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Fundamentals and Development of Panchamrit as per Dharmashastra



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ABSTRACT

Panchāmrit is typically a mixture of five ingredients, namely milk, curd, ghee, honey and sugar. The use of Panchāmrit is limited to use in Hindu rituals. The research was made to introduce Panchāmrit as medicine, tonic as well as food. The invention focuses on maximum utilization of properties of panchamirt. Saffron is added to give flavor. All the necessary evaluation has been done by an authorized institute. Mixing sequence, self-preservation, stability, proportion, flavor, etc. are the key features for preparing a fine product. The present invention provides preservative-free stable Panchāmrit composition.



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INTRODUCTION

According to Indian religious culture, Panchāmrit is used in many religious rituals. It will be easy for people to find such a Panchāmrit in the market easily. Moreover, such Panchāmrit will be good in terms of health and taste as it has proper quantity, storage and conservation. Panchāmrit can also be used as a medicine in the same way. This project is great for providing people with standardized Panchāmrit in the simplest way possible.

Study and research on milk, yogurt, ghee, honey and sugar has been done separately. They have been studied and analyzed nationally as well as internationally. But all of them do not seem to be much studied together. Panchāmrit is basically an Indian dish, so it has not been studied much. Therefore, study and analysis of Panchāmrit become necessary.

Human beings are living a very stressful life today. In this case, humans need strength, health, shine, etc. At the same time, man is looking for many natural substances. In this case, the qualities of Panchāmrit and its benefits are preferable to man. This is good for younger children as well as older ones. Also, Panchāmrit is beneficial and excellent for pregnant women. So, it becomes necessary to preserve and conserve the proper quantity and composition of Panchāmrit.

MATERIALS AND METHODS

All the ingredients of Panchāmrit have been used as food as well as medicines in Ayurveda. All these ingredients have plenty of nutritious properties. These ingredients can provide the nutrients that are essential for the human body. The properties of each substance change according to seasons. Moreover, after mixing all these substances in Panchāmrita, their properties fluctuate and result in a balanced product i.e. Panchāmrit.

In spiritual activities of Hindu religion Panchāmrit is used for *Shodshopchār Vidhi* to give bath to God while worshipping. In ancient times, Panchāmrit was being used in Nitya Puja (daily worship), Kāmya Puja (worship performed for a specific purpose) and many other forms of worship. At the same time, Panchāmrit was consumed for the child to increase strength, grasping power, intelligence, etc.

Apart from using in religious activities, ayurvedic texts have mentions of Panchāmrit as medicine.

शर्करा मधु दुग्धं च घृतं दधि समाशंकम् ।

पञ्चामृतमिदं प्रोक्तं देहशुद्धौ विधीयते ॥

(महानिर्वाणतन्त्र)

This means when sugar, honey, milk, ghee and yogurt are all combined in equal quantities, the mixture is called Panchāmrit, which is said to be useful for body purification.

According to Raasaratnasamunchaya, Panchāmrit is a blend of five ingredients that reduces acidity and it is good for mental health. Panchāmrit aids deceases like tuberculosis. As mentioned in Dhanvantari Nighantu, Panchāmrit helps reduce deceases as well as helps digestion, it reduces inflammation and is effective in pediatrics.

Milk-

According to the Ayurveda texts, Milk is considered as nutritious due to its cold, sweet and fat properties. There is a widespread description of cow's milk, especially in the cultural field. Mentions of milk are found in many places in Vedas. Vedas believe that milk is the best-confirming substance or the symbol of all nutritious food. Milk is considered as nutritious and sacred. Milk is considered to be the main ingredient in Panchāmrit.

Yogurt-

Yogurt is a product made by milk. It is one of the main ingredients in Panchāmrit. Yogurt is a sour matter made from milk. The Vedic people used a mixture of yogurt and some to make a dish called dadhyashir. Yogurt helps digestion. It is filled with probiotics. Yogurt helps strengthen the intestines.

Yogurt is made by storing milk powder and mixing yogurt in it. Yogurt is made by mixing yogurt in prescribed milk. Yogurt is made by squeezing lemon into milk. When the milk is heated and made cool, the properties of the milk destroy and it transforms into yogurt at a distance of one day. But this yogurt is not sour. It reduces vaat, pitta and Kafa (phlegm).

It seems that Indians have been known since ancient times to make yogurt by combining milk with acidic substances.

Ghee-

Ghee is clarified butter. Ghee is known everywhere since Vedic times. It is said, Cow's ghee is to be sprinkled on shilvling. There are many mentions of ghee donation. Ghee is an energizer. It has extra fats.

तेजोवाएतत पशुनाम यत्घृतम् | - ऐ. ब्रा. ८/२० it means ghee is a brightness of animals.

एतद्वा अग्नेः प्रियंधाम यत्घृतम् | - ऐ. ब्रा. १/१, ९/६ Ghee is dear to fire.

There are mentions of ghee in Vedic literature. Considering the nourishment, ghee is said to be life itself. In Ayurveda, ghee and its various forms are used for medicine everywhere.

Honey-

Honey is collected by different insects. These insects mainly include honeybee, beetles, and particular species of bees. Accordingly, there are different species of honey. Honey helps to reduce fat, kafa and pitta. It is a natural preservative. Honey is a sweet dish. Honeybees collect and store juice of flowers in their hive. Their hives are seized by human beings. In Rig-Veda, the word sārādh is used for honey. However, in the Vedas, the word has come to mean sweet food or drink. In some places, it also means som or milk. But in the sense of honey, the word is used exactly. However, in later literature, honey has the same meaning. Many religious practices use honey. According to Matsyapurana, honey should be offered to various deities. Honey is one of the components of Panchāmrit. It is also used for Naivedya. Honey is a necessity in the meal of Shrādhha Vidhi. (The ritual made to bring peace to the dead ancestral spirits).

It is said in Vayupurana that honey is used in Pind dan in Gayakhsetra. Because of this, honey has received a kind of sanctity. The graduating groom is worshiped by a ritual called Madhupark. Here also honey is used with yogurt. In ancient times sages used to consume honey as a part of their food. They should be using honey to sweeten any substance.

Sugar-

Sugar reduces thirst. It is a bile (pitta) reducing element. In fact, in Sanskrit, sugar is called Sharkarā. However, Sharkarā is the only word found in ancient Sanskrit literature. In the

Vedic literature, the word Sharkarā comes as a meaning of sweet grains. The word sugar might be derived from the word Sharkarā. The word sugar is also found in the Arab region. In the 15th century, sugar production started to increase in western states as well as worldwide. Sucrose and fructose are the two essential compounds for the human body. These compounds are passed on to the body through other foods. The mantras that are used in Vedic texts for sugar are all used in the sense of delicious dishes. In mythology, there are descriptions of the importance of sugar or how sugar is produced. The later history of sugar is well known. The mention of sugarcane is found in the Vedic period.

Saffron

According to Ayurveda saffron is an intelligence enhancer. Saffron has been added to give flavor to Panchāmrit. This plays an important role in using Panchāmrit as a food or sweet dish. The saffron is a spice that seems like small threads. A very small quantity of saffron can give an aroma to dish and make it golden-yellowish.

RESULTS AND DISCUSSION

Over the past 4 years, I've been studying Panchāmrit in various ways as well as examined different aspects. Used several types of utensils, packaging materials, raw material, etc. changed the proportion, changed the sequence to make the study more effective. Utensil wise, material wise as well as packaging wise tests are taken.

It is known that sugar, honey, milk, ghee and yogurt are typically combined in equal quantities to make a mixture known as Panchāmrit, which can be useful for the purification of human body. The process for making Panchāmrit involves mixing of these ingredients randomly. Such process is also stated in Dharmashastra. However, the known process is unable to produce a stable product having desired stability, appearance, taste, color etc.

Here are some primary interpretations of this research:

Sample: normal Panchāmrit without frozen or preserved. Approx. the proportion of all ingredients.

1. When prepared, Panchāmrit lasts for up to 8 hours.
2. If copper-brass utensils are not coated, then the Panchāmrit deteriorates.

3. It seems that the taste of Panchāmrit changes after 8 hours when kept in silver utensils.
4. Panchāmrit prepared in the morning, changes its flavor and color and doesn't remain appropriate to eat until the next morning.
5. Panchāmrit lasts in earthenware above 8 hours.

These are earlier and simple interpretations which is the first step of this research. The next step was testing the Panchāmrit in research labs. As Panchāmrit is a food-grade product and most of the ingredients are of biological origin, laboratory tests for evaluation of its quality and potency, presence of pathogenic and non-pathogenic micro-organisms is a selective test which was preferred. Hence, 2 samples of Panchāmrit were sent to the lab for testing. Analysis made in this regard is as follows:

Panchāmrit has been tasted by 2 ways-

Fresh

Frozen for 1 Month

When frozen without using any preservatives, the taste of Panchāmrit doesn't have significant effect. Also, there were no variations in the components.

*Reports of these tests by 'NAFARI Pune' are as follows:

SR. NO.	PARAMETERS	RESULTS	LOQ	UNITS	TEST METHODS
1.	Total Plate Count	5.9×10^4	--	CFU/g	IS:5402
2.	Coliform	<10	--	CFU/g	IS:5401 (P-I)
3.	Yeast & Mould	5×10^1	--	CFU/g	IS:5403
4.	E.coli	Absent	--	Per 10 g	IS:5887 (P-I)
5.	Salmonella	Absent	--	Per 25 g	IS:5887 (P-III)

Considering the shelf life, the storage or packaging of Panchāmrit becomes important. June and August batches have been made to check the shelf life of the product.

Total 2 batches were sent to the lab in August.

I used a traditional method for a sequence of mixing ingredients which is –

Milk-Curd-Ghee-Honey-Sugar-Saffron

The traditional method of preparing Panchāmrit includes an equal proportion of all ingredients. But I've changed the proportion to get the desired properties of Panchāmrit.

Proportion of the ingredients is as follows-

Milk - 15 %

Curd - 15 %

Ghee - 29 %

Honey - 30 %

Sugar -10 %

Saffron - 1 %

Procedure: Heat the milk and cool it. Remove cream over it. Add curd (made uniform), dilute ghee, and mix. Now add honey as it is, then add sugar powder and finally add finely chopped saffron and mix it well. Stir the mixture uniformly.

1)

Utensil used to make the product : Steel	Packaging : Plastic bags
Milk used: Desi cow's milk (24/08/2020)	Ghee used : Desi cow's ghee
Curd used: Desi cow's curd (made on 26/08/2020)	Honey used : readymade
Date made : 29/08/2020	

2)

Utensil used to make the product: Steel	Packaging : Plastic bags
Milk used: Desi cow's milk 19/08/2020	Ghee used: Desi cow's ghee
Curd used: Desi cow's curd 19/08/2020	Honey used : wild
Date made : 19/08/2020	

R&D batches were prepared and sent to the lab for testing.

Some interpretations of this study are as follows:

1. If the milk and curd are mixed first, it becomes curd.
2. If the milk and ghee are mixed first, ghee floats on the milk. Hence its percentage should be decreased in Panchāmrit.
3. Due to the fat properties of ghee, honey, and ghee do not mix well with each other.
4. There are also difficulties with mixing yogurt and honey.
5. No changes occur when milk and sugar combine.
6. Panchāmrit turns yellowish after mixing honey with it.
7. Panchāmrit doesn't last long if mixed fruits.
8. Honey is a natural preservative. Therefore the percentage of honey should be increased.

The latest batch sent to the lab was the March batch. This test was performed to check if some toxic elements i.e. Arsenic, Mercury, Lead, Aflatoxin M1, and Cadmium are formed in the prepared Panchāmrit and shelf life of the Panchāmrit.

Details of this sample are as follows:

Based on the above interpretations, some changes were made in this experiment. The sequence of mixing ingredients changed which is –

Milk-Honey-Curd-Ghee-Sugar-Saffron.

Proportion of the ingredients is as follows-

Milk - 20 %

Honey - 35 %

Curd - 15 %

Ghee – 19.5 %

Sugar -10 %

Saffron – 0.5 %

Procedure: Heat the milk and cool it, remove the cream over it. Add honey and stir it well. Now add curd, diluted ghee, sugar powder and finely chopped saffron. Make the mixture uniform. Stir it in a certain way.

Utensil used to make the product: Steel	Packaging : Pet bottles and earthen vessel
Milk used : buffalo milk	Ghee used: buffalo ghee (made)
Curd used : buffalo curd (made)	Honey: readymade
Date made : 17/03/2021	

The results of this test do not contain any toxic substances or they are extremely negligible and do not have significant effect on the Panchāmrit. Hence Panchāmrit remains edible here.

*Reports of these tests by ‘NAFARI Pune’ are as follows-

Sample Name: Panchamrut (in PET Bottles)

SR.NO.	PARAMETERS	RESULTS	LOQ	UNITS	TEST METHOD
1 \$	Arsenic	<LOQ	0.1	mg/kg	03/SOP/004 Based on AOAC 2015.01, 21st Edition
2 \$	Cadmium	<LOQ	0.1	mg/kg	03/SOP/004 Based on AOAC 2015.01, 21st Edition
3 \$	Lead	<LOQ	0.1	mg/kg	03/SOP/004 Based on AOAC 2015.01, 21st Edition
4 \$	Mercury	<LOQ	0.025	mg/kg	03/SOP/004 Based on AOAC 2015.01, 21st Edition
5 \$	Aflatoxin M1	<LOQ	0.01	µg/kg	03/SOP/013

Sample Name: Panchamrut (in Earthen Vessel)

SR.NO.	PARAMETERS	RESULTS	LOQ	UNITS	TEST METHOD
1 \$	Arsenic	<LOQ	0.1	mg/kg	03/SOP/004 Based on AOAC 2015.01, 21st Edition
2 \$	Cadmium	<LOQ	0.1	mg/kg	03/SOP/004 Based on AOAC 2015.01, 21st Edition
3 \$	Lead	<LOQ	0.1	mg/kg	03/SOP/004 Based on AOAC 2015.01, 21st Edition
4 \$	Mercury	<LOQ	0.025	mg/kg	03/SOP/004 Based on AOAC 2015.01, 21st Edition
5 \$	Aflatoxin M1	<LOQ	0.01	µg/kg	03/SOP/013

Some interpretations of the latest experiment:

1. If the milk and honey are mixed first, the milk does not transform into the curd.
2. Milk, Curd, and Ghee come under one family. Only Honey is of another family.
3. While preparing Panchāmrit, if the sequence of mixing ingredients is changed, the resulting Panchāmrit also changes. These changes vary according to color, taste, form, etc.

This batch was also tested for shelf life. This formulation of Panchāmrit can last up to 6 months without any chemical preservatives at 18° C frozen condition in pet bottles, aluminum foil bags as well as plastic bags. Further, we are willing to do probiotic test of Panchāmrit.

CONCLUSION

- After doing several experiments and tests, the best resulting formulation was decided to be finalized. Which is -

Milk - 20 %

Honey - 35 %

Curd - 15 %

Ghee – 19.5 %

Sugar - 10 %

Saffron – 0.5 %

- Packaging materials to be used are pet bottles, aluminum foil bags and plastic bags.
- Milk, Curd and Ghee are to be used of buffalo.
- Honey to be used readymade.

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REFERENCES

1. Aitarey. Aitarey Brahman. Pune. Anamol Prakashan. 2003
2. Translator – S. N. Khandelwal. Bhavishyapurana;Part III. Varanasi. Chaukhamba Sanskrit Pratishthan. 2017
3. Maheshwar Bhagwat. Mahanirvantantra. Mumbai. Khemraj Shrikrushna Das. 1993
4. Vedvyas. Translator- S. N. Khandelwal. Skand Mahapurana:Vaishanv Khand, Varanasi. Chaukhamba Krishnadas Academy. 2014
5. Shri Narendranath Vidyanidhi. Koulavali Nirnaya. Kolkatta. Gowardhan Mudranalay. 1941
6. Editor- Hari Narayan Apte. Acharendu. Pune. Anandashram. 1909
7. Ayurvedacharya Venimadhav Shastri & Ayurveda Visharada Narayan Hari Joshi, Ayurvediaya Shabdakoshah, Mumbai, Maharashtra Rajya Sahitya ani Sanskruti Mandal, 1968.

