

## CRITICAL REVIEW ON VIRUDDHA AAHARA AND ITS ASSOCIATION WITH JUNK FOOD IN DAY-TO-DAY LIFE

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### ABSTRACT

In today's era our daily routine, food habits are extremely changed. Due to these drastic change in life style and food habits our body gets exposed to various toxins. Various junk foods like sugary drinks, pizza, white bread, industrial vegetable oils, margarine, pastries, cakes, French fries, potato chips, etc. are also results of the modern lifestyle which responsible for formation of toxins within the body. These types of foods can correlated with *Viruddha ahara*. All these toxins remains in our body in a dormant stage for a long duration and due to some stimulating factors, they result into various diseases. This is nothing but the concept of "*Dushivisha*". The concept of cumulative toxicity due to junk food are not given in our ancient text but their symptoms

and pathophysiology resembles with *Dushivisha*. In Charak Samhita, the symptoms that produces by action of *Dooshivisha* depends on vitiation of three *Dosha* (humor) i.e. *Vata*, *pitta*, *kapha* in the body. Thus the disorders that not given in our ancient texts can be correlated with the symptoms of *dosha* and *sthana* of accumulation of toxin which can be evaluate for the selection of treatment protocol of *dooshivisha*.

**KEYWORDS:** Junk Foods, Dooshivisha, Viruddha Ahara.

**VIRUDHHA AAHARA****Ayurvedic view**

देहधातुप्रत्यनिकभुतनिद्रव्यणिदेहधातुभिर्विरोधमापद्यन्ते

परस्परगुणविरुद्धानिकनिचितकनिचितसंयोगातसंस्कारद्वाराणिदेशकालमात्रादिश्चापराणि

तथास्वभावादपराणि

The term *Viruddha* generally means as ‘opposite’ but as per the Ayurvedic context it is used as ‘*Viparyaya*’ or ‘*Vishesha*’. The term *Kanichit* this term is belongs to ‘*Vakyashesh Tantroayukti*’ i.e., these *dravya* comes under this may be *opposite* or may be with *same* properties which leads to *Dhatu-dushti*. For example, Milk and Fish are comes under *Viruddha Ahara*. They both have *Rasa* and *Vipaka* same i.e. *Madhura*, Also both are *Maha-abhishyandi*. These three *guna* are *samana-kanichita*. By these *guna* they leads to *dosha-viddhi* and *Margawarodh*. Therefore they are *Viruddha*. But *Virya* of milk is *Sheeta* and that of Fish is *Ushna*. So that they leads to *Rakta-dushti*. This is an example of ‘*sama-vishama-viruddha ahara*’. It means that in this combination some properties are same while some are opposite to each other.

Another type of *Viruddha ahara* explained where all the properties of both the foods are opposite these substances comes under ‘*Vishamata viruddha-ahara*’. Its best example is black-gram and milk. Here milk has properties as *madhura rasa*, *madhura vipaka*, *sheeta virya*, *guru* and *manda guna*, *rechaka* and *vrishya* while black-gram is *kashaya rasa*, *amla vipaka*, *ushna virya*, *laghu* and *tikshna guna*, *grahi* and *shukranashana*. Thus milk and horse gram are known to be *viruddha* of each other. Some of the foods having all properties same but these foods are said to be *viruddha* of each other due to their action on *dhatu* which leads to *dhatudushti*. For example milk and jackfruit. Here both of them are have *madhur rasa*, *madhur vipaka* and *sheeta virya* but their combination leads to *dhatu dushti* and harmful effects of *viruddha ahara*.

**Srotodushti hetu (Causes)**

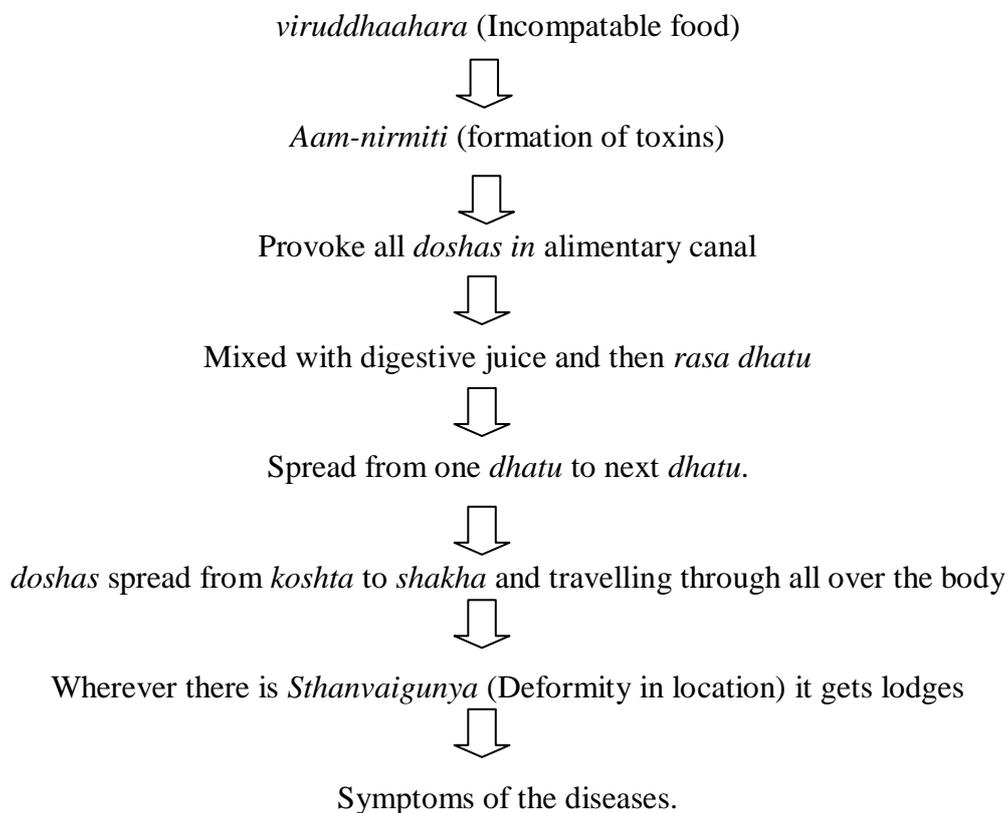
आहारश्चविहारश्चयः दोषगुणैः समः। धातुभिर्विगुणश्चापिस्त्रोतसांसप्रदुषकः॥ (च.वि.५/२२)<sup>[2]</sup>

धातुभिर्विगुणइतिधातुविरोधकस्वभावइत्यर्थः नतुधातुविपरितगुणोविगुणः

दिवास्वप्नमेद्यादयोहिमेदसासमानगुणाएवमेदोप्रदोषकाउक्ताः। (चक्रपाणि)

Here *Viguna* not mean opposite but *Dosha-dhatu-pradoshaka* which leads to *srotodushti*. Which explain by example of *Medo-pradoshaj vikaara* causes due to *Medo-bahul ahara and vihaara*.

### Samprapti (Patho-physiology)



Use of *Viruddha ahara* for longer duration will leads to diseases like Impotency, *Visarpa* (erysipelas), blindness, ascites, Insanity, Fistula in ano, coma or fainting, intoxication, abdominal distention, stiffness of neck, varieties of anaemia, indigestion, diseases of intestine, swelling, gastritis, fever, rhinitis, and various skin diseases like *kustha*, *kilas*, and even death.

### Some common *Viruddhaahara* in day to day life

- Milk shake, Fruit salad – *Rasa & Virya viruddha*
- Juice/ Ice-cream/Alcohol after hot spicy meal – *Upachaar viruddha*
- Cold water or softdrinks before hot tea – *Koshta & Agni Viruddha*
- Spicy Punjabi food with cold drink – *Awastha & Koshta virudhha*
- Sizzling Browne ice-cream with Hot Chocolate – *Guna, Agni & Samyog virudhha*
- Popcorn with watching movie – *Matra virudhha*
- Popcorn along with Cold-drink – *Vidhi virudhha*

### **Junk foods and their health impact**

**Junk food** is a pejorative term for food containing a large number of calories from sugar or fat with little fibre, protein, vitamins or minerals. The term can also refer to high protein food like meat prepared with saturated fat. Some of the commonly eaten junk food is sugary drinks, pizza, white bread, industrial vegetable oils, margarine, pastries, cakes, French fries, potato chips, ice-cream, candy bars, processed meat, processed cheese and the highly processed foods. Consumption of excess junk food puts brain in dilemma. The brain receives mixed signals that make it difficult for the brain to know, whether the body needs food or not. It might eventually lead to overeating. The junk food effects on digestive system, respiratory tract, liver, kidney and heart.

### **Harmful effects of junk food are as follows<sup>[3]</sup>**

#### **(1) Digestive Disorders**

Junk food is rich in fats and oil. This fatty system upset GI tract resulting in gastroesophageal reflux disease (GERD) and irritable bowel syndrome. The oil gets deposited on the stomach wall, which makes the gastric cells to produce gastric acid. This excess acid produces acid and results in various indigestion problems. Diet with inadequate amount of fibers results in constipation and hemorrhoids. The junk food is also loaded with carbohydrates which breakdown into sugars. Pancreas will find it difficult to deal with the excess sugar which can result in fluctuations in blood sugar level and regular consumption can result in diabetes.

**(2) Risk of Diabetes:** Low sugars and excess sugars both are not good for health. In addition body should have a healthy metabolism rate to combat the high calories consumed by intake of junk foods. Obese people are resistant to insulin, making metabolism of sugar even more difficult. The junk food effects metabolism and body loses the tendency to deal with the excess sugar produced after eating junk food. People develop resistance to insulin.

**(3) Effects on Brain and neurological Function:** From a recently studies, the fat from junk food replaces the good fat present in this brain which decreases the cognitive ability and also learning power. This bad fat also impairs the signaling mechanism from the brain. Junk food can result in neuro-inflammation i.e. inflammation of neurons resulting in brain damage.

**(4) Heart Disorders:** As we all know junk foods are processed foods and are composed of fatty substances and are especially rich in bad cholesterol. This bad cholesterol gets deposited on the arteries, reducing lumen of arteries and increases the blood pressure. The deposited

fats can form plaques blocking arteries resulting in cardiac arrest. Sometimes, the deposit turns into inflammatory and attracting more agents enhancing the blockage. The fatty substances increases body weight and makes you obese. The higher the body weight, increased are the chances of cardiovascular risk. The fatty deposition can be fatal and can result in cardiac arrest.

**(5) Kidney Damage:** Kidney is responsible for flushing of toxins. Increased junk food increases the risk of diabetes and heart disease. In diabetes, the body does not produce sufficient amount of insulin or become resistant to insulin. Long term uncontrolled diabetes increases sugar concentration in the body. Increased blood sugar levels have adverse effects on the kidney along with other organs.

**(6) Liver Damage:** Junk food is mostly rich in fatty acid contents. People who regularly eat fatty food, the liver show changes in the liver enzymes. The presence of liver enzymes is an indication of damage to the liver. The liver fails to perform its functions properly. The fat gets deposited onto the liver and results in fatty liver.

**(7) Respiratory disorders:** Excess calories of junk food make people obese. The excess weight produces pressure on heart and lungs. The obese and heavy-weight develops shortness of breath and asthma like symptoms even while doing small daily chores.

**(8) Cancer:** Junk foods like pizza, biscuits, burgers, and chocolate which are rich in calories increases the chances of developing cancer. There are several published reports which indicate consumption of junk food can result in cancer. It is confirmed from a study of Journal of the Academy of Nutrition and Dietetics, a diet rich in high calories without low or nil nutritive value can develop cancer.

Recently Nestle's Maggi noodles were banned in India due to presence of Monosodium glutamate (MSG) and lead in impermissible level. Lead can cause cumulative toxicities of nervous system, bones, heart, liver, and kidneys and also causes severe learning disorders particularly in children.<sup>[4]</sup> Centre for science and Environment (CSE) New Delhi, recommends that, the Food Safety and Standard Authority of India (FSSAI) should ban use of potassium bromate and potassium iodate in breads. As these components contain category 2B carcinogen responsible for cancer and thyroid related diseases.<sup>[5]</sup>

**Role of *viruddha ahara* and junk food in *dooshuvisha samprapti***

Dooshivisha can be defined as any type of *visha* (poison) which may be *Sthavaram* (Plant), *Jangamam* (Animal) or *Kritrimam* (Artificial) origin not completely eliminated from body and accumulate within the body, which become less effective due to *jeerna* (partially metabolized or partially detoxified) *vishaghna aushadhi* (anti-poisonous drugs) or *davagnivata-atapa* (fire-wind-sunrays) or by the own characteristics of poison, it becomes less potent responsible for cumulative effects. Due to *Kapha-avrutatvam* (envelope of *Kapha*) it produces the toxic effects after the long duration.<sup>[6]</sup>

The oil gets deposited on the stomach wall, which makes the gastric cells to produce gastric acid further produce various indigestion problems and also leads to constipation and hemorrhoids. While excess sugar leads to fluctuations in blood sugar level and regular consumption can result in diabetes. Long term uncontrolled diabetes increases sugar concentration in the body. Increased blood sugar levels have adverse effects on the kidney along with other organs. The excess of fat from junk food replaces the good fat present in this brain which, this deposition of bad fat leads to decreases the cognitive ability and also learning power and inflammation of neurons resulting in brain damage. The fatty substances especially rich in bad cholesterol gets deposited on the arteries, reducing the lumen of the arteries and leads to formation of plaques which block the arteries resulting in cardiac arrest. This fatty deposition leads to obesity and heavy-weight which develops shortness of breath and asthma like symptoms even while doing small daily chores. Obesity has significant consequences for the reproductive system, depending upon the amount and distribution of body fat. Epidemiological evidences shows that, it may leads to menstrual disorders, infertility, miscarriage, poor pregnancy outcome, impaired fetal well-being and diabetes mellitus. The fat gets deposited onto the liver and results in fatty liver. The junk food rich in calories also increases the chances of developing cancer. All these examples indicate the concept of *dooshivisha* i.e. these substances does not produce their ill effect immediately but after the certain duration when an individual comes in contact with the certain aggravating factors like, *Dushitadesha: anupa* (with wet land and strong wind, cold, rainfall) *Dushitakaala* (cold, cloudy days), *Dushitaanna* like *sura-lila-kulattha* (alcohol, sesame, horse gram) *Pragvata* (air from eastern region), *Ajirna* (indigestion), etc.

Thus the symptoms of Doohivisha can be correlated with the symptoms of cumulative toxicities due to junk food. For example, *Avipaka*, *Bhinnapurishatva*, *chhardi* can correlated

with various gastrointestinal disorders. *Vaivarnya*, *Murcha*, *Vishamjwara*, *Trushnaca* correlated with nutritional disorders while *Kshapayeccha-shukram* can correlated with infertility and other reproductive disorders. While the symptoms of complication given as *Viplutpakshastuyathavihang* i.e. hairs falls off, body gets emaciated, patient appears like bird clipped off from feathers resembles to symptoms of cancer. This is nothing but the concept of “*Dushivisha*”. The concept of cumulative toxicity due to junk food are not given in our ancient text but their symptoms and pathophysiology resembles with *Dushivisha*. In Charak Samhita, the symptoms that produces by action of *Dooshivisha* depends on vitiation of three *Dosha* (humor) i.e. *Vata*, *pitta*, *kapha* in the body. Thus the disorders that not given in our ancient texts can be correlated with the symptoms of *dosha* and *sthana* of accumulation of toxin which can be evaluate for the selection of treatment protocol of *dooshivisha*.

### Detection Techniques of Cummulative Toxins

**Physical Exam:** During a physical exam, your health professional may use a stethoscope to check your arteries for an abnormal whooshing sound called a **bruit**, which may indicate poor blood flow due to plaque buildup. He or she also may check to see whether any of your pulses (for example, in the leg or foot) are weak or absent, which can be a sign of a blocked artery.

- **Diagnostic Tests**<sup>[7]</sup>

- **Blood Tests** check the levels of certain fats, cholesterol, sugar, and proteins in your blood. Abnormal levels may put you at risk for atherosclerosis.
- **EKG (Electrocardiogram) & Echocardiography** The test provides information about how well your heart chambers and valves are working, and areas of poor blood flow.
- **Computed Tomography Scan** creates computer-generated pictures and can show hardening and narrowing of large arteries.
- **Angiography:** It can show whether plaque is blocking your arteries and how severe the blockage is.

**Following diagnostic methods can be performed for detection of cumulative toxins in the body**<sup>[8]</sup>

1. Blood and urine analysis
2. Fat biopsies
3. Mitochondrial Function Profile

4. Translocater protein studies or Antioxidant status profile used to identify toxins which get stuck on membranes and proteins
5. DNA adduct – to identify chemicals stuck on to DNA
6. Immune function tests (mostly for research purpose only)
7. Psychometric testing
9. Brain scan may show poor perfusion of particular areas of brain

**Treatment Protocol:** According to *Acharya Charaka*, A patient suffered from *Dooshivisha* should be first done *Swedana* and then body detoxified by *Vamana-karma* and *Virechana-karma*. After these procedures daily *Dushi-vishariAgada* should be given to patient.<sup>[9]</sup>

But whenever the *dooshivisha* enters into *Rakta-dhatu*, then *Siravedha* along with other *Panchakrmas* (Detoxifying or bio-purification procedures) should be done according to dosha and their sthana of doshaprakopa. Proper *Pathyadikarma* (dilatory managements) should be followed after these detoxifying procedures.<sup>[10]</sup> After *Shodhana*, *Shamana* is significant to subside the remaining *doshas*. When there is contraindication of *Shodhana* or patient is unable to undertake *Shodhana* then *Shamana* is very effective treatment for them. *Dooshivishari agada* is the most important Ayurvedic herbo-mineral preparation indicated in *Dooshivisha*. Some other *Shamana Chikitsa* given in *Bruhad Nighantu Ratnakara* are *Tankan Yog*, *Sarkaradi leha*, *Krutrim Vishagruha dhoom tail*.<sup>[11]</sup>

**Pathya (dietary management)<sup>[12]</sup>:** *Shigru* (*Moringaoleifera*), *Amla* (*Phyllanthusembilica*), *Madhu* (Honey), *Ushnodaka* (Hot water), *Mudgayusha* (Green gram soup), *Kulatthayusha* (Horse gram soup) etc will be followed in the toxicities related to *dooshivisha*.

## DISCUSSION AND CONCLUSION

Now a days the junk food extensively use in our modern lifestyle. These food contains large number of calories from sugar or fat with little fibre, protein, vitamins or minerals which produce various disorders due to accumulations of toxins. Along with this, the harmful emulsifiers, colours and pesticides make the condition even worse. These toxins accumulate within the body and produce the toxic effect after the certain duration. This concept is well explained as *Dooshivisha* in Ayurveda. By using proper *Shodhana* and *Shamana chikitsa* explained in ayurveda these disorders can be cured but as prevention is better than cure, our responsibility should be more toward prevention of these toxicities in community. First of all banning or partial banning of fast food advertisement should be employed by government

because from these advertisements children are more attract towards these foods. Also fast food avoided by planning of meals and snacks ahead of time and other easy foods can be make under consideration like brown rice, beans, salads etc. fruits like apples, bananas and oranges travel well and can be used as easy afternoon snacks. Also eat healthy fats like nuts and avocado will help to reduce craving. Eat enough proteins like fish, nuts, beans etc. These healthy food habits should be followed in day to day life. Also works on stress management by doing proper exercise, yoga, meditation or doing involve yourself in doing work can distract from overeating. Thus proper follow up of *dincharya* and *aharvidhivishashayatana* that explained in ayurveda can prevent such toxicities which produces due to junk food in the individual.

## REFERENCES

1. Acharya Vidyadhar Shukla and Prof. Ravidatta Tripathi, Editor, Charakasamhita of Agnivesha Edited with Vaidyamanorama Hindi Commentary, Volume 1, Sutrasthana; Atreyabhadrakapyiya-adhyaya, Chapter 26, verse 81, Chaukhmba Sanskrit Pratishtahan, Delhi, Reprint, 2010; 379.
2. Acharya Vidyadhar Shukla and Prof. Ravidatta Tripathi, Editor, Charakasamhita of Agnivesha Edited with Vaidyamanorama Hindi Commentary, Volume 1, Vimanasthana; Srotoviman-adhyaya, Chapter 5, verse 22, Chaukhmba Sanskrit Pratishtahan, Delhi, Reprint, 2010; 592.
3. <https://www.healthline.com/health/fast-food-effects-on-body>.
4. Satya Sivani: Nestle's Maggi Banned in India Due to Excessive Chemical Used: June 7, 2015 <http://www.greenoptimistic.com/nestle-maggi-banned-india> (June7, 2015).
5. Centre for Science and Environment, New Delhi: May 23, 2016 [cseindia.org/content/what's-our-bread](http://cseindia.org/content/what-s-our-bread) (May 23, 2016).
6. Kaviraja Ambikadutta Shastri: Editor, Susrutsamhita of Maharsi-Susruta Edited with Ayurveda-Tatva-Sandipika, Kalpasthana; Sthavarvish-vidnyaniyam Adhyaya: Chapter 2, Verse 25-26, Chaukhmba Sanskrit Sansthan Publication, Varanasi, Second Edition, part 1, 2010: 32.
7. <https://hrcak.srce.hr/file/239404>.
8. Dr. Kundan Rameshwar Meshram, et al, Cummulative food toxicities in India and Their Management in Perspective of Ayurveda, EJPMER, 2017; 4(8): 247-254.
9. Kaviraja Ambikadutta Shastri: Editor, Susrutsamhita of Maharsi-Susruta Edited with Ayurveda-Tatva-Sandipika, Kalpasthana; Sthavarvish-vidnyaniyam Adhyaya: Chapter 2,

Verse 50, Chaukhmba Sanskrit Sansthan Publication, Varanasi, Second Edition, part 1, 2010: 32.

10. Acharya Vidyadhar Shukla and Prof. Ravidatta Tripathi, Editor, Charakasamhita of Agnivesha Edited with Vaidyamanorama Hindi Commentary, Volume 2, Chikitsasthana; Vishachikitsaadhyaya, Chapter 23, verse 63, Chaukhmba Sanskrit Pratishtahan, Delhi, Reprint, 2010.
11. Dattaram Mathur, Bruhad Nighantu Ratnakar, Visha rog adhyaay, first edition, 1996, Khemraj Shri Krushndas Publication, Mumbai.
12. Parvesh Kumar and Munish Kumar, Concept of Dushivisha- Significance in Current Prospective, Int J Ayu Pharma Chem, 2016; 5(2): 19/09/16, 133.