

**GHEE AS AN ANTIDOTE: A LITERARY REVIEW****Dr.Dilip Kumar Goswami<sup>1</sup>, Dr. Rama Kanta Sharma<sup>2</sup>**

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**ABSTRACT**

Ghee (Assamese: Ghee, Sanskrit: Ghrit) is a well-known product obtained from cow's milk even in the house of the general people. The process of preparation of this milk product is very easy for which no training is needed. In the previous times it was a common practice of the housewives to collect the needed portion of milk and prepare ghee from it periodically. Ghee can also be prepared from the milk of other common animals like buffalo, goat etc. But in practice when we say the word "Ghee" it indicates "cow's ghee". Poisoning is a common situation experienced by the people during the day to day life which may invite very serious type of ailment even death to the victim. Since time immemorial the human beings are getting exposure to such harmful substances (poisons) and trying to fight with their effect resulting in recovery and survival. The wise persons dedicating for the benefit of the suffering people (acharyyas -rishi) searched for easy, abundantly available substances with successful result in the condition and gathered their experience with Ghee. The ancient Ayurvedic classics praise Ghee as the best for successful use in poisoning which is also admitted by the modern classics of Toxicology.

**Keywords:** Ghee, common practice, poisoning, easy, abundantly available substances, modern classics.

**INTRODUCTION**

Exposure to the harmful and disease causing agents is not a new thing for the human society. Since existence the living beings are getting exposure to a good number of agents that caused different types of imbalance in the normal physiology which are described as disease. Such exposures may be accidental, suicidal or homicidal. Poisons are occupying an important place among them. Literatures witness the role of poisons (Assamese – Bisha , Sanskrit – Bisha ) in the society as a harmful agent . In the ancient Indian literatures many examples of use of poisons for homicidal purposes are available. Ayurvedic classics, having the position to be the ancient science of life, have discussed about the poisons, poisoning and treatment procedures elaborately. Divid-

ing Ayurveda in 8 branches one branch named "Agada Tantra" is mentioned to discuss the different poisons in detail by acharyya Susruta<sup>(1)</sup> . He discussed on the poisons in 8 chapters in a separate section named "Kalpasthana". Acharyya Charaka , the father of Indian Medicine , discuss about the poisons in one chapter of the section "Chikitsasthana". Though there is similarity on the descriptions of both the scholars then also it is seen that the description of Susruta is more elaborate. In the later period acharyya Bagbhata has added some of his own experience which indicates the evolution of the Ayurvedic system of medicine. The Ayurvedic scholars mention 24 procedures of treatment for poisoning starting from Mantra (shunting of some verses spe-

cially prescribed for the purpose) including the emergency procedures for resuscitation<sup>(2)</sup>

. A good number of single drugs and preparations are advised to use as antidotes (agada) which are described to have miraculous effect. Among the single drugs the most important one is "Ghee".

All the Ayurvedic scholars have unanimously praised Ghee as the best antidote. It is advised to use in all types of poisoning irrespective of the stage and state of the patient<sup>(3)</sup>. Modern Toxicology also advocates the role of this common household material as an antidote<sup>(4)</sup>. A comparative and scientific elaboration of the role of Ghee as an antidote can be considered to be a time tested work.

#### **Objectives:**

1. To study the effect of the poisons on the victim as mentioned in the Ayurvedic classics as well as in the Modern Toxicology.
2. To study the effect of Ghee on poisoning as available in the Ayurvedic and modern classics.
3. To conduct a comparative study of the Ayurvedic concepts with the Modern ones on the effect of Ghee on poisoning.
4. To justify the utility of Ghee on poisoning.

#### **Materials and methods:**

- To search the information's about the effects of the poisons on the victim's body and utility of Ghee on poisoning the Ayurvedic classics, viz. Charaka Samhita, Susruta Samhita, Astanga Sangraha and Astanga Hridaya were studied in detail and the available informations were collected.
- Some of the authentic books on modern Toxicology were studied and available information on the topic was collected.
- A comparative statement of the information collected was prepared and the similarities and dissimilarities were identified.

- Depending upon the classical information the utility of Ghee as an antidote was justified.

#### **Observation and result:**

Effect of poisons: - According to the Ayurvedic classics all poisons are hot (ushna) in nature<sup>(5)</sup>. They act on the victim's body with their 10 qualities that are directly opposite to the qualities of "Oja" (the vital element of the body according to Ayurveda). Stating the mode of action of poisons the great Ayurvedic scholars Charaka, Susruta and Bagbhata say that, poisons, after entering into the body directly attack the vital element of the body "Oja" and produces destruction (qualitative and quantitative reduction) of it and thus cause caseation of life (the function of the vital organs – brain, heart and lungs). Modern Toxicology states that, poisons act on the victim's body very quickly by acting on the vital organs viz. brain, heart and lungs and causes heavy stress on the organs of excretion - kidneys and liver. In most of the cases it leads to failure of the kidneys and liver causing accumulation of harmful and excretable substances in the body resulting in multi organ failure and death. Treatment of poisoning: - As stated by the Ayurvedic scholars, the main aim of treatment of the patients of poisoning should always be "to provide support to oja". For the purpose the substances (food, medicine etc.) used in the condition should contain the same properties with oja. Oja contains 10 guna as heaviness (guru), coldness (shita), softness (mridu), smoothness (shlakshna), viscous (bahula), sweetness (madhura), stable (sthira), clarity (prasanna), slimyness(picchila), unctuousness (snigdha)<sup>(6)</sup>. Therefore to provide support the Oja we are to select the medicines and foods having these qualities among which Ayurveda has given more preference to Ghee. Modern Toxicology has given a treatment module for treatment of the poisoning cases. This module also includes "prevention of further absorption" as an important step in the condition<sup>(7)</sup>. Especially

for this purpose ghee is said to have an important role. Ghee for treatment of poisoning: - The Ayurvedic classics have mentioned Ghee as the drug of choice for treatment of poisoning<sup>(8)</sup>. Charaka, the father of ancient Indian medicine, mentions ghee as the useful substance for oja and hence useful in poisoning. Again it is said that, ghee is the best among the vata-pittaprasamana dravyas<sup>(9)</sup> (substances that bring the vitiated vata and pitta – the two basic elements that contribute in holding the structural and functional integrity of the body and poisons (Bisha) , after coming to the contact with the body, produce vitiation of these two elements . Hence ghee is the best for treatment of poisoning. He also advises to use ghee regularly as it is the best among the life supporting substances (Jibaniya dravya).<sup>(10)</sup>

Susruta, the father of ancient Indian Surgery, describes the qualities of ghee in different references. As per the statements of Susruta ghee is Bishanashaka (that destroys the poisons) because it is sweet, cold, has the capacity to produce oiliness and also has the capacity to increase the vitality (Ojakara). It is also having the capacity to destroy the effect of poisons by virtue of its natural capacity<sup>(11)</sup>.

Bagbhata, the Ayurvedic scholar of later period, who made some additions in the concepts of Charaka and Susruta has also justifies the efficacy of ghee in poisoning. Saying the qualities of ghee he mentions it

as destroyer of poisons (Bishapaha)<sup>(12)</sup> . He clearly mentions that, “in all types of poisonings, irrespective of state of the patient, ghee is the best treatment”. He also mentions that, poisons attack the heart and causes destruction of life .So, to treat a patient of poisoning, ghee should be used alone or with other anti-poisonous drugs. In case of bite by dog and other animals (Alarkabisha) cauterization with hot ghee followed by oral application of old ghee (Puranaghrita) is advised as the specific treatment<sup>(13)</sup>.

The modern classics of Toxicology also mention ghee for treatment of poisoning. Among the mechanical (physical) antidotes fats, oils, milk and egg albumin are mentioned<sup>(14)</sup> . Ghee being an animal fat comes under this group of antidote. This group of substance delays the absorption of poison. They basically form a coating on the mucous membrane of the stomach and prevent the absorption of the poison. In case of both the corrosive and irritant poison this group of antidote has utility. The caution given by the modern classics in using the fats in poisoning is contra indication in fat soluble poisons like phosphorus.

QUALITIES OF GHEE: - Ayurvedic classics vividly discussed about the qualities of ghee. Its action on the human body and diseases are explained on the basis of these qualities. Basing upon the descriptions of the Ayurvedic classics the qualities of ghee are tabulated below.

Serial No.	Quality mentioned in Ayurvedic classics	Modern synonyms
01	<i>Madhur</i>	Sweet
02	<i>Saumya</i>	Mild
03	<i>Mridu</i>	Soft
04	<i>Sitaviryya</i>	Cold
05	<i>Snehana</i>	Capacity to produce oiliness
06	<i>Ojabardhaka</i>	Increases vitality
07	<i>Balakara</i>	Increases strength
08	<i>Ayushya</i>	Increases longevity
09	<i>Vrishya</i>	Increases potency
10	<i>Bayahsthapana</i>	Stabilizes life
11	<i>Bishahara</i>	Anti-poisonous

12	<i>Rakshoghna</i>	Anti-bacterial, Anti-fungal
13	<i>Chakshushya</i>	Beneficial for the eyes
14	<i>Unmadanashaka</i>	Capacity to cure insanity

Modern analysis establishes that, ghee contains fat, vitamin A, E and K as basic contents. Description on ghee with special reference to its effect on health and disease is not available in detail.

#### DISCUSSION:

The study of Ayurvedic and Modern classics clearly reveals that,

1. The Ayurvedic classics discuss about ghee in detail with special reference to its qualities and effects. Starting from acharyya Charaka, the father of ancient Indian medicine, who is considered to be of period 3000 years B.C. till present time ghee is remaining a substance of great importance for the toxicologists to study about its quality and effect. This interest is probably due to easy availability of ghee and also its routine use. In ancient India cow was kept in almost all families and from their milk ghee was extracted and used as a regular recipe.
2. The literatures clearly reveal that, the ancient practitioners of health sciences studied in detail about ghee and its effects on both healthy and diseased persons with special reference to the different organs and systems. The classics of ancient Indian medicine mention the effects of ghee on skin (twak), musculo-skeletal system (peshi –asthi-sandhi ), nervous system (nadisangsthan) including memory (smriti) , intelligence(buddhi), oja(the element of the body that holds and maintains the vital functions of the body) etc. The effects mentioned here can easily be explained with the oily, unactuousness and other

qualities of ghee mentioned by the classics.

3. In reference to the effect of ghee on poison (bisha) all the Ayurvedic scholars unanimously agree that , it is a good antidote which can be used in all conditions of poisoning irrespective of the type of the poison and state of the patient . It is advised to use for the purpose alone or mixing with other antidote. The concept of use of ghee in all conditions of poisoning developed probably due to the cause that, in those days the contra-indications of ghee was not identified or it was not there.
4. Describing about the mode of action of ghee in poisoning it is said that, the antidote effect of ghee is due to its homologous properties with oja . Due to the homologous properties of ghee with oja it increases the strength of the vital element and helps to fight against the harmful properties of poison and as a result the person regains life. The qualities and the mode of action of poison on the victim described in the classics clearly establish the justification of the advice.
5. Modern Toxicology agrees the importance and utility of ghee as an antidote in some selected cases of poisoning. This selective application is based on the concept of solubility. If the poison is an irritant one and enters in the body through the oral route then only application of ghee is indicated.

Concepts of quality & action of Ghee mentioned by Charaka, Susruta & Bagbhata are summarized below -

SL No	Quality and Action	Charaka Samhita	Susruta Samhita	As-tanga Sam-graha	As-tanga Hri-daya
1	<i>Snehana</i> (Oiliness)	Y	Y	-	-

2	Jivana (Helps to increase vitality)	Y	-	-	-
3	Balya (Helps in increasing strength)	Y	Y	Y	-
4	Barnabardhana (Helps to increase the body luster)	Y	Y	Y	-
5	Upachayabardhana (Increases nutrition)	Y	-	-	-
6	Pittanilahara (Pacifies Pitta & Vayu )	Y	-	-	-
7	Rasahita (Gives support to Rasadhātu)	Y	-	-	-
8	Sukrahita (Gives support to Sukra – the body element holding the responsibility to give birth to a child)	Y	Y	Y	-
9	Ojahita (Gives support to the vital element of the body which is considered to maintain the resistance and vitality of the body )	Y	Y	-	-
10	Nirbapana (Reduces the unwanted effects of Pitta which is responsible to increase body temperature)	Y	-	-	-
11	Mridukara (Produces softness )	Y	-	-	-
12	Swaraprasadana (Gives the voice an attractive tone )	Y	-	-	-
13	Barnaprasadana (Increases the color of the body)	Y	Y	Y	-
14	Smritibuddhyagnishukraujahkafamedobibardhana (Increases memory, wisdom, digestive capacity, capacity to give birth to progeny, vitality, kafa and fatty portion of the body)	-	Y	Y	Y
15	Vatapittabishonmadashoshalakshmiwarapaham (Cures the abnormality of Vata and Pitta -two basic elements of human body, poison, insanity and other mental diseases, imatiation, Poverty – by increasing ability to work , fever etc.)	-	Y	Y	Y
16	Shita (Cold )	-	Y	Y	Y
17	Madhura (Sweet)	-	Y	-	-
18	Mridu (Soft )	-	Y	-	-
19	Saumya (Having the capacity to increase saumyagoona – tolerance, excusability etc.)	-	Y	-	-
20	Guru (Heavy )	-	Y	-	-

Modern classics describe Ghee as a class of clarified butter which contain 99.5g/g fat, some quantity of vitamin A and E and cholesterol . The above table and description clearly reveals that, Charaka Samhita, Susruta Samhita, Ashtanga Samgraha and Ashtanga Hridaya which are considered to be the oldest and most authentic treatise on Ayurveda elaborately describe the qualities and properties of Ghee and with little difference in language expressed same statement on the well-known and popular substance.

#### SUMMARY:

As summary of the study the following points can be noted -

1. The ancient scholars of health sciences studied about ghee from various aspects and observed the effects on both healthy and diseased state.
2. Ghee was identified as the most useful substance for the human beings both for the body (sharira) and mind (mana). For a good number of physical and mental ailments it's applicability is mentioned by the Ayurvedic scholars.

3. The effect of ghee as a potent antidote was observed and established by the scholars of 3000 years B.C. which is also reevaluated and agreed by the modern scholars.

#### CONCLUSION:

As conclusion it can be said that, there is admirable scope of use of ghee as an antidote which should be studied and experimented by using appropriate experimental scientific protocols with multi-disciplinary effort.

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