



AGE-OLD DIRECTIVES FOR THE NEW- AGE VIRUS

Community Medicine

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KEYWORDS

Today the world is experiencing a crisis that was only read in books and heard in stories. Never once, we individually prepared ourselves to face it. The pandemic shutdown gave us time to revisit our past culture and customs. That is when we realized that our Indian culture has indeed prepared us, since our childhood and beyond, for any calamity that might hit us. And now, the world appreciates Indian customs. Over handshakes we now prefer "Namaste". The time has come when humans have started to fear not just, the presence of another human, but also from anything they touch including their daily bread. Even though, till date, there are no reports claiming the transfer of coronavirus from food items to humans¹, the fear among humans worldwide has compelled them to take diverse actions to avoid the virus from entering their homes. We take this opportunity to highlight the traditional Indian customs of food hygiene that may be helpful to humans around the world.

Along with ethnic and lingual diversities, India's food habits also vary from region to region. Today, any food item can be ordered in any region of India. During the coronavirus outbreak, when physical human interaction was restricted, locally cultivated and home cooked food preparations were considered which were overlooked in the course of globalization.

Every religion in India worships food and hence, food hygiene has always been a crucial part in our upbringing. This must hold true for most of the cultures worldwide. But with interpolation of different cultures and dilution of individual cultural integrities these habits also got watered down.

It has been hypothesized that fruits and vegetables act as fomite for Covid-19 through which the infection is transferred from person to person. The life span of this virus studied till date, explain its survival ranging from a few hours to up to 72 hours on different surfaces. Hence, the transport of vegetables and fruits from the farmland to cities in any container, handled by people at multiple steps, could become the route of infection.

In India, for ages, the most common practice has been sun-drying the vegetables after purchasing. These practices were blindly followed from generation to generation. The explanations for such activities were never asked by us nor were given to us by our elders. But science explains the disinfection by ultraviolet rays (UV-C) of the sun by destroying the nucleic acid of the microorganism. Commercially, UV-C devices are also available now. However, they are an expensive method of disinfection. Another common practice has been keeping the vegetables soaked in water. Where some people keep the water plain, some add vinegar, baking soda or salt. These are a few, commonly available consumable disinfectants present in every household. Until the horror of the virus, baking soda was used in cakes, salt in vegetables and vinegar with noodles. The other uses of these consumables were new for my generation. So, we decided to look into the data for the use of household food items as disinfecting agents. Studies suggests that using 10% vinegar as a disinfectant helps removing viruses up to 95%². 0.1% potassium permanganate has also proved its efficacy as a disinfectant against bacteria but no data is available for its use against viruses³. Similarly, chlorine has been widely used for disinfecting water but, it affects structural integrity of leafy vegetables, hence cannot be used for disinfecting vegetables.

There is no consensus in the contact duration for the use of potassium permanganate, chlorine or baking soda. Hence, no concrete conclusion can be drawn from the available data.

Washing hands before and after washing vegetables, avoiding bruised fruits and vegetable, gently rubbing these items under running water and cleaning before peeling, are some of the recommendations of the FDA⁴. But why did it take us a pandemic to understand and implement the basic food hygiene habits that we already knew? Now that we try to follow these protocols judiciously, Indian food culture has additionally used an important method of disinfection in our daily routine, that is, eating cooked food. The garden-fresh vegetables are cleaned, peeled and cleaned again before being chopped. With this process, the outer layer that is most likely to be infected is removed after cleaning to avoid contaminating the inner layers with the hands of the handler. As per WHO, SARS coronavirus is killed at temperatures above 56-degree Celsius⁵. Most Indian cuisines involve cooking at temperatures above 100-degree Celsius. Hence, maximum protection from coronavirus transferred by handling food may be attained by cooking all food items.

Finally, carrying vegetables in plastic bags or cloth bags is debatable. Plastic bags are disposable and could be used in these desperate times. But humans have already caused enough pollution with the use of one-time plastic. Contrarily, cloth bags can be cleaned with soap and water and reused like all the other reusable items including our hands. Hence, the use of cloth bags over plastic bags may be encouraged in this pandemic.

In the attempt to modernize our lifestyles, we have taken up methods that appeared safe and more convenient, but in reality, the age-old practices stand strong and are, in a way, sufficient to protect us from the invisible enemy, especially in our own homes.

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