The relevance of dietetic approach of Ayurveda from the perspective of COVID-19 pandemic

Swapnali Khabade¹, Bharat Rathi*², Renu Rathi²

¹Department of Rasashastra Bhaishajya Kalpana, Sunil Ramsinh Chunawale Ayurveda Mahavidyalaya, Chikhali, Buldhana (MS), India
²Department of Rasashastra & Bhaishajya Kalpana, Mahatma Gandhi Ayurveda College Hospital & Research Centre, Salod (H) Wardha (MS) - 442001. Datta Meghe Institute of Medical Sciences (Deemed to be University) Sawangi (M) Wardha (MS), India

ABSTRACT

A novel, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), causes severe acute respiratory syndrome and spread globally from Wuhan, China. In March 2020 the World Health Organization declared the SARS-CoV-2 virus as a COVID-19, a global pandemic. This pandemic happened to be followed by some restrictions, and specially lockdown playing the leading role for the people to get disassociated with their personal and social schedules. And now the food is the most necessary thing to take care of. It seems the new challenge for the individual is self-isolation to maintain themselves on the health basis and fight against the pandemic situation by boosting their immunity. Food organised by proper diet may maintain the physical and mental health of the individual. Ayurveda aims to promote and preserve the health, strength and the longevity of the healthy person and to cure the disease by properly channelling with and without Ahara. In Ayurveda, diet (Ahara) is considered as one of the critical pillars of life, and Langhana plays an important role too. This article will review the relevance of dietetic approach described in Ayurveda with and without food (Asthavidhi visheshaytana & Lanhgan) during COVID-19 like a pandemic.

INTRODUCTION

A novel coronavirus has lead to a disease called COVID-19, became a major global human threat that has turned into a pandemic, is one of the major pathogens that mainly target the human respiratory system. (Gennaro et al., 2020) It is a challenging situation because of its prevalence and urging to concentrate on the immunity of the individual to fight back this coronavirus. But the lifestyle also showing the affirmed obesity because of eating, activity, and sleeps behaviours changed in an unfavourable direction during the lockdown. Ayurveda is the system of medicine which maintains the health of a healthy person and prevents the disease of the ill person. (Sawai et al., 2016) Ahara (Diet) the sum of food consumed by a person and often implies the use of specific intake of nutrition for health. (Swinburn et al., 2004) In Ayurveda, there is always a better solution if you have to maintain the diet you have to follow the Asthavidhi visheshaytana having rules about the food and in excess diet or obesity there is the Lanhgan a samshaman therapy can develop without the food.
COVID-19

Still, there are no specific clinical features that can reliably distinguish COVID-19 from other viral respiratory infections. Few common symptoms are included headaches, sore throat, and rhinorrhea. In addition to respiratory symptoms, gastrointestinal symptoms, e.g., nausea and diarrhoea have also been reported, and in some patients. Respiratory droplet transmission is the main route, and it can also be transmitted through person-to-person contacts by asymptomatic carriers. Some main symptoms associated with the COVID 19 are fever, cough, Dyspnoea, Headache, Sore throat and Rhinorrhea. (Rathi and Rathi, 2020) These symptoms worsen depending on the age factor, some previous disease like Diabetics, Cardiovascular disorders and immunity. (Gennaro et al., 2020)

Lifestyle during COVID-19

As the pandemic spreads this interaction between people and the food system is changing at an unimaginable speed and taking on greater importance in everyday life, with strict rules placed on people’s movement to limit the spread of COVID-19. Defiantly the junk food consumption has reduced but staying at home increases the chances of excess eating, keeping awake late night, sleeping during the daytime, mental stress, holding the natural urges gave birth to several diseases (Rathi, 2013). Some studies are positing that the COVID-19 pandemic will exacerbate all of the risk factors for weight gain associated with summer recess. Specifically, children and adolescents with obesity affirmed that eating, activity, and sleep behaviours changed in an unfavourable direction three weeks into their confinement during the national lockdown. (Pietrobelli et al., 2020).

Repeted overeating for more extended period results in setting a stage when the person does not receive satisfaction in a reasonable amount of food resulting in overeating and hence obesity. A home where the dinner table is always laden with eatables may also influence obesity. Thus the home environment matters a lot. For a depressed and socially isolated person, food may act as a sedative, and soon he becomes prey to obesity. A decrease in BMR may increase weight (Anand et al., 2018). At the individual level, the common denominator that drives most of the nutrition and dietary recommendations to combat viral infections, including COVID-19, lies within the link between diet and immunity. It has been demonstrated that specific nutrients or nutrient combinations may affect the immune system through the activation of cells, modification in the production of signalling molecules, and gene expression (Valdés-Ramos et al., 2010).

A wholesome diet is a primary cause for good health. On the contrary, unwholesome diet is a cause of several diseases. So in Ayurveda diet is having a vital place, but to be a wholesome diet does not mean only the food items, but it includes so many factors, which are called as ‘Ahara Vidhi’, where the law of do’s and don’ts about the diet and drinks are mentioned. A wholesome diet requires a lot more than just having nutrients, and Ayurveda has laid down particular importance on all aspects of Ahara and Ahara Vidhi.

Ahara Vidhi Visesayatana means the factors responsible for the wholesome and unwholesome effect of the Ahara and methods of Ahara sevana (Special rule for diet intake).

These eight factors should be considered before eating food:

1. Prakriti
2. Karana
3. Samyoga
4. Rashi
5. Desha
6. Kala
7. Upyoga-sansatha
8. Upyokta

Prakriti – (Natural quality)

Prakriti is an inherent quality of food, eg. Masha(black gram) is said to be a guru (heavy) in nature while Mudgha (green gram) is said to be laghu (light) in nature. Prkriti of the food will be helpful to decide according to digestive capacity or as per the Prakriti of the person. So it will not lead to any disorder and digest the food properly.

Karana – (Samskara)

This means the Samskara, i.e. processing of food to make good for consuming. Samskaras are followed by cleansing, soaking, cooking, grinding, impregnation flavouring, maturing, preservation, and food storage.

Samyoga – (Combination of food)

Combination of two or more food, it may lead to being beneficial or dangerous. It should be known which qualities these combinations are inherited if
they combined. E.g. Haney and Ghee in equal quantity or fish and milk combination may become lethal for health.

**Rashi** – (Quantity of the food)

This means the quantity of food. Quantity of food may differ per individual. But the quantity of food should not be excessive or less than the amount desired, both are not good for health. So the food should be taken according to the required quantity depends on persons digestive power.

**Desha** – (Geographical region where the food grows)

It is the geographical region where the food grows. The food grows in which part is most suitable for the people in those respective regions. So it will be useful to choose the food in the respective region. E.g. the person is in Rajasthan, he can easily digest a higher amount of Ghrita and other Guru Dravyas, but when the same person has been in south India, he cannot digest the same type of food items. Use of dry and sharp substances in deserts and unctuous in Marshy land is having an antagonistic effect.

**Kala** – (Time of food consumption)

It is the time of food consumption. One must also know about the time factor (Kaala). Nityaga and Avasthika are the two types of Kaala for the use of Ahara. Nityaga Kala in which Ahara is consumed according to the daily regimen differs by seasonal changes. The avasthika kaala means the diseased conditions, comes into the role, by intake of food according to the condition of the disease. (Singh et al., 2015)

**Upyoga- sansatha** – (Rules to take food)

Specific Rules have mentioned concerning the intake of food. This is the upayoga samshita It merely means the dietetic rules. It contains everything related to diet, how to eat, when to eat, what to eat. Below mentioned rules and regulations of the food intake for both healthy and diseased person.

_Ushnam ashniyat_ – Eat hot and fresh food

_SNigdham ashniyat_ – Eat unctuous food

_Matravat ashniyat_ – Eat an adequate amount of food

_Jirne ashniyat_ – Eat after digestion of previously consumed food

_Virya avirudha ashniyat_ – Eat food which is not contradictory in potency

_Ishta deshe, ishta sarvopkarnam cha ashniyat_ – Eat in desired place and pleasant atmosphere.

_Na atidrutam ashniyat_ – Do not eat in a hurry

_Na ativilambit ashniyat_ – Do not eat very slow

_Ajalpana, ahasan, tammana bhunjitam_ – Eat with concentration without a laugh and talk

_Aatanam abhisamikshya bhunjitam_ -

_**Upyokta**_ – (One who uses the food)

_Upayokta_ is the one who uses the food (Aharadravya), and who has the habitual to the food (Okasatmya or sharira satmya). He is the one who must take into consideration all these facts of Ahara and consume food accordingly. By doing so, he gains health.

According to the above points, it can be concluded that food should be taken according to (ahara vidhi Vidhan) dietary guidelines which are truly scientific as mentioned Ayurveda. Many diseases can be prevented merely due to faulty dietary habits. Healthy eating habits may help lower risk for many other health problems. (Rawat and Roushan, 2018)

**Lanhgan**

In Ayurveda, Langhana is the process which brings lightness and malnutrition in the body. Another meaning is light meals or fasting. Acharya Charaka has mentioned ten types of Langhana can be applied for the Sthoulya (Obesity) as per the disease and the strength of the patient.

**Types of Langhana,**

1) _Vamana_  
2) _virechana_  
3) _Basti_  
4) _Nasya_  
5) _pipasa_  
6) _Maruta_  
7) _Atapa_  
8) _Pachana_  
9) _Upavasa_  
10) _Vyayama_

First four are called as _shodhana langhana_ therapy, which eliminates the vitiated _doshas_ from their respective site from the body. Remaining six types are _Shamana langhana_ therapies not do the _shodhna_ but it pacifies the vitiated _doshas_ and brings them to the equilibrium. Also, the four therapies need the expertise to do them, but the remaining _Shamana langhana_ therapies can be followed everyone with their capacity without going through any discomfort. (Kapil, 2010)

1. Pipasa  
2. Maruta
3. Atapa
4. Pachana
5. Upavasa
6. Vyayam

**Benefits of Exercise,**

1. Increases Metabolic rate and Fat Oxidation
2. Maintain Muscle tone
3. Improve Circulation
4. Increase sense of self-control
5. Reduce Depression
6. Help to sleep well
7. Prevent from Diabetes, High Blood Pressure and High Cholesterol etc. diseases.

**RESULTS AND DISCUSSION**

The COVID-19 pandemics cause for the lockdown. That implementation in various countries has resulted in sudden changes in the lifestyle of the people, which may cause damage to the people who do not have any specific disease. This lockdown further may respond with the delayed risks to physical health. During a lockdown, people staying at home for imposing social distancing and limiting with human contacts are getting trapped in their houses. This is resulting in people who are having a lack of physical activity, especially exercise. Even if the junk food may have reduced, but the regular homemade food consumption without any physical activity will lead to gain their weight.

Additionally, stress, feeling of emptiness and boredom will be managed with food consumption. This may lead to weight gain and a worsening eating disorder. Because of the difficulties in weight loss, it will further become the increased high risk of a large number of health problems such as Diabetes, Hypertension, CHD, Stroke etc. Physical and mantel health will be encountered due to weight gain during the lockdown. (Carducci et al., 2020), (Andrade, 2020), (Naja and Hamadeh, 2020).

So this situation can be handled by the Science of Life, i.e. Ayurveda. If followed the two things as reviewed in this article will help the person to eat quantitatively and qualitatively. *Asthavidha Aharavisheshayatana* will help people to stay positive and alter food intake. A person will take the food as per their requirement and will learn to follow it. This will solve the weight gain problem. The second reviewed point is *Langhana*. In case a person starts to gain weight, the *Langhan* will help to lose his weight with the mere simple suitable practice of *langhana*, without seeking any special attention and expertise. These two *Asthavidha Aharavisheshayatana* and *Langhana* will fight against the weight gain and their causative factors and bring the equilibrium and positivity in life during COVID-19 pandemic situation.

**CONCLUSIONS**

Pandemic lockdown definitely will raise health-related problems in future. People may get encountered physically as well as mentally. But Ayurveda has the solutions for those situations, and it needs to be followed regularly. Maintaining a healthy life and curing the disease is the principle of the Ayurveda. Diet is the primary and leading cause of life. *Asthavidha Aharavisheshayatana*’s applications may help in the maintenance of health as well as in the curative aspect for many diseases. These methods of food preparations and rules of food intake have an important role in the community for a healthy life. These are not outrageous processes but help to keep people healthy and happy.

**ACKNOWLEDGEMENT**

Author would like to thank DMIMSU for motivating and providing all necessary help for writing this article.

**Funding support**

DMIMS (Deemed to be University) Sawangi (Meghe) Wardha.

**Conflict of interest**

The authors declare that they have no conflict of interest for this study.

**REFERENCES**

Anand, R., Asthana, A., Asthana, M., Sabharwal, P. 2018. Critical review of meda dhatu and obesity in reference to ayurvedic literature. Asian Journal of Pharmaceutical Research and Development, 6(5):26–31.

Andrade, C. 2020. COVID-19 and lockdown: Delayed effects on health. Indian Journal of Psychiatry, 62(3):247–247.

Carducci, A., Federigi, I., Cioni, L., Landucci, A., Donzelli, G., Ianneli, R., Pretti, C., Tardelli, F., Casu, V., Verani, M. 2020. Approach to a water safety plan for recreational waters: disinfection of...
a drainage pumping station as an unconventional point source of fecal contamination.

Gennaro, F. D., Pizzol, D., Marotta, C., Antunes, M., Racalbuto, V., Veronese, N., Smith, L. 2020. Coronavirus Diseases (COVID-19) Current Status and Future Perspectives: A Narrative Review. International Journal of Environmental Research and Public Health, 17(8):2690–2690.

Kapil, P. 2010. Management of sthoulya (obesity) by basti and shamana aushadhi (Doctoral dissertation, RGUHS).

Naja, F., Hamadeh, R. 2020. Nutrition amid the COVID-19 pandemic: a multi-level framework for action. European Journal of Clinical Nutrition, pages 1–5.

Pietrobelli, A., Pecoraro, L., Ferruzzi, A., Heo, M., Faith, M., Zoller, T., Antoniazzio, F., Piacentini, G., Fearnbch, S. N., Heymshfield, S. B. 2020. Effects of covid-19 lockdown on lifestyle behaviors in children with obesity living in.

Rathi, B. 2013. A Short Study on Pharmaceutical Preparation & Clinical Evaluation of Phalavarti (Gudavarti) in Malavrodha (constipation). Journal of Indian System of Medicine, 1(1):31–31.

Rathi, R., Rathi, B. 2020. COVID 19 Pandemic and Preventive Footsteps.

Rawat, N., Roushan 2018. Ashtavidha Ahar Vidhi Visheshayatan an Explanation of Healthy and Balanced Diet- A Review R. Int J Ayu Pharm Chem, 9(2):51–57.

Sawai, R. V., Binorkar, S., Suke, D. U., Karande, S. P. 2016. Ahara vidhi: concepts of food intake in Ayurveda with comparison to present era. International Research Journal of India, 1:1–6.

Singh, A., Singh, K. B., Singh, P., Sharma, S. 2015. Ahara Vidhi (Dietetics): Concepts of Food Intake In Ayurveda. Unique Journal of Ayurvedic And Herbal Medicines, pages 47–53.

Swinburn, B., and Seidell JC, C. I., WPT, J. 2004. Diet, nutrition and the prevention of excess weight gain and obesity. Public Health Nutrition, 7(1a):123–146.

Valdés-Ramos, R., Martínez-Carrillo, B. E., Aranda-González, I. I., Guadarrama, A. L., Pardo-Morales, R. V., Tlatempa, P., Jarillo-Luna, R. A. 2010. Diet, exercise and gut mucosal immunity. Proceedings of the Nutrition Society, 69(4):644–650.