

Nutrition in this Pandemic of COVID19

Miguel Angel Pedraza Zárate*

Nutrition and Dietetics Coordination, Veracruz Norte Delegation, Mexican Social Security Institute, Xalapa, Veracruz, Mexico

***Corresponding Author:** Miguel Angel Pedraza Zárate, Nutrition and Dietetics Coordination, Veracruz Norte Delegation, Mexican Social Security Institute, Xalapa, Veracruz, Mexico.

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Coronaviruses are a family of viruses that can cause disease [1]. In humans, coronaviruses cause mild respiratory conditions (the common cold) to severe respiratory conditions such as Severe Acute Respiratory Syndrome (SARS). Currently, the coronavirus outbreak is generating COVID-19 [2]. It was first identified in December 2019 in the city of Wuhan, China [3].

The most common symptoms are fever (80%), tiredness (40%) and dry cough (70%), also some patients may develop general malaise, aches and pains, stuffy and runny nose, sore throat, breathing difficulties, headache, anorexia or diarrhea [4]. These are usually mild and begin gradually, and in some cases, people become infected but remain asymptomatic. Most infected people (about 80%) recover from the disease without the need for special treatment. However, 1 in 6 people (15%) who contract COVID-19 become seriously ill and develop difficulty breathing [5].

Based on the foregoing, the immune system protects the body from the invasion of pathogens, is responsible for mobilizing the response to counteract the effect of invading microorganisms, this response is classified as innate or adaptive. The innate immune response is characterized by presenting physical protective barriers, such as epithelial layers in cells or mucosa, the adaptive immune response depends on the specificity of a particular antigen. To achieve the immune response, the participation of different cell types is necessary among them leukocytes, neutrophils (they produce high amounts of TNF and IL-12, useful for signaling), monocytes and macrophages [6].

Therefore, food is of vital importance and actively participates in the function of the immune system, this because the amount and type of food consumed throughout life modulates the activity of the different cells of the immune system [7]. For the system immune function efficiently requires an adequate intake of vitamins and trace elements (vitamins C, E, selenium, copper, zinc, B (6), folic acid, B (12), C, E and iron, etc.), in general, inadequate intake of these vitamins and minerals can lead to suppressed immunity, this predisposes to infections and aggravates malnutrition [8].

Specifically, there is no nutritional treatment for COVID-19, these are aimed at attenuating the symptoms caused by fever and respiratory complications, ensuring adequate hydration [9].

Healthy eating must be sufficient, complete, balanced, balanced, and harmless [10].

The recommendation of fluid intake is essential and relevant since it must guarantee the consumption of water according to the metabolic demand of each patient, guaranteeing at least 2 liters of liquid per day on average, always preferring natural water as a source of hydration, in addition to the consumption of defatted broths, vegetables, seasonal fruits, infusions and tea, gelatins without sugar. Liquids such as fruit juices or milk, consumption of alcoholic beverages, including wine or beer and failing that, do not exceed two glasses of wine or two glasses of beer a day, in men and women, are not considered as a source of habitual hydration. no more than one in women [11-13].

Patients with diseases such as obesity, diabetes mellitus, high blood pressure, cardiovascular diseases, older adults, pregnant women, etc., are susceptible to developing COVID-19 and considering our country Mexico with a high prevalence of obesity, which leads to metabolic syndrome Nutritional intervention is of vital importance and relevance and together with the responsibility of each patient to invest in their health; Nutrition professionals have a great commitment and responsibility to assist in the care of patients with these characteristics.

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