



Ayurveda

A CRITICAL REVIEW ON CHANGING FOOD HABITS AND IT'S IMPACT ON HEALTH: W.S.R. AYURVEDA DIETARY GUIDELINES

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ABSTRACT

BACKGROUND: Urbanization has a great impact on present lifestyle which in turn has affected dietary habits on a significant level. Unfortunately people have been adapted to the food habits which have several adverse effects on health. In the changing lifestyle people tends to prefer fast food, ready-to-eat packaged food items and restaurant eating. There is growing evidence that prevalence of lifestyle disorders have surged owing to the change in the dietary habits. In Ayurveda there is elaborative explanation regarding dietary guidelines which if followed can be helpful in prevention of the disorders related to the changed dietary habits.

MATERIALS AND METHODS: Ayurveda literature, research papers, scientific journals and authentic web sources related to this concept have been referred for conceptual study.

RESULTS: There are enough evidences available supporting the fact that following the Ayurveda dietary guidelines can be helpful in the prevention of disorders associated with the changing food habits of present era.

CONCLUSION: Adopting the Ayurveda dietary guidelines can be useful in preserving and promoting positive health. Further research to find the mode of action on these Ayurveda dietary guidelines in the prevention of lifestyle disorders can be proposed

KEYWORDS : Fast Food, Changing Food Habits, Mindful Eating, Ayurveda

INTRODUCTION

Preservation and promotion of health being the prime aim of Ayurveda, has always given importance to diet as Ayurveda strongly believes that health is ultimately dependent on diet.⁽¹⁾ Ayurveda has elaborative explanation regarding the codes and conducts to be observed while consuming the food; entitled as “*Aharavidhi*”⁽²⁾. There are certain rules and regulations regarding the preparation, consumption and preservation of food which if not followed may have adverse impact on health. Ayurveda has always advocated the consumption of healthy diet⁽³⁾ as both health and disease are dependent on the type of food one consumes.⁽⁴⁾ Although research on personalized nutrition and nutritional genomics is proposed, results from epigenetic studies have shown that dietary habits and experience of a person can change epigenetic characteristics through DNA imprinting and histone modification. This indicates that dietary requirements are not decided by genome. Diets determine the expression, regulation, modification, imprinting, and heredity of the genome without altering DNA sequences.⁽⁵⁾ It is analogous to the Ayurvedic concept that complexion, cheerfulness, good voice, life, imagination, happiness, contentment, corpulence, strength and intellect are dependent on food⁽⁶⁾ and also signifies the importance of diet one consumes with respect to the health.

AIMS AND OBJECTIVES

1. To review the changing dietary pattern owing to present lifestyle and its impact on health
2. To critically evaluate Ayurveda dietary guidelines with reference to changing food habits and its expediency in prevention of diet related disorders

MATERIALS AND METHODS

In this review article an attempt is made to explore the changing trend of food habits and its impact on human health hence references from published research articles, research papers, dissertations and authentic web sources related to concerned concept have been collected and analyzed. Also Ayurveda classical texts have been referred for dietary guidelines and an attempt is made to find the relation of *aharavidhi* mentioned in *Ayurvedic samhitas*, in the prevention of disorders associated with changing food habits.

CHANGING TREND OF FOOD HABITS

Recently there is a paradigm shift in the methods of preparation and ways of consumption of food. In urban areas consumption of processed foods and ready to eat foods has gone up. It is also observed that consumption of beverages, biscuits, processed foods, salted snacks and prepared sweets has increased.⁽⁷⁾ The consumption of fizzy drinks, pizzas and potato crisps, etc. has increased in the diets of the urban population, as witnessed by the sales increase in these items. A number of unbranded producers also flood the markets with cheaper products such as potato crisps and pizzas to woo consumers and suit the pockets of the lower-income groups⁽⁸⁾

In the present era of modernization, unfortunately people have been adapted to food habits which have several adverse effects on human health. The changing lifestyle has compelled many people to consume fancy and high calorie fast foods, popularly known as 'Junk foods'. Junk food is an informal term applied to some foods which are perceived to have little or no nutritional value, but which also have ingredients considered unhealthy when eaten regularly, or to those considered unhealthy to consume at all. In other words Junk food simply means “an empty calorie food”. An empty calorie food is a high calorie or calorie rich food which lacks in micronutrients such as vitamins, minerals, amino acids and fibers which are essential for preservation and promotion of health⁽⁹⁾. Consumption of junk food is found to be associated with the obesity⁽¹⁰⁾, cardiovascular disease, stroke and diabetes mellitus.⁽¹¹⁾ There are lot of studies supporting the fact that incidence of non communicable diseases has increased with the rise in consumption of fast foods^(10,12)

Owing to changing lifestyle people tends to prefer fast food, ready-to-eat packaged food items and restaurant eating. It is evident from scientific studies that fast food consumption and out-of-home eating behavior is main risk factor for lower diet quality, higher calorie and fat intake and lower micronutrients density of diet. Frequent consumption of fast foods found to be accompanied with overweight and abdominal fat gain, impaired insulin and glucose homeostasis, lipid and lipoprotein disorders, induction of systemic inflammation and oxidative stress. Higher fast food consumption also increases the risk of developmental diabetes, metabolic syndrome and cardiovascular disease⁽¹²⁾

AYURVEDA GUIDELINES FOR FOOD CONSUMPTION

As per Ayurveda food must be consumed when it is fresh and hot. Ayurveda advocates that consumption of freshly prepared food tastes well, stimulates digestive fire hence easy to digest.⁽¹³⁾ Food which is cooked long before, reheated food loses its natural taste and the satiety cannot be achieved⁽¹⁴⁾. Similarly tiffin food and ready to eat packaged food products are not essentially fresh at the time of consumption hence may lack in above said qualities.

According to Ayurvedic dietary guidelines food must be consumed only after previously eaten food is digested well.⁽¹⁵⁾ Susruta have said that the person with normal digestive fire must consume food twice a day viz. Morning and evening.⁽¹⁶⁾ Food should not be consumed very late in the evening or very early in the morning.⁽¹⁷⁾ It has become increasingly clear that circadian and metabolic regulation is tightly interlocked at both physiological and molecular levels. The circadian rhythms of the body are controlled by the central clock located in suprachiasmatic nucleus of hypothalamus but also by clocks of peripheral organs.⁽¹⁸⁾ One must consume food only after the previously eaten food is digested else it extinguishes the digestive fire⁽¹⁹⁾

Conventional dietary wisdom holds that eating frequent but small

meals “grazing” helps to maintain steady blood glucose and promotes weight loss⁽²⁰⁾ On contrary, eating twice a day is found to be effective in reducing weight and tummy⁽²¹⁾ According to Ayurveda eating frequent small meals is considered as unhealthy diet pattern. It is similar to the concept of *adhyashana* means taking food over previously undigested food, *amatrashana* means taking food in inappropriately low quantity and *vishamashana* means too early or too late than the scheduled time.⁽²²⁾ Also frequent eating is found to be associated with the elevated blood glucose levels throughout the day. Increasing the protein content of frequent meals attenuated both the glucose and insulin response. These findings of elevated glucose levels throughout the day warrant further research, particularly in overweight and obese individuals with and without type 2 diabetes.⁽²³⁾

Before consuming any kind of food, the consumer must be aware of its effects on the body. One should not use food articles from either attachment or ignorance rather he should use the wholesome one after proper examination because the body is product of food.⁽²⁴⁾ Ayurveda has advocated avoidance of unwholesome factors of food to maintain the health.⁽²⁵⁾ On the contrast, modern food products are given very attractive appearance by adding various food additives such as coloring agents and flavoring agents to enhance taste and texture of food items and preservatives for increasing the shelf life. Increasing scientific evidence suggests potential adverse effects on children's health from synthetic chemicals used as food additives, both those deliberately added to food during processing (direct) and those used in materials that may contaminate food as part of packaging or manufacturing (indirect)⁽²⁶⁾

MINDFULEATING

Ayurveda emphasizes that one must pay proper attention on food while eating.⁽²⁷⁾ This concept has now become popular as “Mindful Eating”. Mindful eating (i.e., paying attention to our food, on purpose, moment by moment, without judgment) is an approach to food that focuses on individuals' sensual awareness of the food and their experience of the food. It has little to do with calories, carbohydrates, fat, or protein. Mindfulness is a process-oriented, rather than an outcome-driven, behavior. It is based on an individual's experience of the moment. The individual focuses on appreciating the experience of food and is not concerned with restricting intake. The person eating chooses what and how much to consume. It is not coincidental that, within a mindful approach, the person's choices often are to eat less, savor eating more, and select foods consistent with desirable health benefits. There is a significant positive relationship between overall mindful eating and mental well-being.⁽²⁸⁾ People who have less awareness of their eating habits are generally more overweight, more anxious and have higher levels of negative effect, while they demonstrate less control over their eating habits⁽²⁹⁾

Digestion involves a complex series of hormonal signals between the gut and the nervous system, and it seems to take about 20 minutes for the brain to register satiety. If someone eats too quickly, satiety may occur after overeating instead of putting a stop to it. There's also reason to believe that eating while we're distracted by activities like driving or typing may slow down or stop digestion in a manner similar to how the “fight or flight” response does. And if we're not digesting well, we may be missing out on the full nutritive value of some of the food we're consuming.⁽³⁰⁾ Person who eats food leisurely does not feel contented, eats large quantity; the food becomes cold and does not get digested well. Person who eats very hurriedly, accompanied with too much of talk and laughter and whose mind is engaged with other things, will have his food going in through wrong passage, gets delayed in digestion; food does not stay in the alimentary tract for required time and person will not be able to experience the good or bad effects of the food.⁽³¹⁾

RESULTS

There are growing evidences suggesting the fact that the life style disorders such as diabetes, cardio vascular diseases, obesity and stroke are associated with the changed dietary habits. Adapting the Ayurvedic dietary guidelines can be helpful in the prevention of disorders associated with the changing food habits of present era.

DISCUSSION AND CONCLUSION

Ayurveda dietary guidelines have elaborated the rules and regulations of preparation and consumption of diet; as it has a close relation with the health. Ayurveda believes that both health and disease are dependent on the diet. But due to the impact of globalization and

modernization there is a tremendous shift in the lifestyle of people. These changes in lifestyle have impacted the dietary pattern of population on a large scale. Diet is much neglected in the present era of fast lifestyle and people tends to prefer fast food, ready-to-eat packaged food items and restaurant eating. These changes in the present food habits are contrary to the ones which are explained in the Ayurveda dietary guidelines. And there are enough evidences suggesting that these changes are closely associated with the lifestyle disorders related to changing diet pattern of modern era. The Ayurveda concepts of diet such as mindful eating, eating according to the *agni* (Digestive fire) and considering the proper digestion can help in preventing disorders associated with the unhealthy way of eating. Further research to find the mode of action on these Ayurveda dietary guidelines in the prevention of lifestyle disorders can be planned.

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