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REVIEW ON GHEE AND IT'S AYURVEDIC USES

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ABSTRACT

*It is well known that removal of the water phase from milk extends the keeping quality of milk fat substantially, and that dairy products such as ghee have been known by various names in Asia, the Middle East, and Africa for several thousand years. Ghee is obtained by a high-temperature process that leaves part of the nonfat milk solids in the product, giving a typical flavor.Flavour is greatly influenced by the fermentation of the cream or butter and the heating processes. Ghee has long shelf life because of its low moisture content and possible antioxidative properties. Ghee may contain high amounts of conjugated linoleic acid, a newly reported anticarcinogen. However, it is also reported that, under certain circumstances, it may contain certain amounts of cholesterol oxidation compounds (COPS) which may cause adverse health effects.This study help to fill the gap on ghee in Ayurvedic aspect on ghee by referring ancient text books in Ayurveda, research articles in science direct,schlory google web sites.Ghee is primarily used for cooking and frying and as dressing or toppings for various foods. It is also used in the manufacture of snacks and sweets. But in Ayurveda Ghee plays very important role internaly & externaly when doing treatments. It has special action called as 'yogawahi'. Also it is anti toxic,anti biotic, energetic & good nutrition supplement.***Keywords***Anhydrous milk fat (AMF); Application of AMF; Fractionation; Ghee; anti toxic activity, 'yogawahi' action*

INTRODUCTION OF GHEE

Ghee & Ayurveda has very closed relationship since thousand years .Ghee is an excellent base for preparing Ayurvedic medicines, because ghee has special ability to reach each and every organ,tissue with in short period ,which help to transport medicine without any change called as "yogawahi" action in Ayurveda. Because of action "Yogawahi" ghee is called as a vehicle for many medicine & decoctions. Proper digestion, absorbtion & delivery to a target organ or system are obtaining the maximum benefit from any therapeutic formulation. According to Ayurveda samhithas ghee has good action on intelegence ,memory ,digestion, long life,sexual life, improving vision & complexion, antiinflammatory action, cooling action, detoxification and good supplement for malnutrition. According to Ayurveda ghee is clarified in to purana ghritha & Gritha manda based on shelf life. Another classification in Bhawaprakashaya, depend on milk source.

Ghee is oil that can bond with lipid soluable nutrients & herbs to penetrate the lipid based cell walls of the body. If increases the potence of certain herbs by carrying active compounds to the intention part of the cells,which helps to increase marrow, seman & ojas (immunity) actions.

The efficiency of a drug is usually depend on its ionization. Usually water based drug will not be able to penetrate properly through the Cerebro- spinal fluid or other body part. So ghee based medicines are digested & absorbed more easily & efficiently working as a solvent.

The anti oxidant properties of ghee help to prevent neurological diseases & increase HDL level of the blood and reduce LDL level of the blood. Ghee is known to be digested 96% which highest as compare to other vegetable and animal source fats.

Ghee contain anti oxidents, vitamin E & beta carotene, nutrients like phospholipids, diglycerides & tri glycerides. Ghee is major ingredient of Ayurvedic medicines, mainly for degenerative diseases, due to its nourishing, extracting power.So, it is used mainly for rejenuation & purification pre treatments.According to ancient Ayurvedic & folk assumption that as ghee becauseslightly bitter & healing properties increase. Ayurveda samhitha consider that ghee as "amritha", because of its action in detoxification. Because ghee is the main component when treating for intoxification in Ayurveda, which removes toxins from the body & prevent allergy & inflammation. Also build up the digestion & reduce the metabolism inside the body.

MATERIALS AND METHODS

Details of Ghee are obtained from Ayurvedic & traditional medicine books, Ayurvedic physicians & from journals & articles from internet.

OBSERVATIONS AND RESULTS

Synonyms of Ghee

Ghrita, Ajya, Havis, Sarpi

Preparation of Ghee

Ghee is prepared by simmering butter,skimming any impurities from the surface, then pouring & refining the clear,still liquid fat, while discarding the solid residue that setteled on the bottom.Ghee was made by three different traditional methods. Storage resultedin milk fat oxidation & changes in volatile Maillard products.Millard continue in storage in virtual absence of protein and sugar.How ever on going Millard reactions do not appear to effect milk fat oxidation.

Ghee is produced mainly by indigenous methods in Ascia, the Middle East and Africa, the methods of manufacturing & characteristics are diffrerent. Ghee commonly used for culinary purposes but also for particular social functions & therapeutic purposes. Flavour is greatly influenced by the fermentation of the cream or butter & the heating process. Carbonyls,lactones & free fatty acids are reported to be the key ghee flavouring compounds.

Ghee is fairly shelf stable largely because of its low moisture content & possible anti oxidative properties. Ghee is rich source of energy,fat soluable vitamins & essential fatty acids due to long shelf life at room temperature (20-40C).Ghee has melting range 28 to 44C.Lack of carotenoids in buffalo milk, ghee prepared from milk is white unlike cow ghee which has a golden yellow colour. Because of its pleasing flavor & aroma ,ghee has always had a supreme status in Ascia.

Cultural value of ghee

Ghee is always made from the milk of cows, which are considered sacred and it is a sacred requirement in Vedic fire sacrifices. Fire sacrifices have been performed dating back over five thousand years. They are thought to be auspicious for ceremonies such as marriage and funerals. In India honey, milk and ghee used for bathing the deities on the appearance day of Maha shivarathri. Ghee is considered as auspicious thing for every good thing according to Hindus.

Culinary uses of Ghee

Ghee is common in cuisines in Asia, including traditional rice preparations. Also ghee used with roti in North India. In Tamil Nadu, ghee tops Pongal, dosa. In Benghal and Gujrat ghee is used for traditional evening rice with lentils. Also ghee is main ingredient of sweets in India. Ghee is ideal for deep frying because it is easy to cook under typical cooking temperature.

Nutrient composition of ghee

Ghee mainly consists of fatty acids, saturated fat, monosaturated fat, poly saturated fat, trans fat, omega fatty acids, cholesterols, vitamin A,B,D,K,E and very less amount of water.

Therapeutic value of ghee in Ayurveda

According to Charaka Samhitha ghee called as "amrita" for curing all type of poisons. Because of its anti toxic activity. It is used as good vehicle for many decoctions, mediums to administrater herbal preparations. Not only for internal treatments but also ghee used for external application for body massage-abyanga. Apply cow ghee all over the body ,rubbing in to head,chest and neck and joint orifices.It will by pass the digestive system and allow the qualities of cow ghee to penetrate directly in to deep tissues. Cow ghee is used in poorva karma (early pancha karma) where the small amount of cow ghee is taken first thing in the morning, to tolerate the internal organs and dissolove" ama" or toxic wastes in the tissues, allowing them to the digestive tract for elimination.

According to Ashtanga Hradaya samhitha ghee is the best thing for intelligence, memory, keen digestive power ,long life, sexual vigour and good eye sight ,for children and old people. Ghee also help for good complexion, softness of the body and good voice for those suffering from injury to the chest, emaciation, visarpa (herpes),insanity, tuberculosis and fever. Ghee is best among fatty materials, coolent.

Also ghee can use for purgation process, incase of presence burning sensations, abyanga with sahasradhauta ghrita is very effective. Also can use for pitta cough, will remove sputum by using vomiting. Ghee can administer successfully for hiccups, laryngitis and common cough.

Ghee is the best for enhance the strength of poor digestive power ,so ghee mainly used for ghrahani chikithsa.

According to Bhawaprakasha ghee is rejuvenating,sweet in taste ,good for eyes, increase digestive power, cold in potency, moisture channels, remove poisons, improve good voice, strengthning intelligence, cure ulcers, specially inside the abdomen

CONCLUSIONS:

A study published in September 2012, in "The Indian Journal of Medicine Research" reported that ghee compared to other cooking oils, decreases enzyme activities responsible for activating carcinogens in the liver. Ghee helps to increase carcinogen detoxification and helps to reduce the risk of cancers.People who are lactose or casein sensitive,they can use ghee because the process has removed these allergens People who has gluten sensitivity, IBS, crohn's or certain pancreatic disorders may cause a problem of absorbing vitamin A. Ghee is best solution for above conditions because butyrate or butyric acid, is a short chain fatty acid that acts as a detoxifier and improves colon health. One table spoon provides 12% to 15% of the recommended daily intakes of vitamin A for men and women respectively. Not only vitamin A,D,E ghee contains vitamin K2 which helps to maintain good condition of bones and work against calcification of arteries. Also ghee reduces secreting leukotriene and reduce secreting prostaglandin in the body. So, it helps to reduce inflammation inside the body which helps to reduce asthma, ulcers of the colon and gastritis.

Ghee is an important medicine in Ayurveda having specific rasayana properties. In the West, the use of ghee as medicine has been circumspect because of

its association with dairy products and saturated fatty acids. Ghee is a liquid at body temperature and is only 68% saturated which means it cannot go in to an organism and suddenly become "solid". Cholesterol, which is found in ghee esterified to fatty acid has been implicated in CVD, but research through the years has demonstrated that cholesterol is not the causative agent for atheroma formation. Although, cholesterol does not appear to be the causative agent, controlling the biosynthesis of cholesterol has reduced the primary and secondary risks associated with elevated serum cholesterol. That said, the amount of cholesterol in 1-3 tablespoons of ghee is in line with the NHILBI's recommendations for a low fat/low cholesterol diet. Further, attention is turning from cholesterol specifically to the role in CVD. The body of evidence on ghee in specific, controlled Western style clinical trials is small, yet promising for explaining the Ayurvedic actions of ghee to the Western medical community. Regardless, the ancient texts of Ayurveda clearly state the many medicinal applications of ghee and it is considered one of Ayurveda's most potent medicines. Perhaps going forward, more Western style research will be done to support the many Ayurvedic medicinal claims for ghee, but that remains to be seen. On the other hand, the predictive value of the science that is Ayurveda should be enough for most practitioners to have confidence using ghee in the treatment of appropriate patients.

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