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REVIEW OF VIRUDDHAAHAR WITH ITS IMPACT ON HEALTH

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ABSTRACT:

Food is any substance consumed to provide nutritional support for an organism. Food is usually of plant or animal origin and contains essential nutrients such as carbohydrate, fats, proteins, vitamins or minerals. The substance is ingested by an organism and assimilated by the organisms cells to provide energy, maintain life or stimulate growth. All these happen only when foods are taken in proper combinations, proper time, and in a proper proportion otherwise in wrong combination it said to be *viruddha ahara*.

The food which is wrong in combination which has undergone wrong processing, which is consumed in incorrect time of day in wrong season canbe describe as *virudha ahara*. *Ayurveda* clearly defines that certain diet and its combinations, which interrupts the metabolism of tissue, which inhibits the process of formation of tissue and which have the opposite property of tissue are called as *Viruddha ahara* or incompatible diet. Observation on antagonistic food is a unique contribution from Ayurveda in order to prevent internal disease and synergize action of drugs in the management of disorders. This Article deals with review of viruddha aahara and narrates the modern perspective of *sanskar viruddha, veerya viruddha, samyoga viruddha* and so on. It also enlists a variety of incompatible dietary articles consumed in day to day life and its hazardous effects on health.

Keywords: Ayurveda, food-food interactions, Viruddha Ahara, Incompatible diet.

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INTRODUCTION:

Viruddha ahaar, incompatible diet is very important contribution discussed by ancient ayurved Acharyas, which is cause of many systemic disorders. Modern scientists are still working on this aspect which was already mentioned in our books centuries ago. It is important to understand the mechanism of how Viruddha Ahara is cause of many metabolic disorders. It is essential to know certain food combination which interact with each other and create many systemic disorders.¹

The food material opposite in combination can lead to inappropriate processing, consumed in wrong dosage or consumed of improper time of the day and in inappropriate climate can lead to *Viruddha Ahara*.

With advancement of modern technology and biochemistry, it becomes easy to elaborate the effects of *Virudha Ahara*. Food and food interaction is a serious issue requiring much attention to prevent the health from its possible chronic harmful effect to protect from the creation of any defects to the organs of the body. Despite of the fact that many of these food-food interactions are harmless immediately but it is always better to know about its long term effect.²

AIMS AND OBJECTIVES:

- 1. To explain in detail the mode of action of *Viruddha Ahara* causing the disease.
- 2.To Emphasize the need for prevention of intake of *Virudda Ahara* in present days.

MATERIALS AND METHODS:

Acharya Charaka defined Viruddha Ahara are the certain diet and its combination which interrupts the metabolism of tissues, which inhibits the process of formation of tissue and have the opposite property to

the tissue. The food which is wrong in combination has undergoes wrong processing in incorrect dose consuming, and/or consumed in incorrect time of the day and in wrong season can lead to Viruddha Ahar. Modern technology and biochemistry aspects collectively make it easy to elaborate the effect of Viruddha Ahara and mechanism of action. The word Viruddha Ahara has the basic meaning i.e. opposite which means that food combination of certain type of food may

- -opposite properties.
- -opposite activities on the tissues.
- -may exert some unwanted effect on the body when processed in a particular form.
- -may exert undesirable effects, when combined in certain proportion
- -It may have unwanted effect if consumed at wrong time.

In Ayurvedic texts there is description of 18 types of *Viruddha Aahara* as below:

- 1. Desha-(Place) Virudha
- 2. Kala Viruddha
- 3. Agni Viruddha
- 4. Matra Viruddha(Quantity)
- 5. Satmya (Wholesome)Viruddha
- 6.Dosha Viruddha
- 7.Sanskar (Mode Of Preparation) Viruddha
- 8. Veerya(Potency) Viruddha
- 9.Koshtha Viruddha
- 10.Avastha(State Of Health) Viruddha
- 11.Krama(Sequence) Viruddha
- 12. Parihar Virudha

- 13. Upachar(Treatment) Viruddha
- 14.Paak(Cooking)Viruddha
- 15.Samyoga(Combination)Viruddha
- 16.Hriday Viruddha
- 17.Sampad(Richness Of Quality) Viruddha
- 18. Vidhi(Rules For Eating) Viruddha³

Some Examples of Antagonistic/incompatability Viruddha aahar

- 1. *Veerya viruddha* (potency incompatibility) -fish+ milk
- 2.Sanskar viruddha(processing incompatabilty) -Heated honey
- 3.*Matra viruddha* (dose incompatability) Honey+cow ghee mixed in equal proportion
- 4. Krama viruddha -consuming curd at night. Taking madhur rasa food or dravya at the end of meals and tikta and katu rasa dravyas (food substance) at starting of meals.
- 5.krama virudha-Hot water after taking honey.
- 6. Kala viruddha-(time incompatability)pungent substance in summer and cold substance in winter.
- 7.samyog viruddha-(combination in compatability)- fruit salad or milk with banana
- 8. Parihar viruddha- (contradiction incompatability)- consuming cold water immediately after having hot tea or coffee.

From the above list, it can be understood that any procedure, combination, dose amount of food, opposite properties of food if consumed in a regular fashion can lead to number of disorders.⁴

Impact of Viruddha Ahara

Charaka stated that various types of wrong combination can cause even death. If above said rules for diet are not followed then disease occurring due to *Viruddha ahara* can occur which are mentioned below:

Impotency, *Visarpa*, Blindness, Ascitis, Bullus, Insanity, Fistula In Ano, Coma, intoxication, Abdominal distention, Stiffness in neck, varieties of Anaemia, Indigestion, Various skin diseases, Diseases of intestine, Swelling, Gastritis, Fever, rhinitis, and infertlity.

From above list it can be conclude that *Virudha Aahara* can lead to disorder upto impotency and Infertility i.e. Sukradushti i.e. Starting from Rasa Dhatu if effects all up to Sukradhatu which explain the severity of potency of adverse effects of *Viruddha aahara* intake. By consumption of *Viruddha aahara* all system like immune system, Endocrine system, digestive system, Nervous System and Circulatory system all are affected.⁵

Food incompatabilities in Todays Perspective

Viruddha ahara can lead to inflamatiom at a molecular level. Number of food incompatabilities are mentioned in old Ayurvedic literature such as Charaka and Sushrut Samhita. Along with these type of food combinations, some are also use in todays era. We have to identify that new food incompatabilities, which are used in todays day to day life as per Ayurvedic perspective and made research on them and has to create awareness in public about its consequences.⁶

Results:

Viruddha ahara we take can be categorized into

- 1.Karma Virudha
- 2.Krama viruddha
- 3. Veerya Virudha and so on

Such food combinations can prove harmful which may be imparting its negative effects on Immune system, cellular metabolism, Growth hormone.

A new branch of topography (A science related to combination of food) is emerging tells about combinations of basic categories of the food. As per this science protein should consume differently, it must not get combined with starch and carbohydrates.

- 1. consuming protein and starches together will result in absorption of one being delayed by other.
- 2.Similarly, eating sugars and acid fruits hinder the action of Ptyalin and pepsin, reducing the secretion of saliva and delaying digestion. If insufficient amylase is present in the mouth, Starch will not be digested at all in the stomach, instead logging up the work until amylase in the small intestine can get to work on it.

This unwanted effect of wrong combination of food is not limited up to gastrointestinal tract but may affect major systems of the body. Let us have some examples of Ahara we are taking Now a day unknowingly which are more harmful as our daily routine which all comes under *viruddha ahar* only.⁷

Food type with which it is incompatibility:

1. Fruits-All other foods fruits is best eaten by itself at least 30 minutes

Before a meal or at least 2 hour after a meal. This is quite possibly the most important food combination Rule of all.

- 2. Legumes-Fruits ,cheese, eggs, fish, milk, meat yogurt, legumes are Recommended to be eaten with starches ie rice however to create a perfect protein.
- 3. Eggs- Fruits(especially melons), beans, cheese, fish, kitchari, milk, meat, Yogurt.
- 4. Grains- Fruit, Tapioca
- 5. Honey-Honey should never be cooked, heated, baked or boiled. As this causes the molecules to become a toxic non Homogenized glue that is unrecognizable and indigestable to the body mixed with equal amount of ghee by weight it also considered toxic.
- 6.Lemon-Cucumber, milk, tomatoes, yogurt.
- 7. Milk-Bananas, cherries melons, sour fruits and fruit juices, bread with Yeast, fish khichari, meat yogurt
- 8. Tapica-Fruits, especially banana and mango, beans, raisons, jaggery
- 9. Yogurt-Fruit, cheese, eggs, fish, hot drinks, meat milk
- 10.Proteins-Starches, high carbohydrate foods, other proteins (eat only

One protein type at a time as all proteins requires the different enzymes for digestion) high fats food as fat inhibits the secretion of the necessary enzymes needed to digest the proteins.

- 11.Starches and grains- Proteins, high sugar food.
- 12. Vegetables-Fruits raw veggies with cooked veggies combines well with both starches or proteins.⁸

Some incompatibility combinations are as follows-

1.Green tea or Black tea and milk

Tea contains flavonoids called catechins which have many beneficial effects on the heart. When milk is added to tea then a group of proteins in milk called caseins, interact with the tea to reduce the concentration of catechins. So avoid tea and milk together.

2. Milk and Yogurt interaction-

As You Know consuming both together can precipitate milk inside the stomach that may irritate and induce vomiting, so avoid milk and yogurt together.⁹

3.Tea Garlic-Tea contains and compounds called anticoagulant coumarins. When combined with garlic(that also has anticlotting properties)they may increase the risk of bleeding, so better to avoid tea and garlic together. 10

4. Pomegranate juice and grape fruit juice-

Pomegranate juice and grape fruit juice are both known to block the cytochrome P450 3A4 enzyme systems in the intestine and increases blood levels of many medications you are taking. Taking these two juices together may synergize the above action.¹¹

5. Unripe(Green) tomato or potatoes and alcohol

The unripe green tomatoes contain huge amount of solanine, Which may interact with alchohol. You may feel more sedation if the intake is more.¹²

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DISCUSSION:

Samskara viruddha- Deep frying of potatoes can develop toxic substance, such as, Acrylaozide which can prove to be carcinogenic

1. Eating potato chips regularly is *samskara viruddha*.

2. It is also mentioned in Ayurveda that heating honey is *samskar viruddha*. Honey that is available in the market is Agmark honey and this honey is strongly heated before packaging. It is very important to find out the relevance about why we must not heat honey,

According to a conducted study heated honey(>140C) mixed with ghee produces hydroxymethyl furofuraldehyde (HMF) which may produce deleterious effects and act as a poison in due course(*Ushnam Cha Samagrutham Madhu Marayati*) it comes both under *sanskar viruddha* and *samyoga viruddha*¹³

MODE OF ACTION OF VIRUDDHA AHARA-

Viruddha ahara taken regularly can induce inflammation at a molecular level, disturbing the eicosanoid pathway creating more arachidonic acid leading to increased prostaglandin-2 thromboxane .This inflammatory effect is an important effect. As these are all the basic pathologies that create Agnimandya, Ama and a number of metabolic disorders.¹⁴

1. Concept of HNE

It has been clearly mentioned in Ayurveda text that oil and food must not be reheated. Reheating of oil creates more oxidation and if consumed may creates more oxidative stress creating more free radical.

A recent study found that a toxin called 4-hydroxy-trans2-nonenal(HNE) forms when such oils as corn, soyabean sunflower oils are reheate consumption of food containing HNE from cooking oil has been associated with increased chances of cardiovascular diseases, stroke, parkinsons disease, Alzhimers disease, huntingtons disease various liver disorders and cancer

According to some research quantity of HNE is higher in deep fried foods.such as snacks that fried in cooking oil such as corn, soyabean and sunflower oil Eg-French fries, fried items Manchurian etc.

According to science when fruits or vegetables pieces are boiled inside oil to get fried then oil molecules that penetrates into the fried food gets converted into similar molecule like that of HNE. while getting cooled to room temperature, these molecule will convert into toxin HNE which will ultimately leads to risk of cardiovascular disease, stroke, Parkinson disease Alzeimer disease, various liver disorders and cancer.

Majority of the disease has inflammatory pathology, Even if the drug therapy successfully blocks the COX and LOX enzymes systems, Arachidonic acid can still be converted into other damaging molecules such as epoxy derivatives. Therefore another approach to treating the disease involving eicosanoids desirable to try to prevent eicosanoid production by dietary modifications in addition consuming omega-6-rich oil and that too ranoid by reheating aggravates the inflammatory pathology. 15

2. Concept of AGES

High temperature cooking must also be called as *samskara viruddha*. Food typically cooked at high temperature like meats may contribute to the risk and exacerbation of chronic diseases linked with inflammation. When proteins are cooked with sugars in the absence of water, AGEs Advanced Glycosylated end products are formed.

Water, however, these sugar from binding to the protein with sugar and cooking it in absence of water is *viruddha*.

Grains, vegetables and fruits all such have protein in them as well with browning being an indication of AGEs. Certain processing detoriates the nutrients value of the food or convert into RAGE that is receptor for Advance Glycosylated End products. It is now well established that formation and accumulation of AGEs progress during normal ageing, and at an extremely accelerated rate under diabetes, thus being implicated in various types of age related disorders such as Diabetes vascular complication, neurodegenerative disease and cancers.

Certain type of food combinations and the unwanted substance release by certain incompatible food in vivo may have a bad impact on immune system

- 1.Milk which contains lactogen and certain fruits such as banana, which also contain common allergen may aggravate an asthmatic attack.
- 2.Milk with eggs reheated ,cow milk consuming too much sugar along with saturated fats can lead to number of immunological disorders.
- 3.it has been observed that the pateints of rheumatoid arthritis who consume curd at night, sour fod at night complain of more morning stiffness. It must be studied that such type of kala viruddha ahara diet would accelerate antigen and antibody reactions and exibhit an impact on WBCs. These type of studies would also suggests that regular consumption of viruddha ahara also leads to immunological disorders. ¹⁶
- 4. Concept of Zinc and Antioxidant properties-As per the definition explained by *Charaksamhita* these food combination which induce detoriateing action on the body tissues ie *Dhatus* can be called as *viruddha ahara*.

Fast food is high in energy, density and low in essential micronutrients especially zinc of which antioxidant processes dependent. Nowadays eating pizzas, noodles are the perfect examples that's why children are becoming obese with nutritional deficiencies.

It has been tested that frequent fast food consumption could induce oxidative damage associated with inflammation in weanting male rats in relevance to zinc deprivation, which could adversely affect testis function. This could be another reason that Charaka has mentioned the disease .such as Shandhatva and santandosha, cause due to excess consumption of Viruddha ahara

5. Concept of effect on Genes-

The process of creating a new protein in cells is referred to as gene expression. Gene expression is highly regulated by the body to esure that the correct protein is produced in the correct amount, and at appropriate time. **Errors** in Expression have the potential to lead to illness. Experts in nutrition believe that these epigenetic changes can affect the expression of certain genes. In the quotation of Charaka about the effects of *viruddha ahara* he has mentioned Shandhatva. Shandhatva congenital, which can be due to certain genetic expression in fetus if the parents have consumed regular viruddha aahara.¹⁷

CONCLUSION-

Viruddha ahara shows its effects from rasa level dhatu to sukra dhatu ie it affects all the dhatus which shows its severity of consequences which leads to many systemic disorders and it also acts at gene level which reveals that it is cause for disease of manv unknown etiology (idiopathic) for and also cause carcinogenesis. So in order to prevent these deadly disorders one has to take the preliminary step of preventing the intake of *viruddha ahara* in our day to day life.

REFERENCES:

- 1.Agnivesha, Charaka, Dhridbala, Charaka Samhita, Sutra Sthana, 26/81 Vaidya Yadavaji Trikamji Acharya Editor ,Reprint, Krishnadas Academy, Varanasi 2000 Page 149.
- 2.Shelton Hm. The Hygienic System,Orthotrophy Chapter 26 Dr.Sheltons Health School 1935.
- 3.Agnivesha,Charaka,Dhridbala,Charaka Samhita,Sutra Sthana,26/84 Vaidya Yadavji Trikamji Acharya Editor,Reprint,Krishnadas Academy,Varanasi 2000 Page 150
- 4.Agnivesh Charak Samhita Sutra Sthana 26/103,Page No 151
- 5.Agnivesh Charak Samhita Sutra Stana 26/105 Page No 153
- 6.Internet Nhp.Gov. In Date 27-03-20 8pm
- 7.Available From: http://Pvhs.Org/Documents/Pharmacy Services/Food And Drug Interaction.
- 8. Health And Weight Loss Clinic.Com
- 9.Brown Pj,Wright Wb, An Investigation Of The Interactions Between Milk Proteins And Tea Polypnenols J Chromatogar 1963 11:504 -(Pub Med)
- 10.Engdal S,Nilsen Og. In Vitro Inhibition Of Cyp3a4 By Herbal Remedies Frequently Used By Cancer Patients. Phytother Res 2009,23:906-12(Pub Med)
- 11.Hidaka M Okumura M,Fujita,K. Ogikubo T, Yamasaki K, Iwakri T,Et All Effects Of Pomogranate Juice On Human Cytochrome P450 3ac(Yp3a) And Carbamazepine Pharmacokinetics In Rats.

Drug Metab Dispos. 2005;33:6448(Pub Med)

12.Available From :Http://Pvhs.Org/Documents/Pharmacy Sevices/Food And Drug Interaction.

13.Tareke E, Rydberg P, Karlson P,Eriksson S, Tornqvist M, Acrylamide: A Cooking Carcinogen? Chem Res Toxicol 2000;13: 517-22 (Pub Med)

14.Swetha Chalamalasetty Et Al: Concept Of Viruddha Ahar-The Present Scenario Iamj: Feb 2017: 552

15.Esterbaucer H, Schaur Rj, Zoliner H Chemistydry And Biochemistry Of 4-Hydoxynonenal ,Malonaldehyde And Related Aldehyde.Free Radic Biol Med 1991;11:81-128(Pub Med)

16.Bhatnagar A. Electrophysiological Effects Of 4-Hydroxy-Nonmal,An Aldehyde Product Of Lipid Peroxidation,On Isolated Rat Ventricular Myocytes.Cir Res.1995;76:293-304.

17.Swetha Chalamalashetty,Conceptof Viruddha Ahara, The Present Scenario,Iamj:Feb 2017 554

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