

### Scientific Review on Food Custom of Siddha

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#### ABSTRACT

Now a days prevalence of life style diseases like diabetes, blood pressure, cancer etc. are very high when compared to few decades before. Our ancestors had much better overall health than us. This is just because of their lifestyle which was very close to nature. Preventive medical care was gained an important place in Siddha system of medicine. New strategies have been developed for combating specific deficiencies for example nutritional blindness and iodine deficiency disorders. The recognition of the role of vitamins, minerals, proteins and other nutrients and more recently dietary fibre emphasize the pivotal role of the nutritive components in preventive medicine. This review focuses the scientific basis of certain traditional Siddha food customs which would be supportive in the prevention of life style diseases.

**Keywords**: Preventive medicine, Siddha, Life style disorders, Dietary pattern, Nutritional blindness

#### **INTRODUCTION:**

Diet plays a major role in our everyday activity. Diet acts as the source of vital nutrients to gain energy and it builds our body. According to Siddha, an ancient traditional system of medicine, improper dietary habits cause disturbances in the balance of the three humours (Uyir thathu) and physical constituents (Udal thathukkal) in turn causing several diseases.

"UNAVAE MARUNTHU; MARUNTHAE UNAVU"

Diet act as a medicine and medicine act as a diet, is the basic concept of Siddha which explains importance of diet and dietetics. "Thiraviyalum thilunarnthae thinranupa vippar

Paraviyanoi kaanarayp pala rivayather

Meyyaing kalithidukon mikkayul pechreraezh

Vaiyaing kaliththudavazh vaar."

- pathartha gunapadam

This poem emphasises the importance of choosing the quality and seasonal aspect of food items, to get a strength and long life.

Traditional wisdom about processing of food its preservation techniques and their therapeutic effects have been established for many generations in India. Indian traditional foods are recognized as functional food because of the presence of functional components like body healing, antioxidant, dietary fibers and probiotics. These functional molecules help to management of obesity, diabetes and supports the immune system of our body.

#### **GLIMPSES OF DIETETICS IN SIDDHA:**

#### WHY WE USES EARTHEN VESSELS:

"Maazhaivelli venkalamum manantram- kozhi

kuyapaanda noipokuing karu thinivaik kellaam

kuyapaanda melasanaing kol."

- Pathartha guna chintahmani-1364

According to the above verse, it is learnt earthen vessels are best for cooking, other vessels made of gold, silver and pure bronze are good. <sup>[1]</sup>

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\**Nutrients are preserved-* Clay is porous in nature. This quality makes clay pots unique and effective for cooking. Due to this porous texture of clay pot moisture and heat circulate evenly through the pot while cooking, clay pot take a longer time to heat than metal pots. This even and slow cooking plays very important role in **retaining nutrients inside the food.**<sup>[5,6,11]</sup>

\**Alkaline nature of clay*: Alkaline nature of clay interacts with the acidity in the food and neutralizes the PH balance. It is very important for our body to always remain alkaline and maintain its PH balance which protect us from various disease like cancer. Cancer cells develop in an acidic environment. Also alkaline environment restrict the growth of cancer cells.<sup>[5,6,11]</sup>

\*Less oil or fat required for cooking: It provides plenty of moisture and eliminates the need of adding extra oil or liquid. The food gets cooked in its own natural juices.<sup>[5]</sup>

\**Safe for food contact:* Clay is a natural material and its doesn't contain any harmful like calcium chemicals to react with the food. All it consists of is micronutrients, phosphorus' iron, zinc, sulphur etc.<sup>[5,6,11]</sup>

\**Environmental benefits*: Even if the clay pots get break they are biodegradable, so no harm to environmental at all.<sup>[5]</sup>

\**Retain heat for longer*: A clay pot can keep it hot for much longer, because of its insulating properties clay pot retains heat<sup>[5]</sup>.

\**Flavourful and nutrient food;* Food cooked in clay pot with a lid, it gets an intense rich flavour.<sup>[5]</sup>

# COPPER POT IS GOOD FOR STORAGE OF WATER:

"Eravivaddirruma miraththapiththam pokkum"-(Pathartha guna sinththamani)

Eravi means COPPER.

According to above verse, using a copper vessels for storage of water it cures burning sensation in eyes and ratha pitham.

The antibacterial effects of copper pots against important diarrhoeagenic bacteria, include vibrio cholera, shigella flexneri, enterotoxigenic Escherichia coli and salmonella paratyphi is reported. When drinking water (PH  $7.83\pm0.4$ ) was contaminated with 500 CFU/ml of the above bacteria and stored in copper pots for 16 hours at room temperature, no bacteria could be recovered on the culture medium<sup>[20]</sup>.

### 2. WHY TO USE PLANTAIN LEAF FO SERVING:

"Thoki nuruminnuinj sukapokamu mannu

Makkini manththam palamodu - thikakidukaaal

Paazhai yilaippumarum pannupiththa muinjsamanaam

Vaazhaiyilaik kunaru vaay."

- Pathartha gunapadam

According to above verses, banana leaves poses the character of correcting indigestion, constipation, tastelessness and also increase the skin tone. It equalise the pitham.

\*Eating food on banana leaves aids proper digestion. The wax coat on the banana leaf melts when hot food is served on it. The melting point of wax is 78-82<sup>0</sup>C.It has rich amount of polyphenol, this component gives nice flavour and adds taste to the food. Steaming with banana leaves gives a sweet taste and good smell to the dish.<sup>[7,22]</sup>

\**Antioxidant*(Ascorbic acid) on banana leaves helps to fight against cancer.<sup>[7,21]</sup>

\*Banana leaves contain polyphenol oxidase an enzyme that produce L-DOPA, a neurotransmitter that is used in the treatment for parkinson's disease.<sup>[7,8]</sup>

\*Banana leaves have EGCG (EPIGALLOCATECHIN GALLATE). EGCG are polyphenol molecule which has antifungal and antibacterial activity.<sup>[7,8]</sup>

#### 3. WHY TO SIT ON FLOOR WHILE EATING:

In Siddha system says leaves or plates should be placed so that those who want to increase their longevity shall sit facing western direction and those who is interested in honesty should sit facing northern direction.<sup>[1]</sup>

\**Helps to improve your digestion:* When you sit cross legged an asana known as sukhasana or a half padmasana, which are poses that helps in digestion. Apart from that when you eat from a plate placed on

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the floor, you will have to naturally bend forward slightly and go back to your starting position to swallow. This constant back and forth movement causes the muscles of your abdomen to be activated and also leads to increased secretion of digestive juice making it much easier for you to digest food.<sup>[9]</sup>

\**Help you lose weight:* The main reason of overeat is because they do not know when they are full. This happens because the vagus nerve sends signals to the brain as you eat, telling if it you are satiated or not. When you sit on the floor this nerve is able to perform between and transmit signals more efficiently.<sup>[9]</sup>

\**Can make you live longer*: A study published by the journal, European journal of preventive cardiology, found that people who sat on the floor in padmasana and able getup without any support well more likely to live longer.

\*Lubricates and keeps you knee and hip joint healthy: Padmasana and sukhasana is one pose that has health benefits for your entire body. Not only does it help in your digestive system function better, but it also helps keeps your joints supple, flexible and less prone to injuries and degenerative diseases like arthritis and osteoporosis.<sup>[9]</sup>

\**Strengthens the heart by improving circulation*: When you sit in the floor your heart gets the benefit of circulation as the blood is easily pumped through the heart to all the organs needed for digestion.<sup>[13]</sup>

#### 4. WHY TO USE HAND WHILE EATING:

"Kaipaath thiraththir kalanththannaing kolluingkaal

Vaippaa manassaeddai maaruingka -nippaar

Saruva kilaesamumpoinj saarruvan salinnum

Peruvarusi noyumpom paesu"

- Pathartha guna sinthamani.

This version says using a hand while eating, it cures the sadness and tastelessness.

When you use your finger tip to pick up food, millions of nerve endings in your fingers relay the message to brain sends signals to the body releasing digestive juice and enzymes. Hence the digestion prove starts well before the food is enter the mouth.<sup>[10]</sup>

Conditioned reflex in cephalic phase: Impulse from special sense organ(touch)» afferent fibers of neural

circuits» cerebral cortex »dorsal nucleus of vagus and vagal efferent» stomach wall »acetylcholine secreation »stimulate gastric gland and increased secreation..<sup>[21]</sup>

### 5. WHY TO SERVE GHEE AT FIRST [PATHIRAPIKARAM]:

"puththimikuinj .....piththamodu

Vathakabha maara varadsiyaellaa neekkuing

Kothinru neyyaik kudi"

- pathartha gunapadam-515

According to this version, ghee taken before food, it balances the derange the pitham, vatham and kabham and also enhances the memory and vision.

Ghee protect the gastric mucosa ( inner lining of stomach ). Hence if you are consuming ghee in the beginning of meal, then it would nullify the acidity of the spicy food that you may eat later in the meal.<sup>[4]</sup>

Ghee is a rich source of butyric acid that is a short chain fatty acid .This acid is connected to an immune response that can help in lowering inflammation and improving the digestive system .Ghee also aids in the stimulation of stomach acid secretion which in turn helps with the proper digestion of food.<sup>[25]</sup>

#### 6. WHY TO SIP A LITTLE WATER BEFORE EATING:

In our Siddha system says, while eating one must first sip a little water to wet the throat.<sup>[1]</sup>

\*Water promotes weight loss but little scientific reason that is has no calories and fill up the stomach, making people less hungry.

\*Our stomach have a knack of knowing when you will eat and starts releasing digestive juice immediately. If you start drinking water at the same time what you are actually doing is diluting the digestive juice being released to digest your food. Its helps in absorption of nutrients.<sup>[12]</sup>

# 7. WHY TO EAT SWEET ARTICLES AT FIRST?

"Aathi yinippu vaampira neerup podusaa

Kaathi yuraippapapaa lanththir -kothuvarp

Paaththiyup pooriyikaa yaathivakai seru navai

Maanththi maanpuru vaai" -Pathartha guna sithnthamani

According to this version, sweet article should be taken first, then sour, salty and pungent eatables and then leafy vegetables have to be consumed respectively.

Sweet taste acts quickly on the taste buds and saliva. Eating the sweet items first enables the flow of digestive secretions.<sup>[14]</sup>

*Cephalic* phases *of gastric secretion:* presence of food in mouth» taste bud stimulate(The receptors of sweet taste are more at the tip of the tongue) » afferent nerve fiber (glossopharyngeal &facial nerve)» appetite centre (amygdala & hypothalamus)» efferent impulse pass through dorsal nucleus of vagus » wall of stomach »acetylcholine secrete at vagal nerve ending» stimulate gastric gland to gastric secretion .<sup>[21]</sup>

### 8. WHY TO EAT CURD AFTER THE MEAL:

"mooththathayi ruppunna munpirantha vaththukalin

Koththathiri thodaing kudivilakum -poorththiyaa

Yundapin munnadu vurravaiyael laampuzhukakam

Kondadas seeran maakum"

-Pathartha guna sinththamani-1395

According to this above version, at the end of the meal, sour curd has to be taken by which the ill effects caused by variated three humours due to half cooked food, will be easily digested.<sup>[16]</sup>

\**Improve digestion*: Being a probiotic, curd contains vit B12 and micro organism( lacto bacilli) that help in growth of gut bacteria, which in turn aids digestion. Hence eating curd daily is a healthy as it helps in proper digestion of food and also prevents indigestion problems and constipation.<sup>[15]</sup>

\**Helps you to fight acidity:* It helps to neutralise the PH of the body, thus cools the body. It also helps in the absorption of nutrients from other food. A Taiwanese study even found that curd is helpful in curing H.Pylori infection which is known cause of peptic ulcer.

\**Good for lactose intolerants*; Lactose a protein present in milk is converted into lactic acid in curd that makes it easy to digest.<sup>[15]</sup>

# 9. WHY NOT TO TAKE BATH WITH IN ONE HOUR AFTER MEAL:

In siddha system says, one should not do bath within hour after eating. If do so they develop indigestion.<sup>[16]</sup>

Taking shower reduces the body temperature. During bath, the arteries and veins dilate to increase the blood flow to skin and bring your body temperature back to normal. So blood supply get reduces in digestive system. Before taking bath if you take meal our blood is pumped towards the stomach to help digestion.<sup>[29]</sup>

Mechanism of temperature regulation: in addition to temperature receptors present in skin, abdomen and other structures, there are some heat sensitive nerve cells in the preoptic nuclei of anterior hypothalamus. The heat sensitive nerve cells are called thermoreceotors. Food intake regulates by two centers present in hypothalamus:1)Feeding center 2)satiety center. Feeding center is lateral hypothalamic nucleus. Food intake is inversely proportional to body temperature. The preoptic thermoreceptor may act via feeding center.<sup>[21]</sup>

### **10. WHY IS FASTING IMPORTANT:**

"laingkanam paramaa vizhthamena vulakainj

Sonnamuraik kiyalpuras suththiram vuraiththa

Development Laayunum.... -Theran kapiyam

Meaning: pattini perumarunthu.

In siddha literature says, the practice of fasting once in a fortnight or at least once thirty days is good. On the day of fasting nothing should be taken except water.

Fasting acts as antidote, for it lowers the acid content in the body which helps people to retain their sanity. Research suggests there are major health benefits to caloric restriction like reduced risk of cancer, cardiovascular diseases, diabetes, immune disorders etc..

The researchers at the intermountain heart institute have discovered that fasting lowers both insulin level and bad cholesterol while increasing HGH and glucose metabolism. They also found that fasting lowers IGF-1 triglycerids and glucose levels in blood thus lowering risk of diabetes,heart disease and cancer.<sup>[19]</sup> It is stated in the Siddha literature that conception of Agathi keerai (*sesbania grandiflora*) and venpoosani ( *Cucurbita pepo*), after the long fasting it will nullify intense acidity, as they said to poses antipitha activity.<sup>[1,16]</sup>

#### **CONCLUSION:**

The saying "**Prevention is better than cure**" reveals that prevention methods are much better to remain away from any problems than finding out solutions to cure that problems. . Siddha system which is natural way of healthy living. We just need to maintain a healthy and disciplined life style all through the life in accordance with the nature.

Only those traditions gave pace for a disease free life. Everyone should practise Siddha way of life style modification by adhering the rules of healthy eating.

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