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ANCIENT-MODERN CONCORDANCE OF SHATA DHAUTA GHRITA:

MULTIDISCIPLINARY APPLICATIONS OF TRADITION AND TECHNOLOGY

PULATE C*, TARE H AND DAMA G

Shri Gajanan Maharaj Shikshan Prasarak Mandal's Sharadchandra Pawar College of Pharmacy,

Dumbarwadi, Otur, Tal. Junnar, Dist. Pune, M.S., India

***Corresponding Author: Chetan Pulate: E Mail: harshaltare51@gmail.com**

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ABSTRACT

In this review endeavour has been made to study the ancient modern concordance of Shata Dhuta Ghrita along with its multidisciplinary applications. Shata Dhuta Ghrita is an ancient cream with magical beautification properties. It is certified by science for its supreme skin-healing benefits & Ayurveda defines it as supreme skin elixir. A cooling, super-light cream and powerful anti-aging formula, Shata Dhuta Ghrita is an anti-inflammatory skin solution & a beautifying skin agent. As specified in Ayurveda's classical text Charaka Samhita, Shata Dhuta Ghrita is made in pure copper vessel by washing pure cow ghee 100 times in the aura of divine mantra chants. Shata Dhuta Ghrita is a light cream that deeply penetrates into all seven layers of skin to heal it from within. It keeps skin silky, smooth & wrinkle-free. It protects against sun-damage & heals age-spots. Its light texture & silky-smooth feel feels heavenly on skin. Shata Dhuta Ghrita helps shrink the pores & is a super skin food for all skin types.

Keywords: Shata Dhuta Ghrita, Ayurveda, Anti-inflammatory

INTRODUCTION

The ritual of extracting Shata Dhauta Ghrita

Shata Dhauta Ghrita is a result of an ancient Ayurvedic ritual of washing cow ghee (clarified butter) 100 times with purified water in a copper vessel while chanting vedic mantras. The result is butter like odorless silky cream which has the incredible property of penetrating all the seven layers of the skin without blocking the pores [1].

The Seven Layers of your Skin

Ayurveda describes seven distinct layers of the skin, each with its own structure and function. The skin as a whole is able to effectively perform its overall functions when all the seven layers are healthy [2, 3].

Avabhasini

This is the outermost layer. It reflects the complexion and aura of the individual. Internal and external moisturization restores the health and appearance of this layer of the skin.

Lohita

This layer supports the outermost layer. It indicates the quality of Rakta Dhatu (blood)

and impacts the aura of the outer layer and accentuates sensitivity to the sun.

Shweta

This is a white layer, and it provides balance to skin color, lightening the darker colors of the inner layers.

Tamra

This layer nurtures the upper layers of the skin. It supports the immune system. This is the layer that helps the skin perform its function of being a “barrier.”

Vedini

This fifth layer sensually links the skin to the rest of the body. It is the center for transformation of sensation — feeling of pain, for example.

Rohini

This layer upholds recuperating and recovery. A fruitful nutritional diet routine supports this layer.

Mamsadhara

This deepest layer is the stage for the skin's soundness and solidness. At the point when this layer is in balance, the skin looks youthful and flexible.

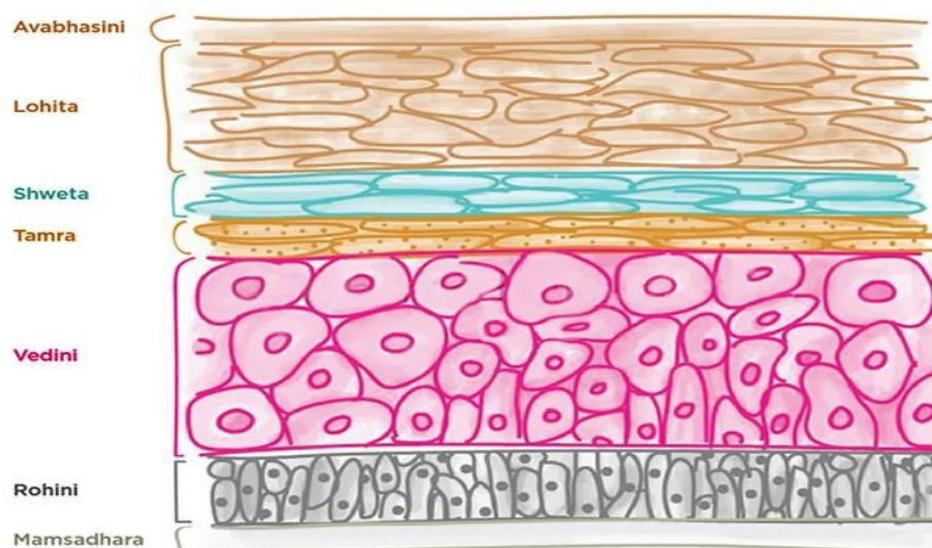


Figure 1: Seven Layers of Skin (Source: alyuva)

Shata Dhauta Ghrita – A background

Ayurveda and its prizes resemble a tremendous sea. Panchagavya, 5 of Ayurvedic fixings that are easily recognized names now and acquired from cow (Milk, Curd, Ghee, Urine and Dung) have huge part in illness the executives. Every one of the items have monstrous number of advantages. With regards to skin, the most solid and sought after item is GHEE.

It's utilized in different structures in the Ayurvedic healthy skin system. Notwithstanding, outstanding amongst other the revered Ayurvedic method is Shata Dhauta Ghrita or multiple times washed ghee. Shata Dhauta Ghrita is multiple times washed explained butterfat, which has been gotten from milk from unadulterated desi

cow. It was initially found in the heavenly Atharva Veda.

Unadulterated ghee from cows is washed multiple times in a copper vessel while mantras are being recited. Reciting of Mantras helps tune into the force inside and its reverberation channelizes every one of the energies and positive vibrations in the item. Each wash makes the ghee lighter and causes a ton of different changes in its synthetic properties. The way toward washing in the copper vessel works with the blending of copper in the combination, expanding its properties. The trademark smell, granular and slick consistency in cow ghee no longer remaining parts in Shata Dhauta Ghrita. It turns into a homogeneous, smooth, non-slick item which is simpler to apply.

With each wash, the substance goes through various compound and actual changes. The expanded copper content in the item recuperates scars and furthermore gives it a calming property. Shata Dhauta Ghrita is useful in getting gleaming skin, yet can likewise be utilized to treat an assortment of other skin-related issues. The increment in dampness content because of washing is useful for hydration and cooling impact on skin. The greatest and most extraordinary property that the item soaks up from being washed in a copper vessel is that it is the lone compound that infiltrates through every one of the 7 layers of the skin. The Products are made while reciting so vibrations are invested in the item thus by your skin. Every item clings to the best expectations of virtue, credibility and quality. Aside from customary skin issues, SDG can likewise fix dermatitis, rosacea, and pimples. Along these lines it is the healthy answer for all your skin issues [4, 5].

Customary arrangement of medication, advanced over the ages, had been totally taking care of the medical care of the world until the approach of allopathic arrangement of medication. As this framework utilized information on present day science and science, for both revelation and treatment, it discovered quick adequacy and now

consumes critical space in the space of medical services. Regardless of this, the commitment of the conventional frameworks of medication to medical care keeps on being tremendous. The adequacy of conventional arrangements, which are regularly polyherbal, is expanding a direct result of the overall impression that these items are amiable. The single particle based medications utilized in allopathic framework can have extreme unfavorable impacts. Panchagavya, for example 5 items acquired from (cow milk, curd, ghee, pee and fertilizer) referenced in Ayurveda have huge job in illness the executives. Cow ghee is having different exercises without anyone else and furthermore by definitions created utilizing cow ghee. For instance, impact of Bramhi ghrita on CNS, narcotic and anticonvulsant action of Unmadnashak ghrita, wound mending action of Darvhi ghrita, wound recuperating movement of Hingvadya ghrita, mitigating action of Jatyadi ghrita, and so on Shata-dhauta-ghrita (SDG) is multiple times washed (shata = 100, dhauta = washed) explained butterfat. It is referenced in customary writings for the administration of conditions like consumes, chicken pox, scars, wounds, herpes, infection, and other skin sicknesses and as a vehicle for medications to be applied

remotely. In the investigation, the Ayurvedic planning has been assessed for its physicochemical boundaries and changes happening during washing were examined. An endeavor is made to discover the reasoning behind washing cow ghee multiple times with water. Traditional arrangement of medication, advanced over the ages, had been totally caring for the medical services of the world until the coming of allopathic arrangement of medication. As this framework utilized information on current science and science, for both disclosure and treatment, it discovered quick worthiness and now consumes huge space in the space of medical services. Despite this, the commitment of the customary frameworks of medication to medical care keeps on being colossal. The adequacy of conventional arrangements, which are ordinarily polyherbal, is expanding a result of the overall impression that these items are kindhearted. The single particle based medications utilized in allopathic framework can have extreme antagonistic impacts. Panchagavya, for example 5 items acquired from (cow milk, curd, ghee, pee and compost) referenced in Ayurveda have huge job in sickness the board. Cow ghee is having different exercises without help from anyone else and furthermore by definitions created

utilizing cow ghee. For instance, impact of Bramhi ghrita on CNS, narcotic and anticonvulsant movement of Unmadnashak ghrita, wound mending action of Darvhi ghrita, wound recuperating action of Hingvadya ghrita, mitigating action of Jatyadi ghrita, and so on Shata-dhauta-ghrita (SDG) is multiple times washed (shata = 100, dhauta = washed) explained butterfat. It is referenced in conventional writings for the administration of conditions like consumes, chicken pox, scars, wounds, herpes, infection, and other skin sicknesses and as a vehicle for medications to be applied remotely. In the examination, the Ayurvedic readiness has been assessed for its physicochemical boundaries and changes happening during washing were investigated. An endeavor is made to discover the reasoning behind washing cow ghee multiple times with water [6, 7].

Methods of Preparation

Samskara assumes a significant part in all definitions in changing the medication into wanted dose structure with better helpful worth. Shatadhouta Ghrita is one such novel Ayurveda readiness and a model for Dhauta samskara, Jala samskara and Agni samskara. It is set up by two techniques. In one technique Ghrita (Ghee) is warmed, poured in chilly water and remembering

Ghrita for multiple times. In second strategy *Ghrita* is washed with water for multiple times. The Pharmaceutical investigation showed stamped contrasts in actual boundaries and distinction in planning time was likewise seen in this examination [8].

Samskara is a procedure adopted in pharmaceuticals to induce the therapeutic properties, thereby enhancing the potency and bioavailability of the drugs involved. *Samskaro hi naama Gunantaradhanam Uchyate*. The methods by which the properties like *Rasa*, *Guna*, *Virya*, *Vipaka*, undergo “*Gunantaradhaanam*” i.e the changing of *Sthoola Guna* (macro form) to *Sukshma Guna* (micro form); there is transformation of physical as well as chemical properties within the *Dravya* (Substance). *Shatadhouta Ghrita* is an Ayurvedic arrangement, ordinarily recommended for treatment of skin conditions. As the name indicates, it is set up by washing Ghee multiple times with water. This methodology changes the ghee into a delicate, cooling, supporting, plush treatment that is utilized as a customary lotion and hostile to wrinkle skin cream. *Shatadhauta Ghrita* is set up by washing the *Ghrita* with water till the water turns warm and afterward the warm water is disposed of and new water is added and the cycle is rehashed for

Multiple times. *Vaidayak Shabda Sindukara* has explained one more reference about the preparation of *Shatadhouta Ghrita* by *Santapya* (Heating) the *Ghrita* and *Nirvapana* (Pouring) in *Sita Jala* (Cold water) for one hundred times. This method is seldom used in pharmaceuticals practice and is not popular. Hence, an attempt was made to compare pharmaceutical preparation of *Shatadhouta Ghrita* by both the methods and understand the pharmaceutical changes that occur by preparing it and it was carried out for ten times with *Sagni* and *Niragni* method [9-12].

Method of preparation of *Shatadhauta Ghrita*

Ghrita: - The whole procedure was divided in two methods.

- Method A - Preparation of *Shatadhauta Ghrita* by *Sagni* method
- Method B – Preparation of *Shatadhauta Ghrita* by *Niragni* method

Method A

- Desired amount of *Ghrita* (50 g) was taken in steel vessel and started heating on gas stove from a distance of 4 cm to give *Mandagni*.
- Once *Ghrita* melted and started boiling it was poured in cold water having temperature of 22°C.
- Once *Ghrita* got cool, it settled over the water in the form of a layer.

- After self cooling *Ghrita* was collected with the help of a spoon/ spatula.
- Some watery portion came along with spoon that was removed manually.
- Again, the same *Ghrita* was given mild heat (*Mandagni*) till it reached a state where the water started to splash.
- Again it was poured in cold water temperature of 22 °C.
- This process was repeated for ten times.

Method B

- Desired amount of *Ghrita* (50g) was taken in steel vessel.
- Desired amount of cold water (100 ml) was poured till the *Ghrita* fully immersed in water.
- The temperature was noted of the *Ghrita* with water
- It was rubbed well with the help of a steel

glass with some pressure till increase in temperature of water was observed.

- Once temperature was increased, water was taken out and it was measured.
- Again fresh water was poured and the same process was repeated for ten times.

Both the methods are easy for the preparation of *Shatadhauta Ghrita*. But from pharmaceutical point of view Method A (Heating method) the yield is less; time consumption is more and requires heating process is required rather than Method B (Non-heating). Analytical studies should be carried out to compare the constituent changes occurring in the *Ghrita* in both methods. A clinical study also has a wide scope to revalidate the efficacy and safety of the *Shatadhauta Ghrita* prepared by both methods [13, 14].

Table 1: Comparative Parameters of Cow ghee and SDG

Criteria	“Cow” ghee	Shata Dhauta Ghrita
Organoleptic Parameters		
Colour	Yellowish Golden	Pure White
Odour	Pleasant and Characteristic	Odorless
Taste	Characteristical	Tasteless
Texture	Oily and Granular	Homogeneous mass, Smooth and non – oily in nature

In planning SDG, temperature isn't expanded yet there is rehashed and drawn out tritutation of the fat and water blend. Consequently, the pressing factor might be contributing for fat parting for this situation. After every pulverizing, watery stage is removed and supplanted by new space of something similar if there should arise an

occurrence of fat parting. It has likewise been tracked down that parting is sped up by presence of mineral acids, certain metal oxides and sulphonic acids. SDG has been referenced to be set up in copper vessels. In this way, fuse of copper metal in the blend during pulverizing was shown by expansion in copper content in SDG. Copper can go

about as an impetus to advance fat parting. The above speculation of fat parting by utilizing enormous overabundance of fluid stage can be connected with washing cow ghee multiple times with water. It very well may be called attention to that by washing cow ghee multiple times with water, the fatty oils are splitted into glycerol and free unsaturated fats. The reduction in corrosive worth can be connected with the reality of fat parting in to glycerol and unsaturated fats, which are eliminated alongside the fluid stage. From the current work, it very well may be reasoned that changes occurring in cow ghee while washing it with water multiple times to plan Shata-dhauta-ghrita, makes it a rich and appropriate item for effective application. Notwithstanding, there is a need to do additionally concentrate on its soundness, pharmacological assessment as a powerful effective item and its plan improvement [15, 16].

DISCUSSION

Shatadhauta Ghrita is a unique Ayurvedic formulation utilized for the treatment of wounds, burns, skin illnesses and so forth it is an illustration of emulsion where Ghrita and water are in immiscible fluid, one of which is dispersed as minute globules into the other.

In Method A, Ghrita was warmed and poured

in cool water (24°C). It brings about the arrangement of oil in water (o/w) emulsion. Since while pouring the hot dissolved Ghrita in chilly water the Ghrita is separated into globules which indicate Ghrita as scattered stage and water means as constant stage. Melted *Ghrita* became solid and accumulated over the surface of water. That ghrita was taken out and there was 5 g increase in weight during 1st *Dhauta*. The reason may be the passage of water globules in fat molecules by forming water oil (w/o) emulsion. Here water molecules are considered as dispersed phase and fat molecules (*Ghrita*) are considered as continuous phase. The utilization of energy as warmth, mechanical unsettling is needed to decrease the inner stage in little drops. Warming is a compelling method of breaking practically every one of the connections between the particles of a fluid. In technique A, Ghrita was warmed so there might be shortcoming or breakage of bonds in the atoms of Ghrita and when Ghrita interacts with water fat parting cycle may happens. At the point when the liquefied Ghrita was filled virus water out of nowhere it spread over the outside of water in light of the fact that the thickness of water is more than thickness of Ghrita and there is an inconsistent appealing power among water and Ghrita particles.

After first Dhauta sprinkling of Ghrita was seen during warming Ghrita. Since some water divides consistently come during recalling the Ghrita after each Dhauta. During heat, water at the lower part of the vessel being warmed quickly transforms into steam and structures cavitations in Ghrita. Because of pressing factor created by heat it shoots up with a sound and is named as sprinkle. In Method B, Ghrita was ground up alongside water and in this way development of water oil (w/o) sort of emulsion since water is in scattered stage and oil is in constant stage. As the washing proceeds, because of pressing factor applied during fomentation, molecule size of fat granules gets decreased (according to surface it was non granular and smooth). In the long run, progressive washings bring about o/w sort of emulsion. It is conceivable that it may prompt development of a complex system

like w/o/w emulsion. The explanation might be section of water globules in fat particles by framing water oil (w/o) emulsion and prompts expanding of Ghrita.

In Method B, during pulverizing normal 2.2⁰C temperature was expanded and there is reshaped and delayed trituration of the fat and water combination. In this manner, the temperature and pressing factor might be contributing for fat parting (**Figure 1**). The yellow coloring arrives from beta carotene in the cow's butterfat. Due to heating and again washing with water the pigment may leak out into water and change in the colour takes place after washing (*Dhauta*). Method A, *Dhauta Ghrita* was more whitish than Method B. Because in Method A, heat is the additional factor which may facilitates rapid expulsion of beta carotene from *Ghrita* than Method B.

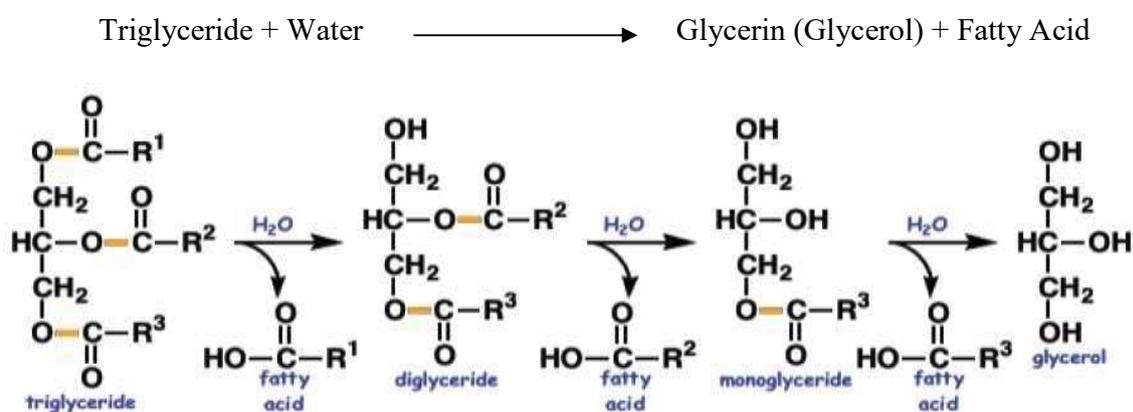


Figure 2: Fat Splitting process

The benefits of Shata Dhauta Ghrita

Shata Dhauta Ghrita is unbelievably potent when it comes to repairing damage caused to the skin by pollution and sun-exposure. This silky cream is then mixed with ayurvedic herbs like Avabhasini, Lohita, Shweta, Tamra, Vedini, Rohini, Mamsadhera etc. and an earthy fragrance that leave your skin and hair feeling naturally nourished and repaired.

Authentic and Raw Fragrance

Shata Dhauta Ghrita may sometimes contain mild negligible scent of ghee that dissipates immediately after application. All these ingredients are 100% natural & sourced from organic resources. The authentic and raw fragrance of the SDG is the hallmark of its purity. The earthy and natural smell that emanates from SDG is really enjoyable. The

shelf-life of all SDG is usually 18 months after which the goodness of oils in it may begin to evaporate. It shall be stored away from moisture and keep refrigerated for longer shelf-life [17, 18].

Advantages

1. Authentic and Organic Ingredients
2. Purely Vegetarian
3. Alcohol Free
4. Chemical Free
5. Completely Natural
6. Cruelty Free
7. Free from Preservatives
8. Traditionally Accepted
9. Known for Purity
10. Applicable to Modern Cosmetic World [19, 20].



Figure 3: Comparison between Cow Ghee and Shata Dhauta Ghrita
(Source: Google Images)

CONCLUSION

Shatadhauta Ghrita is a widely practiced topical application to cure skin disorder and for skin burn cases. There are two methods of preparation mentioned for this Ayurvedic formulation, one is heating *Ghrita* and pouring in chilled water, then isolating it

again from that cold water, again heat it and pour in water. In second method water is added to *Ghrita* and rubbed with pressure till some time and change that water and again water pour in the same. Both the process is repeated for hundred times. The solution is formed here, is an example of an emulsion

where *Ghrita* and water are immiscible. Oil-water (o/w) emulsions are generally valuable as water-laundable medication bases and for general corrective reason. Water-oil (w/o) emulsions are utilized all the more generally for the treatment of dry skin and emollient applications. Thus, from this review, it can be concluded that the shata dhruata ghrita finds its modern applications in Wound Healing, anti-inflammatory activities of active pharmaceutical ingredients in form of various nanoformulations. More research endeavours are required to determine the various pharmacological as well as pharmaceutical applications of Shata Dhruata Ghrita in modern pharmaceutical era.

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