* (processed ghee), as ghee is denser than air, refractive index is always more than one. This is confirmed from the present study.

Increase in refractive index of *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed

ghee) indicates the increase of its density. It is due to the dissolution of bio constituents in the *Murcchita Ghrita* (processed ghee). It also suggests increase in the degree of unsaturation indicating the essential role of unsaturated fatty acids on the health of an individual, especially in reducing the cholesterol and Low Density Lipoprotein levels (LDL).

Specific gravity of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) was more compared to *Ghrita* (ghee) and *Panchatikta Ghrita* prepared with *Amurcchita Ghrita* (unprocessed ghee).

Specific gravity of *Ghrita* (ghee) determines the solid to liquid ratio in *Ghrita* (ghee). Increase in specific gravity after *Murcchana* (process) indicates addition of some bio constituents from the drugs used for *Murcchana* (process).

Saponification value indicates breaking down of oil into glycerol and free fatty acids by treatment with alkali. The higher saponification values of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) indicates the content of low molecular weight fatty acids.

It suggests that the increased low molecular weight fatty acid content is much beneficial in the increased rate of absorption of the *Ghrita* (ghee), leading to the increased efficacy of the *Aushadhi Siddha Ghrita* (medicated ghee).

Analytical values have shown increase in the saponification values of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) which is suggestive of beneficial effect of *Murcchana Samskara* (process) in increasing the degree of unsaturation indicating the essential role of unsaturated fatty acids on the health of an individual.

Acid value normally reflects the amount of acidity which is due to free fatty acids, acid phosphates and amino acids. This acidity is neutralized by treating with alkali which is known as processing of fats.

Analytical parameters shows decreased acid values in *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) indicating that *Murcchana* (process) has beneficial effect in processing of ghee and decrease in the degree of rancidity, ultimately reducing the undesirable effects of *Ghrita* (ghee).

Analytical parameters shows that Iodine value of *Ghrita* (ghee) was increased after *Murcchana*

(process) in case of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) which is suggestive of beneficial effect of *Murcchana Samskara* (process) in increasing the degree of unsaturation indicating the important role of unsaturated fatty acids in reducing the cholesterol and LDL cholesterol levels.

Loss on drying is indicative of moisture content of the preparation present. The higher the value more will be the amount of moisture and *Ghrita* (ghee) will be more susceptible for rancidity.

Loss on drying values of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) have increased after *Murcchana* (process) and this is due to the addition of water in the preparation.

Viscosity of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) has decreased after *Murcchana Samskara* (process) and it is due to addition of the *Drava Dravya* (liquids) like water as these are less viscous than *Ghrita* (ghee).

Esters are the fatty acids with glycerol. As the esters increase, the chances of rancidity decrease.

Ester values of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) has increased after *Murcchana Samskara* (process) indicating that the chances of rancidity have reduced.

All the four samples of *Ghrita* (ghee) have shown no rancidity, which shows the presence of tocopherols as natural antioxidant.

Oxidative rancidity arises from the decomposition of peroxides. Peroxides are the result of the oxidation of unsaturated fats. The products resulting from the decomposition of peroxides include aldehydes, ketones and hydrocarbons. These help to produce the flavors and odour associated with oxidative rancidity. The abnormal characteristics of a product that has undergone oxidative rancidity are paint like or acrid (burning) odour and an abnormal (rancid) taste. The colour of a food item is not normally changed due to this deteriorative process. The texture of a food product is not affected by the deteriorative condition.

The most common cause of milk fat deterioration is rancidity which is due to oxidation, thereby affecting its flavor and quality. The acceptability of ghee largely depends on the extent to which the oxidative deterioration has occurred. It

is generally considered that the first product formed by oxidation of an oil or fat is hydro peroxide. The peroxides further decompose to secondary oxidation products i.e., aldehydes and ketones which impart off flavor in ghee.

Peroxide value is an indicator of products of primary oxidation and thus measures the rancidity or degree of oxidation but not the stability or shelf-life of a fat. Fresh ghee has a peroxide value equal to zero. According to its Peroxide value, ghee is graded as follows **Table-4**.

In this study, peroxide values of *Ghrita* (ghee), *Murcchita Ghrita* (processed ghee), *Panchatikta Ghrita* prepared with *Amurcchita Ghrita* (unprocessed ghee) were zero and *Panchatikta*

Table 4: Showing the grading of *Ghrita* samples based on the peroxide values [11]

Peroxide value	Grade
Below 1.5	Very good
1.6 to 2.0	Good
1.1 to 2.5	Fair
2.6 to 3.5	Poor
3.6 to 4.0	Not acceptable

Ghrita prepared with *Murcchita Ghrita* (processed ghee) was 0.84%.

As the normal peroxide value ranges in ghee is below 4 that is within the permissible limits of unrancidification. But more peroxide value signifies its higher tendency for rancidification. Above values of all four samples indicates that they are free from rancidity.

Previous study conducted by Haldar Pronab, Mahapatra B.N, Agrawal D.S and Singh A.K on *Panchatikta Ghrita* shows similar values on Physico-chemical analysis. Author has mentioned in detail about procedures of parameters [12].

CONCLUSION

Increase in refractive index of *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) indicates the increase of its density, better dissolution of medicaments and increase in the chain length. Increase in the specific gravity of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) indicates addition of some bio constituents from the drugs used for *Murcchana* (process). Increased saponification values of *Murcchita Ghrita* (processed

ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) indicates the content of low molecular weight fatty acids, increase in the degree of unsaturation suggesting important role of unsaturated fatty acids in reducing the cholesterol and LDL cholesterol level. Decreased acid values of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) indicates that the *Murcchana* (process) has beneficial effect in processing of ghee and decrease in the degree of rancidity, ultimately reducing the undesirable effects of *Ghrita* (ghee).

Increased iodine values of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) suggests the beneficial effect of *Murcchana* (process) in increasing the degree of unsaturation. Increased loss on drying values of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) indicates the addition of water in the preparation. Decreased viscosity of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) indicates the addition of *Drava Dravya* (liquids) like water.

Increased Ester values of *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) indicates the reduction in chances of rancidity.

All the four samples show negative result for rancidity. This indicates all the samples are devoid of free radicals which are known to cause cellular damage, digestive distress and deplete the body of vitamins B and E.

As the three samples have peroxide value zero and another sample has the value below one, which is within the permissible limits of unrancidification. This indicates that all four samples are free from rancidity which is due to oxidation and is cause for imparting off flavor.

Organoleptic changes in *Murcchita Ghrita* (processed ghee) and *Panchatikta Ghrita* prepared with *Murcchita Ghrita* (processed ghee) are because of the drugs employed in the process of *Murcchana* (process).

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