

Food and Nutrition Considerations during the COVID-19 Pandemic

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The spread of the coronavirus (COVID-19) in practically all countries on earth made it a worldwide pandemic. Recent statistics showed that over 10 million people have been infected with the virus, and the total deaths reached more than half a million. Those who were infected had to receive medical care in hospitals and similar facilities. Precautionary measures to reduce the spread of this disease among the public were imposed in all affected countries and resulted in a travel ban among all nations. Suspected cases had to have mandatory isolation, whether at home or in a medical facility. So many guidelines for individuals were devised and implemented to curb the spread of infection, which include: Staying at home, not to be among crowds, avoid physical contact with others, wearing of face masks, social distancing, sanitizing of surfaces, and frequent washing of hands. Needless to say that, this COVID-19 pandemic has caused much disruption of many lives all over the world, in addition to the adverse effect on the world economy. The lockdown situation of individuals would be expected to have negative effects, both physically and mentally.

When the coronavirus was recognized, it was not thought that it will produce that much of an alarm. Then, the World Health Organization of the United Nations (WHO-UN) declared that this virus situation as a pandemic earlier this year. It was first thought that the elderly segment of any society is the most susceptible to infection. Recent reports showed that this virus can infect people of many age categories, including the youth and women in their child-bearing years. At present, there is a warning for pregnant women and that they should take extra care and precaution for their health and their future babies. It is predicted that this pandemic will linger for longer time than first thought, so are its negative consequences.

The relationship between nutrition and health has been established very long ago. Sound nutrition and dietary practices are determinant factors of individual health. Our

food items contain several nutrients that play many roles in bodily organ functions and for the immune system to defend the body against invading microorganisms. Under normal living conditions, the advice is always for individuals to lead a healthy lifestyle – which includes proper nutrition (both quantitatively and qualitatively) and being physically active on a regular basis. The association between food and nutrition is very strong – thus, having enough food supply would be the key to sound nutrition. With such a disrupted live caused by this pandemic; there is a great concern for the food supply chains and food security. Such would make food items less available for human consumption and/or make people go on binge-buying of food because of the psychological thought that such foods will not be readily available anymore.

Both macronutrients (carbohydrates, proteins, lipids, and water) and micronutrients (minerals and vitamins) are required in proper amounts for the body – thus, a balanced diet is always recommended. Such nutrients provide the body with energy and are essential for the normal functions of organs. The roles that micronutrients play in fine-tuning of bodily functions have been established. However, with the circumstances of confinement during the pandemic, people become less physically active or sedentary, which means that they do not burn many calories. With such a confinement state, people tend to eat more food as an emotional comfort response. In the overall disturbed picture at home, there is a good chance that nutrition would not be balanced – thus, resulting in malnutrition. One consequence of confinement is body weight gain, which can cause other diseases such as diabetes. In addition to resultant overweight and obesity, imbalanced nutrition can involve over consuming nutrients and less of others. This is particularly critical from the standpoint of nutrients and the immune system. For example: Consuming a diet that is high in saturated fats, sugar and refined carbohydrates can put individuals at risk of severe infection. Such a diet activates the innate immune system and

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impairs adaptive immunity, leading to chronic inflammation, and disabled host resistance against invading organisms.

There is not enough body of scientific literature that would allow for making specific recommendations for food and nutrition during the COVID-19 pandemic. However, established guidelines for a healthy lifestyle would be most relevant and ought to be followed. Emphasis on consuming recommended amounts and varieties of fruits and vegetables would be advised – for boosting the immune system. Sufficient intakes of fruits and vegetables ensure providing the body with both minerals and vitamins. Foods that contain antioxidants such as Vitamins A, C, and E and other antioxidant compounds such as polyphenols, flavonoids, and omega-3 – as well as those containing the minerals zinc and selenium, are of significance

in this regard. It is important to point out that extra care should be taken in washing fresh fruits and vegetables to remove possible contaminants and added viruses by those who handle them. In addition, drinking water ought to be of high quality and conforms to known standards of purity – both physically and microbiologically. Thus, it is advised during this unusual COVID-19 pandemic era and its circumstances that people should observe their balanced nutrition, avoid gaining weight, and stay hydrated. Furthermore, even in confinement, people should remain physically active and mentally engaged for better physical and psychological outcomes.

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