

Revisiting Viruddha ahara: An Ayurvedic Perspective with Modern Nutritional Correlation

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Abstract. Ayurveda explains that food plays a major role in keeping the body healthy and preventing disease. In Ayurveda, many aspects of diet are described regarding how they influence health and protect against illness. Among them, viruddha ahara is one important concept. It means eating food combinations or preparations that do not suit the body. Viruddhaahara refers to incompatible food combinations — those that are not suitable for digestion, metabolism, or overall health when taken together, even if each item is wholesome on its own. If such food is consumed regularly, it can cause both short-term and long-term health problems.

Although described in classical texts, this concept is highly relevant today, as modern diets often include wrong food combinations and processed foods. Ayurveda mentions 18 types of Viruddha Ahara— such as Samyoga Viruddha (wrong combinations like milk with fish), Paaka Viruddha (improper cooking), and kaala viruddha (food taken in the wrong season). These can be compared with modern findings on food allergies, indigestion, reduced nutrient absorption, harmful chemicals in burnt or processed food, and lifestyle-related diseases.

Modern research also shows that wrong food choices and unhealthy cooking practices can contribute to stomach disorders, obesity, diabetes, and even cancer. The principle of Viruddha Ahara therefore gives timeless guidance for healthy eating and can help in preventing many diet-related problems. By combining Ayurvedic dietary rules with modern nutrition science, we can develop a better and holistic approach to health in the present era.

Key words: Viruddha Ahara, food incompatibility, Nutritional science, Lifestyle and Metabolic disorders.

I. INTRODUCTION

Ayurveda, the ancient science of life, emphasizes the role of Ahara as a fundamental pillar in maintaining health, preventing, critical component in sustaining life and ensuring the normal physiological functioning

of the human body [1]. Among the various dietary principles elaborated in the classical texts, the concept of Viruddha ahara holds a unique place. Viruddha Ahara refers to food substances or combinations of food substance, even it is wholesome individually, it may produce adverse effects when consumed together, when prepared in an improper manner, or when taken at an unsuitable time, quantity, or season. it causes aggravation of the Doshas but fails to expel them. This retention subsequently causes vitiation of the Rasadi Dhatus and produces many diseases [2].

The value of virudha ahara is becoming clearer in today's world. With the rise of lifestyle-related diseases such as obesity, metabolic syndrome, and digestive disorders [3], it is important to revisit these traditional dietary principles. Modern nutrition research supports many of these ideas, showing that certain food combinations and cooking practices can disturb digestion, reduce nutrient absorption, and increase inflammation [4]. For example, mixing some proteins with milk products, or repeatedly heating oils, can create harmful effects—similar to what Ayurvedic texts describe as Viruddha Āhāra.

This article looks at the concept of Viruddha Āhāra from both Ayurvedic and modern scientific perspectives. By linking classical knowledge with current evidence, it explains how incompatible foods may lead to disease and highlights the importance of mindful eating habits for better health and long life.

II. CONCEPT OF VIRUDHARA IN AYURVEDA

Definition:

Viruddha ahara refers to any food that dislodges the doshas (morbid humors) but does not expel them from the body [5]. This incompatible food that acts antagonistically against the dehadhatu. This type of food dislodges the doshas from their sites but does not

expel them from the body, leading to their harmful accumulation of doshas and bring abnormalities in dhatus [6].

Acharya Charaka, with his commentators Chakrapani and Gangadhara, has detailed a total of 18 distinct types of these incompatible food combinations [7].

Types of Viruddha Ahara (incompatible diet):

- 1.Desha Viruddha - Incompatible with the geographic environment or climate.
- 2.Kala Viruddha - Incompatible with the time (season, time of day).
- 3.Agni Viruddha - Incompatible with one's digestive capacity.
- 4.Matra Viruddha - Incompatible in quantity or dosage.
- 5.Satmya Viruddha - Incompatible with one's personal tolerance or habits.
- 6.Dosha Viruddha - Incompatible with one's body constitution.
- 7.Samskara Viruddha - Incompatible due to the method of processing or preparation.
- 8.Veerya Viruddha - Incompatible in potency
- 9.Koshtha Viruddha - Incompatible with one's natural bowel habit or type of digestive tract.
- 10.Avastha Viruddha - Incompatible with one's current state of health or stage of life.
- 11.Krama Viruddha - Incompatible with the proper sequence of eating.
- 12.Parihara Viruddha - Incompatible due to disregarding prescribed rules or contraindications.
- 13.Upachara Viruddha - Incompatible with the therapy or treatment one is undergoing.
- 14.Paaka Viruddha - Incompatible due to the method of cooking
- 15.Samyoga Viruddha - Incompatible combination
- 16.Hrid Viruddha - Incompatible with one's palate
- 17.Sampad Viruddha - Incompatible due to a lack of quality or richness
- 18.Vidhi Viruddha - Incompatible with the general rules of eating.

Regularly eating incompatible foods (Viruddha Ahara) can lead to many different disorders. Acharya Charaka listed these health problems in his Samhita. The diseases that result can be short-term (acute) or long-term (chronic), and they can be classified as follows [8]:

Twak Vikara (Skin disorders):

Visarpa (rashes), Visphoṭa (pustules), Kilasa (leucoderma), Kuṣṭha (various skin diseases).

Annavaḥa Srotas Vikara (Digestive disorders):

Adhmana (abdominal swelling), Jalodara (ascites), Grahani (sprue/IBS-like condition), Amla pittha (acidity), Bhagandara (fistula).

Sarvanga Vikara (Systemic conditions):

Jvara (fever), Shotha (swelling/edema), Paṇḍu Roga (anemia), Aama (endogenous toxins).

Manovaha & Nadi Vikara (Neurological & psychological disorders):

Unmāda (insanity/psychosis), Mūrccchā (fainting/syncope), Mada (narcosis/intoxication).

Gambhira Vikara (Serious health issues):

Galgraha (throat obstruction), Pīnasa (allergic rhinitis/chronic cold), Sandhatva (impotency), Santana Doṣa (infertility), Andhatva (blindness), Mṛtyu (death – in severe cases).

III.MODERN NUTRITIONAL CORRELATION OF VIRUDDHAAHARA

Desha Viruddha:

When food items possess properties similar to those of a particular Desha (habitat/region), it is termed as Desha Viruddha[7]. Ayurveda emphasizes that one should consume foods with qualities opposite to those of the corresponding Desha to maintain balance and health. In Arid/Desert Region the foods with similar properties like dried snacks, crackers, excessive spicy foods, and alcohol, these foods exacerbate dehydration and electrolyte imbalance [9]. The body is already struggling to conserve water; consuming diuretics like alcohol or dry foods increases the osmotic load, demanding more water for digestion and threatening homeostasis. Hydrating foods like melons, cucumbers, and soups, which aid fluid retention and electrolyte balance. In Marshy/Wetland Region Heavy, damp, and cold foods like excessive dairy, processed foods, refined sugars, and cold drinks. These foods can promote water retention, slow metabolism, and disrupt gut microbiota. In a humid environment where pathogens may thrive, a diet high in sugar can further encourage inflammatory processes and microbial overgrowth

Kala Viruddha:

when a person consumes food items that have properties similar to the prevailing kala (season or time), it is termed as kala viruddha ahara. In a hot climate, the body works to cool itself via sweating.

Consuming hot, spicy, dry foods forces it to expend more energy to cool down, raising the risk of dehydration, heat stress, metabolic activity [10]. Conversely, cooling foods like watermelon (high water content, electrolytes) aid the body's natural cooling mechanisms. In a cold climate, metabolism increases to generate heat. Consuming cold, raw foods forces the body to waste energy warming them for digestion, lowering core temperature. Warm, cooked, and spicy foods (ginger, garlic) contain compounds that stimulate thermogenesis [10], helping to maintain a safe core temperature efficiently. In humid climates, sweat does not evaporate well, impairing cooling and leading to electrolyte loss. Heavy, oily foods increase metabolic heat and are harder to digest. Light, bitter foods (leafy greens) are easier to digest and often contain minerals that help replenish electrolytes without overloading the system. Cells are most sensitive to insulin in the morning and least sensitive in the evening. Eating a large, sugary meal at night leads to higher blood sugar spikes than the same meal eaten in the morning. The sleep hormone melatonin, which rises in the evening, can inhibit insulin secretion and pancreatic function. Eating late forces the digestive system to work when it is naturally winding down [11].

Agni Viruddha:

Food taken without knowledge of individual's Agni which may be either of 4 types Mrudu, Madhyama, Tikshna and Vishama. E.g.: Laghu and Alpa Matra Aahara for Tikshna Agni – consuming poha or mudga in very minimal quantity in case of excessive hunger Guru and Adhika Matra Aahara in Manda Agni. - consuming fried meat, heavy cream during indigestion in excess. This is considered as agni viruddha. The person with intense hunger can be describes someone with a high Basal Metabolic Rate (BMR), potentially high sympathetic (stress) drive, or blood sugar dysregulation (e.g., reactive hypoglycemia). Eating a small, light, or carbohydrate meal (like only poha) causes a rapid spike in blood sugar, followed by a sharp drop due to a corresponding spike in the hormone insulin. This hypoglycemic state triggers the release of stress hormones like cortisol and glucagon to raise blood sugar again, which intensifies hunger, cravings, and irritability.[12] A light meal fails to provide the sustained energy release needed. It lacks sufficient complex carbohydrates, protein, and healthy

fats, which slow digestion and provide a steady glucose supply. This mismatch exacerbates the metabolic stress, leading to a cycle of overeating later and potential metabolic inflammation

The manda agni persons can be describes a state of impaired digestive function, potentially low stomach acid (hypochlorhydria), insufficient digestive enzyme production, or delayed gastric emptying (gastroparesis). consuming a heavy meal like fried meat or rich cream is profoundly disruptive. Scientifically, this overwhelms every stage of the compromised digestive process. Firstly, it stretches the stomach wall beyond its comfort zone, triggering pain, nausea, and potentially forcing acid into the oesophagus, causing heartburn [13]. Secondly, and more critically, the volume and complexity of the food dilute already insufficient stomach acid and digestive enzymes, crippling their ability to break down proteins and fats effectively. Instead of being digested, this stagnant food mass then sits in the gut, becoming fuel for bacterial fermentation, which produces excessive gas, leading to severe bloating, cramping, and discomfort. Furthermore, these undigested protein particles can damage the gut lining, promoting inflammation, leaky gut syndrome, and the systemic absorption of toxin

Samyoga Viruddha and Matra Viruddha:

Samyaga Viruddha and Matra Viruddha together describe how combining specific foods (Samyaga) and consuming an improper quantity (Matra) can independently disrupt health. Foods such as Alcohol + Energy Drinks - Alcohol acts as a central nervous system depressant, while caffeine and taurine in energy drinks are stimulants. This antagonistic interaction masks alcohol's sedative effects, increasing alcohol consumption, cardiac workload, and risk of arrhythmias or sudden cardiac events [14], Milk + Citrus or Sour Foods Acidic foods like lemon or orange cause milk proteins (casein) to coagulate in the stomach, leading to indigestion, gas, and sometimes diarrhea [15]. Combinations such as Calcium-rich foods (e.g., milk, cheese, yogurt) with iron-rich foods (e.g., red meat, spinach, lentils, fortified cereals) is not suitable because Calcium and non-heme iron (the type found in plants) compete for the same absorptive pathways in the intestines. When taken together, calcium can significantly inhibit the absorption of iron [16]. A high-starch meal (e.g., white

bread, pasta, white rice) combined with concentrated simple sugars (e.g., a sugary soda, dessert, sweetened sauce). Both starches (complex carbohydrates) and simple sugars are broken down into glucose. Consuming them together leads to a very rapid and high spike in blood sugar. The body must release a large amount of insulin to manage this surge. This is particularly problematic for diabetics and pre-diabetics.[17] These kinds of foods in terms of combinations especially when qual in combinations produces harmful effects in body such kinds of food should be contraindicated.

Satmya Viruddha

Satmya Viruddha means incompatibility caused by sudden withdrawal or change from accustomed diet. A person who is habituated to a particular food or routine may develop harmful reactions when it is abruptly stopped or drastically altered.

Long-term use of substances like caffeine, alcohol, nicotine, or certain drugs makes the body physiologically adapted. Sudden discontinuation leads to withdrawal symptoms such as headache, irritability, tremors, or cravings [18],[19]. These should withdraw gradually or with medical assistance. People accustomed to high salt or high sugar intake feel fatigued, irritable, or unsatisfied when suddenly shifted to bland/low-salt/low-sugar diets. Similarly, vegetarians who suddenly start eating meat may suffer indigestion, while habitual meat eaters may feel weakness or nutrient deficiency when meat is suddenly stopped. The gut microbiome adapts to habitual diets. Sudden drastic dietary shifts (e.g., from high-fibre vegetarian diet to high-fat animal diet) can cause bloating, dysbiosis, or gastrointestinal disturbances

Mustard oil contains allyl isothiocyanate, an irritant causing mucosal irritation. In unaccustomed individuals, low enzymatic tolerance and heightened sensory [20]. Coconut oil is rich in medium-chain triglycerides (MCTs); unaccustomed gut microbiota and fat-digestive enzyme patterns, produces indigestion, altered lipid metabolism; also, strong coconut aroma causes sensory rejection [21]. Rice is low in gluten; sudden shift to wheat (high gluten, higher fiber) Produce changes in gut microbiota fermentation which cause bloating, altered bowel habits. Psychologically, rice eaters often feel “not full” without rice. Wheat has higher protein & gluten,

provides prolonged satiety. Switching to rice (rapidly digested starch) produce early postprandial hunger, blood sugar spikes that cause fatigue, mood changes [22]

Dosha Viruddha

Food items having similar properties to that of Doshas, which causes Dosha dushti are called as Dosha Viruddha. These can be co related with following things in terms of modern Purine-Rich Foods (e.g., red meat): Increase uric acid production, elevating the risk of gouty arthritis (a Pitta/Vata disorder) [23]. High Sodium Intake (e.g., excess salt): Causes fluid retention and hypertension, leading to oedema and long-term cardiovascular and kidney strain (a Kapha disorder) [24]. Refined Sugars and Carbohydrates: Drive metabolic syndrome, fatty liver disease, and weight gain (primarily Kapha-aggravating) [25]. Alcohol: Acts as a direct irritant to the gastric mucosa and hepatotoxin, potentially leading to gastritis, fatty liver, and cirrhosis [26] (primarily Pitta-aggravating). In essence, Dosha Viruddha foods are those that, based on their inherent biochemical properties, challenge specific physiological systems and initiate a disease process. This ancient framework aligns with the modern understanding of food intolerances, metabolic stressors, and dietary triggers for chronic disease.

Samskara viruddha

Samskara Viruddha refers to dietary incompatibility arising from an incorrect or inappropriate method of preparation or processing of food. This principle asserts that even wholesome ingredients can be rendered harmful or difficult to digest based on how they are cooked, combined, or treated. Overheating or Burning Foods: Grilling, frying, or baking foods at very high temperatures can generate harmful compounds like Acrylamide, Advanced Glycation End Products, Polycyclic Aromatic Hydrocarbons and Heterocyclic Amines [27] Reheating Oils or Reusing Fried Oil: Reheating cooking oils, especially polyunsaturated fats, leads to Oxidation and Rancidity by the oil breaks down, forming free radicals and toxic aldehydes, which are inflammatory and linked to an increased risk of cardiovascular disease and cancer. [27] Improper Fermentation or half cooked / under cooked food: Incorrect fermentation or under cooked food can lead to: Food Poisoning: Growth of pathogenic bacteria like Salmonella, E. coli,

Clostridium botulinum or Mycotoxin Production which are potent carcinogens [28]. Processing that Destroys Nutritional Value: Heavy refining, such as turning whole wheat into white flour or brown rice into white rice, removes fiber, vitamins, and minerals. This can lead to rapid spikes in blood sugar and contribute to metabolic syndrome [29].

Krama viruddha:

Krama Viruddha means food taken in the wrong sequence/order, which leads to harm to the body. The order of food intake has a profound effect on postprandial (after-meal) blood glucose and insulin levels. Studies show that consuming vegetables and protein/fat before carbohydrates (like rice or bread) creates a protective barrier. The fiber from vegetables and the fat/protein slow down the gastric emptying of the carbohydrates, leading to a slower, more gradual release of glucose into the bloodstream. This prevents a sharp spike in blood sugar and insulin, promoting better metabolic control.[30] Conversely, Krama Viruddha starting with high-glycemic carbs which causes a rapid glucose surge, demanding a large insulin release, which over time can contribute to insulin resistance and weight gain

Avastha viruddha:

Consuming food without proper awareness of one's own health status and bodily conditions can be called as Avastha viruddha. Ignoring Food Intolerances and Sensitivities: Ignoring food intolerances/sensitivities means repeatedly consuming foods your body cannot properly process. This causes chronic, low-grade inflammation, as the digestive and immune systems are constantly stressed. Lactose Intolerance: Undigested lactose travels to the large intestine, where gut bacteria ferment it. This produces short-chain fatty acids and gases (hydrogen, methane, CO₂), causing bloating, gas, cramping, and diarrhoea. Repeated exposure can damage the gut lining, increase intestinal permeability and allow larger, undigested food particles and bacterial endotoxins into the bloodstream. This triggers a systemic immune response, leading to chronic inflammation. This can manifest as skin issues (eczema), headaches, general malaise, and exacerbate autoimmune conditions [31]. Celiac Disease & Non-Celiac Gluten Sensitivity: Celiac Disease, gluten triggers an autoimmune response that damages the small intestinal villi,

causing malabsorption, nutrient deficiencies, fatigue, and skin rashes. In NCGS, the reaction is non-autoimmune but still involves inflammation through cytokines like IL-1, IL-6, and TNF- α , producing symptoms such as bloating, brain fog, joint pain, and tiredness.[32] Food allergies: Peanut Allergy, for someone with this allergy ingesting even a trace amount triggers an immediate, explosive release of histamine, potentially causing hives, throat swelling, and life-threatening anaphylaxis. Shellfish Allergy: An individual's immune state is hypersensitive to proteins in crustaceans like shrimp or lobster. Consuming them leads to a rapid IgE-mediated response, resulting in vomiting, wheezing, dizziness, and a sudden drop in blood pressure.[33]

Upachara viruddha:

Upachara Viruddha refers to consuming or doing something incompatible with the treatment or therapy a person is currently undergoing. Consuming dairy with certain Antibiotics (e.g., Tetracycline) or Iron supplements, which binds the medication and prevents its absorption.[34] Drinking Alcohol while taking Metronidazole or Acetaminophen, which can cause a severe reaction or liver damage [35]. A patient being treated for Hypertension who continues to consume a high-sodium diet, counteracting the effect of their blood pressure medication. A person undergoing Physiotherapy for a back injury who repeatedly lifts heavy objects with poor form, re-injuring the area.[36]

Paaka Viruddha:

Paaka viruddha refers to food that becomes incompatible because of the method of cooking. The term "Paaka" means cooking or preparation. When the cooking method alters the natural qualities of the food, destroys its nutrients, or produces harmful chemical changes. Over-cooking or burning food can cause Formation of Carcinogens & Nutrient Loss. Charring food creates harmful compounds like Acrylamide (in starchy foods) and Polycyclic Aromatic Hydrocarbons (PAHs) [27]. Improper cooking or under cooked food Foodborne Illness such as salmonellosis, campylobacter & Reduced Bioavailability of nutrients in food²⁸. Reheating cooking oils to a high smoke point multiple times, which oxidizes the fats, creating free radicals and toxic compounds [27].

Hrud viruddha:

Hrid Viruddha occurs when food is incompatible with one's palate or is eaten with dislike and aversion. It activates the Stress Response (Sympathetic Nervous System). The "fight-or-flight" mode reduces blood flow to the gut and suppresses the secretion of digestive enzymes and stomach acid. Mild stress, leading to nausea, gagging, or a stomach ache because their digestion has effectively shut down [37].

Sampad viruddha

Sampad Viruddha refers to consuming foods that are inherently poor in quality, making them incompatible with health. Modern examples include spoiled food like mouldy bread or sour milk, which contain harmful bacteria and toxins. It also covers adulterated items such as honey cut with sugar syrup or milk diluted with water, which reduce nutritional value and introduce contaminants.[38] Furthermore, unnatural, processed substances like artificial trans fats in, high-fructose corn syrup and processed meats with synthetic nitrates are included, as they offer no real nourishment and can trigger inflammation and long-term disease [39]. Essentially, it warns that low-quality or toxic food will always harm the body.

IV. CONCLUSION

The concept of Viruddha Ahara in Ayurveda highlights that food incompatibility goes beyond just ingredients. It also includes factors like quantity, combination, preparation, timing, individual constitution, and current bodily or mental state. Ignoring these principles can make food harmful, even if it's nutritious by today's standards. This happens due to issues in metabolism and the immune system. Modern nutrition increasingly supports these ideas, showing how wrong food combinations, cooking methods, or eating habits can lead to inflammation, oxidative stress, metabolic disorders, and digestive problems. Looking at Viruddha Ahara today connects traditional wisdom with scientific knowledge. This approach offers a well-rounded view of dietary health. By incorporating Ayurvedic principles into modern nutrition, we can enhance digestion, increase metabolic balance, and support preventive care. Therefore, the ancient teaching of Viruddha Ahara remains important today. It helps us choose a diet that

is nourishing and works well with our individual bodies and lifestyles.

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