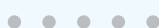


The Alkaline Foods and its Relation with Immunity and COVID-19 Virus during Quarantine Time

 Emad A. Shalaby^{1*} and Hana E. Shalaby²
¹Department of Biochemistry, Cairo University, Giza, Egypt

²Department of Biochemistry, Agial Hail International School, Hail, Saudi Arabia


***Corresponding author:** Emad A. Shalaby, Department of Biochemistry, Faculty of Agriculture, Cairo University, Giza-12613, Egypt. E-mail: dremad2009@yahoo.com



Article Type: Editorial

Compiled date: December 29, 2021

Volume: 2

Issue: 2

Journal Name: Clinical Oncology Journal

Journal Short Name: Clin Oncol J

Publisher: Infact Publications LLC

Article ID: INF1000052

Copyright: © 2021 Emad A. Shalaby. This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0).



Keywords: Alkaline foods; Coronavirus; Immunity



Cite this article: Shalaby EA, Shalaby HE. The alkaline foods and its relation with immunity and COVID-19 virus during quarantine time. Clin Oncol J. 2021;2(2);1–2.

Editorial

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was first identified in December 2019 in Wuhan, China, and has since spread globally, resulting in an ongoing pandemic [1–2]. As of May 12, 2020, more than 4.23 million cases have been reported across 187 countries and territories, resulting in more than 289,000 deaths. More than 1.48 million people have recovered [3].

Alkaline foods: All foods can be divided into acidic, neutral, or alkaline. A food's pH isn't measured by its physical properties, but by the residue (final products) that's left in the body once the food has been metabolized.

For example, we would intuitively consider lemon acidic because it has a sour taste and the ability to erode our tooth enamel. However, once it has been metabolized by the body, lemon leaves the blood alkaline. This explains why a seemingly acidic food can "turn" alkaline in the body.

To determine whether a food is alkalizing or acidic to the body, each food is measured on a PRAL scale, "Potential Renal Acid Load," as shown in (Table 1). Usually, alkaline foods list are divided into three sections. a) Strong alkaline foods; b) Medium alkaline foods; and c) Poor alkaline foods.

Table 1: The PRAL scale for some alkaline foods under different categories.

Alkaline foods	PRAL value
Beverages	
Apple juice, unsweetened	-2.2
Carrot juice	-4.8
Espresso	-2.3
Vegetable juice (Tomato, beetroot, carrot)	-3.6
Orange juice, unsweetened	-2.9
Lemon juice	-2.5
Fruits	
Figs, dried	-18.1
Bananas	-5.5
Raisins	-21.0
Kiwi fruit	-4.1
Mango	-3.3
Watermelon	-1.9
Vegetables	
Broccoli, green	-1.2
Carrots	-4.9
Cucumber	-0.8

Alkaline foods	PRAL value
Vegetables	
Garlic	-1.7
Lettuce	-2.5
Onions	-1.5
Tomato	-3.1

The relation between the alkaline foods, immunity and Covid-19 virus.

The British Dietetic Association (BDA) has stated no specific food or supplements can prevent a person from catching COVID-19. Alongside WHO advice, the BDA encourages people to consume a healthy, balanced diet to support the immune system.

Healthy and varied alkaline foods as mentioned in (Table 1) containing the five main groups can help provide most people with the nutrients they need. Most of the nutrients we already get from our regular diet (including copper, folate, iron, zinc, selenium, and vitamins A, B6, B12, C, and D) are all involved in maintaining healthy immune function. Moreover, we also advise adults (living in quarantine) to take a daily supplement of 10 µg of vitamin D and eat vitamin D rich foods, like oily fish, egg yolks, and fortified breakfast cereals to ensure adequate vitamin D levels. This is because of the effect of vitamin D on the immune system and its ability to prevention COVID-19 infection.

Conflict of Interest

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. Informed consent was obtained for this publication.

References

1. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) Johns Hopkins University (JHU). 2020. [Last accessed on May 22, 2020]. Available at: <https://coronavirus.jhu.edu/map.html>
2. Hui DS, Azhar EI, Madani TA, Ntoumi F, Kock R, Dar O, et al. The continuing 2019-nCoV epidemic threat of novel coronaviruses to global health - The latest 2019 novel coronavirus outbreak in Wuhan, China. *Int J Infect Dis.* 2020;91:264–266.
3. WHO Director-General's opening remarks at the media briefing on COVID-19. WHO. 2020. [Last accessed on Apr 16, 2020]. Available at: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19--13-april-2020>