



Review Article

ROLE OF VIRUDHAHARA IN CURRENT LIFESTYLE DISEASES

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ABSTRACT

Ayurveda has long emphasized the importance of a healthy lifestyle and proper dietary habits to prevent illness. Ayurveda places great importance on a balanced diet as a fundamental pillar of overall health and well-being. A significant concept within Ayurveda is *Viruddha Ahara*, which refers to the consumption of incompatible or unwholesome dietary habits. The consumption of *Viruddha ahara* increased in present era due to modern food habits. Individuals who adopt such food habits are more susceptible to various health conditions. The rise in lifestyle diseases, such as type 2 diabetes, hypertension, obesity, heart disease, dyslipidaemia, and infertility, particularly in urban areas, is largely attributed to incompatible eating practices. As these conditions are closely linked to diet and lifestyle, the concept of *Viruddha Ahara* becomes increasingly relevant. This article explores the relationship between *Viruddha Ahara* and the growing prevalence of lifestyle-related diseases. A comprehensive review of modern medical and Ayurvedic literature was conducted through freely accessible platforms like PubMed and Google Scholar. The review of available data indicates that *Viruddha Ahara* contributes significantly to the onset of various health conditions. Therefore, it is essential to raise awareness about the harmful effects of consuming incompatible foods and encourage healthier eating practices.

INTRODUCTION

Ayurveda is regarded as the science of life, which aims on the prevention and management of diseases. One of the key concepts discussed in Ayurvedic texts, particularly the *Samhitas*, is *Viruddha Ahara*. Incompatible or unhealthy food habits which is especially relevant in today's fast life food habits. The pathophysiology of diseases begins with improper food habits. Poor dietary choices play a significant role in the development of lifestyle diseases. Conditions such as hypertension, diabetes mellitus, dyslipidaemia, and obesity, often linked to cardiovascular diseases, are rapidly on the rise^[1]. The rapid economic growth and increasing westernization of lifestyle over recent decades have contributed to a sharp increase in the prevalence of these diseases in India.

According to a report by the Indian Council of Medical Research (ICMR) and the Public Health Foundation of India (PHFI), the burden of non-communicable diseases (NCDs) has been steadily increasing, with 61.8% of deaths in India in 2017 attributed to such conditions^[2]. On a global scale, NCDs account for 41 million deaths annually, or 74% of all deaths, with over 15 million people between the ages of 30 and 69 dying prematurely from NCDs each year-85% of these deaths occur in low- and middle-income countries^[3]. *Viruddha Ahara* is recognized as one of the primary causes of these disorders. The continual consumption of incompatible foods disrupts the function of *Agni* (digestive fire), leading to the accumulation of *Ama* (toxins), which in turn causes disease^[4]. It is crucial to understand how various dietary combinations can interact to trigger these health issues. Therefore, there is an urgent need to identify and raise awareness about the types of *Viruddha Ahara* present in modern diets and inform the public about the harmful impact of incompatible food choices on the development of lifestyle diseases.

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OBJECTIVES

- To identify and analyse the *Virudhahara* in modern food habits and its role in lifestyle diseases.
- Create awareness among general public on hazardous effect of *Virudhahara* and educate the public to reduce incompatible dietary habits for prevent lifestyle diseases.

METHODOLOGY OF REVIEW

- Literature has been reviewed from both Ayurveda *Samhithas* and modern medicine literature
- Used electronic searching engine like PubMed and Google Scholar with key words 'Diet, *Viruddha Ahara*, Food incompatibilities and Lifestyle diseases.'
- Comparison with results and conclusion was done and summed up the derived findings.

Viruddha Ahara

In Ayurveda, the concept of *Viruddha Ahara* (incompatible or contradictory foods) plays a crucial role in the development of various diseases. According to Acharya Charaka, *Viruddha Ahara* refers to certain foods or food combinations that disrupt the body's metabolism, impede tissue formation, or possess

Types of *Viruddha ahara*^[7]

18 types of *Viruddha ahara* are mentioned in Charaka Samhitha

Table 1: *Viruddha ahara* are mentioned in Charaka Samhitha

1	<i>Desha Viruddha</i>
2	<i>Kala Viruddha</i>
3	<i>Agni Viruddha</i>
4	<i>Matra Viruddha</i>
5	<i>Satmya Viruddha</i>
6	<i>Dosha Viruddha</i>
7	<i>Samskara Viruddha</i>
8	<i>Veerya Viruddha</i>
9	<i>Koshtha Viruddha</i>
10	<i>Avastha Viruddha</i>
11	<i>Krama Viruddha</i>
12	<i>Parihara Viruddha</i>
13	<i>Upachara Viruddha</i>
14	<i>Paaka Viruddha</i>
15	<i>Samyoga Viruddha</i>
16	<i>Hridaya Viruddha</i>
17	<i>Sampad Viruddha</i>
18	<i>Vidhi Viruddha</i>

Food Incompatibilities in Today's era

Ancient texts like the *Charaka* and *Sushruta Samhita* outline various food incompatibilities, but many of these combinations are not commonly found

properties that are contrary to the inherent qualities of the tissues^[5]. This kind of diet, when consumed, disturbs the natural balance (homeostasis) of the body and can lead to the onset of numerous health problems. *Viruddha Ahara* can result by eating the wrong food in the wrong combination, from the improper preparation, in the wrong dosage, at the wrong time of day, or in the wrong season^[6]. Such foods can create imbalances that increase the susceptibility to a variety of ailments, as they disturb the body's equilibrium among the *Doshas*, *Dhatus* and *Agni*.

Foods and drinks categorized as *Viruddha Ahara* generally exhibit the following traits:

- Combination of opposite properties or qualities.
- They produce conflicting effects on the body's tissues.
- When prepared in a certain manner, they may lead to harmful effects in body.
- Their combination in specific proportions may result in negative effects on the body.
- May have unwanted effect if consumed at inappropriate time.

in today's modern diet. As a result, there is a need to identify new food incompatibilities that are prevalent in contemporary life, from an Ayurvedic perspective.

With the rapid globalization and urbanization, people's lifestyles and eating habits have undergone significant changes. Fast food has become a regular part of daily life due to its convenience, quick preparation, and availability. However, most fast foods and junk food items fall under the category of *Viruddha Ahara*, primarily because of improper processing and incompatible food combinations. Examples of such foods include chicken burgers, pizzas, packaged salty snacks, carbonated drinks, processed and canned foods, milkshakes with fruit salads, buffet-style meals,

and more. These are becoming *Viruddha* because of incompatible combinations of food items, wrong method of preparations, and low nutrient value. So most of the junk foods come under *Samyoga viruddha*, *Veerya viruddha*, *Samskara viruddha*, *Sampad viruddha*. Fast food is typically high in calorie density but low in essential micronutrients, especially zinc, which is vital for antioxidant processes. As a result, children who regularly consume fast food are experiencing both obesity and malnutrition

Common forms of *Viruddha ahara* in modern food habits

Table 2: Common forms of *Viruddha ahara* in modern food habits

Type of <i>Virudha ahara</i>	Example
<i>Samyoga viruddha</i>	<ul style="list-style-type: none"> • Fruit salads • Milk shakes prepared with sour fruits • Chicken burger • Chicken pizza, Shawarma • Fish and curd
<i>Veerya viruddha</i>	<ul style="list-style-type: none"> • Biryani with curd • Fish and milk • Hot ice cream
<i>Samskara viruddha</i>	<ul style="list-style-type: none"> • Cooked food which keeps on refrigerator for days • Heated honey • Reuse oil which used once • Use of aluminium utensils • Use of canned food items
<i>Kala viruddha</i>	<ul style="list-style-type: none"> • Curd at night • Hot and spicy substance in summer • <i>Sheeta</i>, <i>Ruksha</i> substances in winter
<i>Krama viruddha</i>	<ul style="list-style-type: none"> • Intake of hot water after taking honey • Habit of taking buffet food
<i>Matra viruddha</i>	<ul style="list-style-type: none"> • Honey and ghee in equal quantity
<i>Vidhi viruddha</i>	<ul style="list-style-type: none"> • Habit of intake of food in a hurry • Habit of intake of food while talking, watching television, mobile

Nowadays, food adulteration has become a widespread practice, and it is a major contributor to food incompatibility. Various food adulterants are responsible for making the food toxic and harmful to health⁸.

Table 3: Diseases caused by *Viruddha ahara*

Food	Common Adulterants
Milk	Urea, formalin, detergents, ammonium sulphate, boric acid, caustic soda, benzoic acid, salicylic acid, hydrogen peroxide, sugar, melamine, water, addition of refined oil or hydrogenated fat.
Ghee	Vanaspati, hydrogenated fat, refined oils, starch.
Wheat flour	Tapioca flour, talc, refined flour, sand, chalk powder, corn flour, benzoyal peroxide.
Chilli powder	Brick powder
Honey	Molasses, sugar cane
Ice cream	Pepperonil, ethylacetate, butyraldehyde, nitrate

Viruddha aharajanya diseases mentioned in Caraka Samhita are ^[14]

Shandyam (impotency), *Visarpam* (erysipelas), *Andhyam* (blindness), *Visphota* (bullus), *Udakodara*, *Unmada* (insanity), *Bhagandaram* (fistula-in ano), *Murcha* (coma), *Mada* (intoxication), *Adhmana* (abdominal distention), *Pandu* (anaemia), *Kilasa*, *Kushta* (skin diseases), *Grahanigada* (dysentery), *Galagraha* (stiffness in neck), *Amlapitha* (gastritis), *Jwara* (fever), *Peenasa* (rhinitis), *Santhana dosham* (infertility), *Sotham* (swellings), *Mrtyu* (death).

From above list, it is evident that *Viruddha Ahara* can lead to diseases affecting multiple body systems. If these diseases are categorized according to the body systems, it can be concluded that continuous consumption of incompatible foods impacts the immune system, endocrine system, digestive system, nervous system, and circulatory system.

Lifestyle Diseases

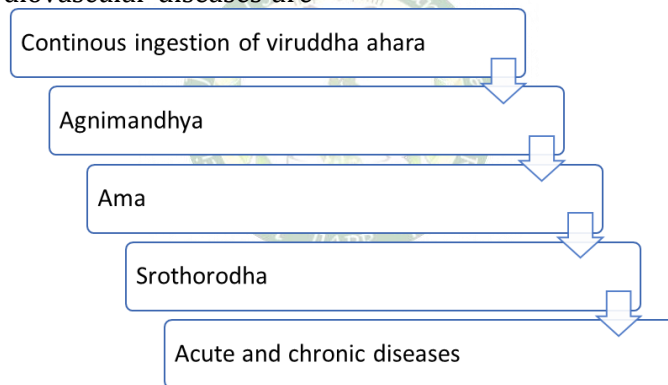
Lifestyle diseases have become increasingly common in today's era, primarily stemming from poor dietary habits. The prevalence of conditions such as hypertension, diabetes mellitus, dyslipidaemia, and obesity, which are closely linked to cardiovascular diseases, is rising rapidly. Cardiovascular diseases are

responsible for the majority of non-communicable disease (NCD) deaths, claiming around 17.9 million lives each year, followed by cancers (9.3 million), respiratory diseases (4.1 million), and diabetes (1.5 million). Together, these four disease categories account for more than 80% of all premature NCD-related deaths.^[9]

Mode of Action of Viruddha ahara

Viruddha Ahara can trigger inflammation at the molecular level. When consumed, these incompatible food combinations produce toxins that negatively impact the immune system, cellular metabolism, and growth hormones. The body's metabolism releases proteins after digestion of incompatible foods, can damage vital organs at both the cellular and molecular levels^[10]. The severity of these harmful effects depends on factors such as the quantity of the toxic substance, its antigenicity, the duration of exposure, the individual's immune compatibility, and their age. One of the most severe long-term consequences of regularly consuming such food combinations is the development of cancer.

According to Ayurveda pathogenesis of *Viruddhaharajanya rogas* can summarize as,



Viruddha Ahara initiates the pathogenesis by disturbing the balance of *Agni*, which plays a crucial role in the digestion and transformation of food, as well as in the nourishment of the body's tissues (*Dhatus*). Prolonged consumption of incompatible foods results in the formation of *Ama*, a toxic substance that causes blockages in the body's channels. This obstruction, referred to as *Srothorodha*, can lead to a range of acute and chronic diseases, with the severity depending on the quality and duration of consuming incompatible food combinations.^[11]

Viruddha ahara action on cellular level

- Regular consumption of *Viruddha Ahara* can lead to inflammation at the cellular level by disrupting the eicosanoid pathway, which elevates arachidonic acid and increases the production of prostaglandin-2 and thromboxane. This inflammatory response is significant because these imbalances contribute to *Agni Mandya*, the

formation of *Ama*, and various metabolic disorders^[12].

- Eicosanoids derived from COX enzymes, such as prostaglandins (PGs) and thromboxanes (TXs), play key roles as autocooids that regulate cardiovascular function and tumour progression. Additionally, eicosanoids derived from lipoxygenase (LO), such as leukotrienes (LTs), have been identified as crucial mediators in inflammation, asthma, cardiovascular diseases, and cancer^[13].

Role of Viruddhahara on causing lifestyle diseases

In Ayurveda, the pathophysiology of metabolic disorders is comparable to that of *Dhathu Pradoshaja Vikaras*, which can be classified as either *Aptarpanottha* or *Santarpanottha Vikaras* (diseases arising from improper eating habits and faulty tissue metabolism), such as *Atisthaulya* (obesity) and *Madhumeha* (diabetes). These conditions are

interrelated and share a common pathological mechanism. Ayurvedic treatment for these diseases primarily focuses on managing *Medoroga* (disorders of fat metabolism) and *Santarpanjanya Vikaras* (diseases caused by excess nutrition). Improper dietary habits lead to *Agnidushti* (impairment of digestive fire), which in turn results in the formation of *Ama* (toxic substances). When this toxic *Ama* interacts with *Medodhatu* (fatty tissues), it alters both the quality and quantity of the fat, including cholesterol^[15]. The interaction between *Ama* and fatty tissues leads to *Sama Medadhatu* (unhealthy or bad fats), which, when spread throughout the body, can block microchannels, trigger antigenic reactions, and initiate a series of events that contribute to various lifestyle diseases.

Role in causing Infertility

Viruddha Ahara can lead to *Dhathu Pradoshaja Vikaras* (disorders related to tissue imbalances). It can impact upto the *Sukra Dhathu* (reproductive tissues), potentially resulting in conditions like impotence and infertility. Therefore, the widespread consumption of incompatible foods in modern diets is a contributing factor to the rising cases of infertility seen today^[16]. Acharya Charaka identified *Shandhatva* (infertility) as a disease caused by *Viruddha Ahara*. Congenital *Shandhatva* may occur due to specific genetic factors in the fetus if the parents consistently consumed *Viruddha Ahara* during conception^[17].

Viruddha ahara according to the modern point of view

A new area of research, known as topography or the science of food combinations, is emerging. This field explores the proper pairing of different types of food. According to this science, proteins should not be combined with starches and carbohydrates, and it is recommended that they be consumed separately. When proteins and carbohydrates are eaten together, their absorption is delayed^[18].

Nutrigenomics is the study that examines the relationship between nutrition, health, and the human genome. This field uses advanced technologies to investigate the molecular processes that link food ingredients to health outcomes or nutrition-related diseases, such as colorectal cancer, obesity, diabetes, cardiovascular diseases, and inflammatory bowel diseases^[19]. Numerous studies have shown that specific dietary components can influence gene transcription through various mechanisms. For instance, polyphenols, found in many foods, have anti-inflammatory effects by interfering with multiple stages of the nuclear factor- κ B activation process, a key regulator of inflammation. Similarly, fatty acids can function as ligands for membrane and nuclear receptors, thereby regulating intracellular signalling and gene expression.^[23]

- Reheating oils such as sunflower, soybean, and corn can produce a toxic compound called 4-hydroxy-trans-2-nonenal (HNE). Consuming food that contains HNE from these reheated oils has been associated with an increased risk of various health issues, including cancer, Parkinson's disease, Alzheimer's disease, Huntington's disease, liver problems, as well as cardiovascular diseases and strokes^[20]. Reheating oil leads to oxidation, which raises the risk of oxidative stress and the formation of free radicals when consumed. Toxic compounds called oxygenated aldehydes are produced, which increase the risk of degenerative diseases like arthritis and contribute to oxidative stress in the body's cells.^[21]
- Milk, which contains lactogen, when combined with certain fruits like bananas, which also contain common allergens, can exacerbate asthma attacks^[22].
- Deep-frying potatoes can produce harmful substances, such as acrylamide, which have been linked to an increased risk of cancer.
- Animal and vegetable proteins should not be consumed together, as this combination is heavy and difficult for the digestive system to process. High-protein foods that are processed with concentrated fats should be avoided, as the fats reduce the secretion of gastric juices, impairing digestion. Research has shown that a diet high in fats can decrease the digestive rate by up to 50%^[23].

DISCUSSION

Viruddha Ahara plays a significant role in the growing prevalence of lifestyle diseases, largely due to modern dietary habits^[24]. Any food that disturbs the body's balance of humors (*Dosha*) without properly eliminating them, and is harmful or incompatible with the body's tissues (*Dhatu*), is classified as *Viruddha Ahara*. Such foods remain antagonistic to the tissues^[25]. The incidence of conditions such as infertility, diabetes mellitus (DM), cancer, obesity, cardiovascular diseases, and hormonal imbalances is increasing each year. To reduce the risk of these diseases, halt their progression, enhance the body's protective mechanisms, support the immune system, and improve overall health, it is essential to avoid incompatible diets and educate people about their harmful effects.

Viruddha ahara - Potent cause of lifestyle diseases

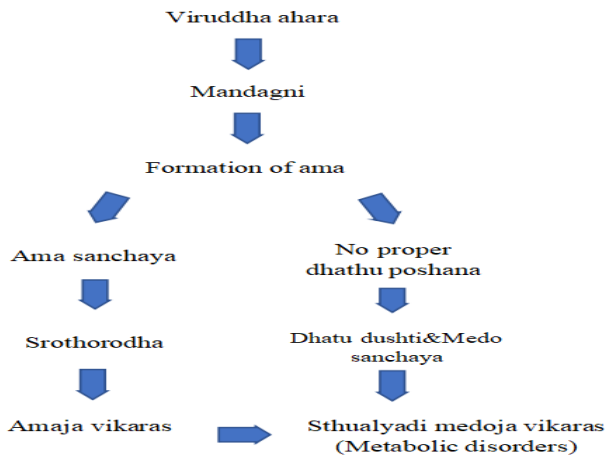
Continuous consumption of *Viruddha Ahara* leads to the formation of *Ama* in the body. This *Ama* disrupts the normal balance of the *Doshas*. When the *Doshas* are vitiated, their imbalance obstructs the proper functioning of the body's channels (*Srotas*), leading to *Srothorodha* and *Dhathudushti*^[26]. As a

result, various diseases related to the affected *Srotas* develop.

The reasons of *Viruddhahara* become an important cause for lifestyle diseases are,

1. Disrupt the balance of *Agni* and cause *Agnimandhya*
2. Formation of *Ama*
3. Being *Abhishyandhi* cause *Srothorodha*
4. Vitiating of *Doshas* and *Dhatus*
5. Disrupt *Dhathuposhana*

Figure 1



CONCLUSION

Diet plays a crucial role in addressing the root cause of diseases and promoting overall health. As highlighted in the discussion, *Viruddha Ahara* (incompatible food combinations) is a significant factor contributing to today's unhealthy eating habits. This can lead to a variety of immunological, metabolic, and digestive disorders, as well as severe diseases, often without the individual's awareness. Food incompatibilities act as key etiological factors that disrupt the body's homeostasis in otherwise healthy individuals. *Viruddha Ahara* generates *Ama* in the body, which disturbs the normal balance of the *Doshas*. The rise in lifestyle diseases today is largely attributed to such incompatible dietary practices. Therefore, it is essential to identify and address these dietary factors in the context of metabolic diseases. Raising awareness about the dangers of incompatible food combinations and their role in the development of lifestyle diseases is crucial to reducing the prevalence of lifestyle diseases. In Ayurveda, food is regarded as *Mahabhaishagya*, the great medicine. Thus, we should adopt the principle, "Let food be our medicine, not medicine our food". Government-led awareness campaigns can be integrated into national programs focusing on prevention of lifestyle diseases by educate the public about importance of healthy eating habits will helps to improve health status of society

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