

CONCEPT OF *KSHEERA* AND *GHRITA* AS *NITHYA RASAYANA*

A review article

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Abstract

Nutrition is a cornerstone of the Indian healing system of Ayurveda. It emphasizes the relationship between food, health and well-being. *Rasayana* is a vital component of Ayurveda that results in rejuvenation and preventive health care. Its holistic approach not only seeks to enhance physical well-being but also addresses mental and spiritual health, reflecting Ayurveda's comprehensive understanding of human health. *Nithyam Ksheera Ghritabhyasa* is a foundational Ayurvedic practice that promotes the daily consumption of milk and ghee, which are considered as *sattvic* foods. It promotes purity, strength, mental clarity and rejuvenate the body. Milk, which is rich in nutrients like protein and calcium supports bone health, enhances digestion and boosts immunity. Ghee, known for its nourishing properties, aids in detoxification and promotes mental clarity. Together, these foods helps to improve overall vitality and support the body's natural rhythm. Incorporating *ksheera* and *ghrita* into daily diets through palatable preparations is vital for achieving the benefits of *Nithya Rasayana*. By utilizing various preparations mentioned in classics individuals can enjoy these nutritious substances regularly, thereby supporting their overall health and well-being. This review aims to gather scientific evidence supporting the Ayurvedic principle of *Ksheeraghritaabhyaso Rasayanam*, which emphasizes the regular intake of ghee (*Ghritha*) and milk (*Ksheera*) for rejuvenation and longevity.

Keywords : *Ksheeram, Ghritam, Nithyarasayanam, Palatability*

Introduction

Ayurveda, the ancient Indian system of medicine, encompasses a holistic approach to health and well-being. Among its various disciplines, *Rasayana* stands out as a specialized branch focused on rejuvenation and longevity. It utilizes a combination of herbal formulations, dietary regimens, and lifestyle practices aimed at achieving homeostasis within the body. This therapy not only addresses physical health but also emphasizes mental well-being by improving cognitive functions and emotional balance.

The term *Rasayana* is derived from two Sanskrit words *Rasa*, meaning essence or nourishing fluid, and *Ayana*, meaning pathway or movement^[1]. Together, they signify the processes that enhance the quality of bodily fluids and promote optimal health. It is practiced as drug, diet, special health promoting conduct and behaviour.

Ksheeraghritabhyaso Rasayanam is a practice that highlights the synergy between two core ingredients -milk (*ksheera*) and ghee (*ghrita*). According to Charakacharya these are the chief ingredients which rejuvenate body by through daily consumption^[2]. The other contexts where the importance of daily intake of *ksheera* and *ghrita* are emphasized include *Achara rasayana*^[3], *Ajasrika rasayana*^[4] and *Nithyasevaneeya ahara*^[5]. These substances are considered to hold a special place in Ayurvedic medicine due to its deeply nourishing and rejuvenating properties.

Ksheera (Milk)

In Ayurvedic literature, *Ksheera* (milk) is regarded highly for its vast therapeutic potential and is frequently mentioned in classical texts such as Charaka Samhita, Sushruta Samhita, and Ashtanga Hridayam. *Ksheera*, as a natural and nourishing substance, plays a central role in many Ayurvedic treatments and practices. It improves appetite and vitality, nourishes body tissues and helps to rejuvenate the body. It increases *ojas* as it has qualities similar to that of *ojas*. It enhances strength and immunity ^[6]. It is essential to consume milk mindfully, considering individual needs and *doshic* imbalances, to maximize its *Rasayana* benefits.

Milk is a nutritious food containing various essential components that contribute to health. Approximately 3.5% of milk is protein including casein and whey. It provides essential amino acids and possess bioactive properties, such as antimicrobial and antihypertensive effects ^[7]. It contains calcium, vital for bone health. Milk provides about 1 g/L of calcium, contributing significantly to dietary calcium intake. It is rich in vitamins such as vitamin A, D, B12, and riboflavin, which support vision, immune function, and energy metabolism. The beneficial fatty acids in milk such as oleic and linoleic acid, which can improve heart health and provide energy. Milk contains minerals like phosphorus, potassium, and magnesium, crucial for various bodily functions including muscle contraction and nerve signalling ^[8]. Evidence showed that milk has a wide range of physiological activities including anti-carcinogenic, anti-inflammatory and anti-oxidative properties^[9]. Daily intake of 200ml of milk offers several health benefits including 7% lower risk of stroke ^[10], 6% lower risk of CVD ^[11], and a 4% lower risk of hypertension ^[12]. The meta-analysis with 1,003,303 subjects showed that the highest milk intake was connected with a lower risk of both colon and rectal cancer, especially in colon cancer ^[13].

Ghrita (Ghee)

Ghrita is a key substance in Ayurveda, referred for its *Rasayana* properties. Its rejuvenating, nourishing and detoxifying effects make it one of the most powerful substances for maintaining health, vitality and longevity. *Ghrita* is a cornerstone of Ayurvedic *Rasayana* therapy whether used alone or in combination with medicinal herbs, promoting not only physical well-being but also mental clarity and spiritual peace. When consumed in moderation, *Ghrita* is a potent tool for rejuvenation, detoxification, and maintaining overall health. *Ghrita* act as a promoter of intellect, fertility and longevity, enhances voice quality, complexion and improve semen quantity^[14]. It stimulate digestive power and assists in the proper development of *ahara rasa*. Its *madhura rasa*, *guru*, *snigdha*, *sheeta gunas* improve the nutritional content of *rasa* and produce *dhatu* with the best qualities. It is the only medium which nourishes the brain tissue^[15]. Its therapeutic and rejuvenating qualities make it a cornerstone of Ayurvedic *Rasayana* therapy, fostering physical, mental, and spiritual well-being.

Ghee is a significant food source of essential fatty acids like linolenic acid, arachidonic acid and fat-soluble vitamins like A, D, E, and K ^[16]. This imparts several health benefits to the body. Other beneficial fatty acids in ghee like DHA, EPA, and CLAs have been found beneficial for cognitive functions and anti-inflammatory effects in the brain ^[17]. SCFA in ghee improve digestion, enhance the integrity of the intestinal wall and boost the immune system in the gut ^[18]. Additionally, researchers have found that α -linolenic acid reduces cholesterol and triglyceride levels ^[19], improves eyesight, reduces weight, and has anti-inflammatory effects. Ghee is rich in vitamin A which is essential for the function of the heart, lungs, eyes, and other organs, as it supports cell growth and differentiation. Calcium is important for the development of bones and teeth, giving them structure and hardness. It also plays a role in the metabolism of vitamin D. Ghee contains butyrate, a short-chain fatty acid with anti-inflammatory properties ^[20]. It enhances digestion and absorption of fat-soluble vitamins (A, D, E, K) and supports cognitive function.

While ghee is highly beneficial for health, it is important to consume according to individual requirements. The daily intake of ghee should be customized based on an individual's constitution (*Prakriti*), current health status, and the seasonal changes that affect the body. When used mindfully, ghee can be a powerful ally in Ayurvedic *Rasayana* therapy, nourishing the body and mind for a long and healthy life.

Rasayana action of Ghrita and Ksheera

Rasayana dravyas, *Ghrita* and *Ksheera* act holistically, promoting rejuvenation at every level of the body—physical, mental, emotional, and spiritual. It works at the level of *Rasa*, *Agni* and *Srotas*. At the level of *rasa* it nourishes the *annarasa* with its rich nutrients. By improving digestive power it act at the level of *agni* and

helps in proper digestion and metabolism. At the level of *srotas* it improves micro circulation^[21] and helps in proper assimilation of the nutrients. These substances contribute to longevity, good health, and mental clarity by nourishing the tissues, balancing the *doshas*, enhancing *Ojas* and improving the body's immunity and vitality.

Ksheera and Ghrita as Nithyarasayana

The daily use of milk (*Ksheera*) and ghee (*Ghrita*) as *Rasayana* will promote overall health, well-being and longevity. Milk and ghee are considered *Jeevaniya* (life-giving) substances due to their nourishing properties. This combination is particularly beneficial for children, supporting their growth and immunity against diseases due to its nutritious content^[22]. This practice aligns with Ayurvedic principles advocating for preventive healthcare through diet. It addresses modern lifestyle challenges such as poor nutrition and environmental stressors by reinforcing the body's resilience. A critical review highlighted the role of *Ksheeraghritaabhyasa* in enhancing *Ojas* through proper nourishment of *Dhatus* (tissues)^[23]. It emphasizes that regular intake can counteract modern lifestyle diseases caused by poor nutrition. The antioxidant properties associated with milk and ghee contribute to reducing oxidative stress within the body, which is crucial for maintaining cellular health. Researches shows that *murchana* of *ghrita* increases the degree of unsaturation indicating the important role of unsaturated fatty acids in reducing the total and LDL cholesterol levels^[24].

The role of *ksheera* and *ghrita* as *Naimithika rasayana* can also be incorporated here. Their combined and continued use not only enhances physical health but also supports mental well-being, making them integral components of *Naimithika Rasayana* aimed at specific health challenges. Regular incorporation of these substances into the diet can promote resilience against various ailments. *Mustha ksheera*^[25] in *Amatisara*, *Pippalyadi ghrita* in *Jwara*^[26], *Chagaladya ghrita*^[27] in *Rajayakshma*, *Vasa ghrita*^[28] in *Raktapitta* are some of them.

Garbhini Paricharya is another area where the regular use of *ksheera* and *ghrita* is explained. *Ksheera* and *Ghrita* in raw as well as processed form have been indicated throughout the gestational period by Acharyas. It provides adequate nutrition to the pregnant woman and growing foetus due to its sweet taste and cold potency. Researches shows a positive association between maternal consumption of milk and milk products and the birth weight of baby^[29]. *Acharyas* specifically indicated the intake of *ksheera* and *ghrita* for men as periconceptional measures to improve sperm quality.

When comes to the practical aspects of *Nithyarasayana* ensuring the palatability of food products through effective processing is crucial for promoting their regular use. Palatability of the food is jointly determined by the nature of the food (smell, taste, texture and state), the sensory capabilities and metabolic state of the subject, and the environment in which the food and subject interact^[30]. Dairy products are food items which have a low compliance in adults.^[31] *Nithyarasyana* needs continued compliance with the food item, Here processing of the food is one important aspect by which the daily intake of substances as *Nithyarasayana* can be ensured. Properly processed foods not only improve taste but also enhance digestibility, ensuring that the nutrients are effectively absorbed and utilized by the body.

There are several preparations mentioned in classical textbooks that can ensure the adequate intake of *ksheera* and *ghrita* without compromising the palatability factor. *Ghritapura*, *Narikela ksheerika*, *Hamsini*, *Yava ksheera*, *Dugdha kupika*, *Lapsika*, *Dravaka modaka* are few of them.

Table 1 Preparations of *ksheera* and *ghrita*

Name of preparation	Method of preparation
Ghritapura ^[32]	Fine wheat flour is kneaded with milk and sugar. Then spread over a pan and cooked in ghee.
Narikela ksheerika ^[33]	Cut the fleshy part of coconut in to small pieces and add to milk, then boil.
Hamsini ^[34]	Mix the thick milk with curd and strain it. Then, add sugar, cardamom powder, and pepper powder.
Yava ksheera ^[35]	Boil milk by adding barley powder and ghee.
Dugdha kupika ^[36]	Separate the solid portion of milk by adding sour substance. Mix it with rice flour to make it thick. Make small balls out of it and fry in ghee. Make a hole

	in the center of the ball and fill it with the thickened milk. Fry it again in ghee and soak in sugarcandy syrup.
Lapsika ^[37]	Roast wheat flour in ghee then gradually add milk to it till it become properly cooked. The add sugar and continue cooking till ghee separates. Then add powder of clove and black pepper.
Dravaka modaka ^[38]	Add a mixture of milk and ghee to wheat flour and cook it until a viscous fluid is formed. When the mixture is half-cooked, add the required amount of ghee. After completing the cooking add equal amount of sugar. Prepare laddus from this mixture.

Conclusion

Ayurveda views health as a balance among physical, mental, and spiritual aspects. It recognizes that well-being is not merely the absence of disease but involves a harmonious state of all life aspects. *Rasayana* is a vital component of Ayurvedic medicine that emphasizes rejuvenation and longevity through a holistic approach that integrates diet, herbs, and lifestyle practices. By focusing on enhancing vitality, boosting immunity, and delaying aging, *Rasayana* therapies provide valuable strategies for maintaining health throughout life. *Ksheera* and *Ghrta as Rasayanam* embodies a holistic approach to wellness through dietary practices rooted in ancient Ayurvedic wisdom. By harnessing the nourishing properties of milk and ghee, this practice not only aims to enhance longevity but also fosters overall health by supporting bodily functions at a cellular level. In today's context, where lifestyle related diseases are prevalent, *Nithyam Ksheera Ghrtabhyasam* offers a natural preventive strategy to enhance well-being. The daily and proper use of *ksheera* and *ghrita* can be ensured by processing techniques, Continued research into this area can lead to better integration of these practices in modern health regimens.

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