



(RESEARCH ARTICLE)



## Relation between Covid-19 and high capsaicin diets

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### Abstract

Covid-19 in the announced numbers of World Health organisation a significant discrepancy is seen in terms of number of infected cases to the total population in each county and by 1 million populations. It seems to be that having high capsaicin diet can prevent from Covid-19 infection and antiviral immune responses.

**Keywords:** Covid-19; Capsaicin; Infection rate

### 1. Introduction

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is a positive-sense single-stranded RNA virus (1). It is contagious in humans and is the cause of the on-going pandemic of coronavirus disease 2019 (COVID-19) that has been designated a Public Health Emergency of International Concern by the World Health Organization (WHO) [1, 2]

Capsaicin used as a main component in several pharmaceutical formulations for treating various human ailments [3, 4] as we know the Capsaicin had antiviral properties and reduce recurrent infection of herpes simplex virus [5] and in varicella zoster virus a double-stranded DNA virus related to the herpes simplex virus [6] and capsaicin had not either antiviral nor antiviral immune responses, even so the chilli had high dose of vitamin C which has also immune effect [7]. The study which was done in Australia shows that is relation between inhibits influenza A in the lungs and intake capsaicin [8].

### 2. Methodology

This is a retrospective analysed study from the records of World Health organisation during the pandemic of Covid-19 during the years 2019-2020 and compares them with the countries which use capsaicin in daily cuisine.

Purpose of the work: The main objective of our work is to analyse the relation between Covid-19 and High Capsaicin diets.

Study Location: All countries of the world.

Study Population: All positive cases of Covid-19 in the world.

Study period: From November 1<sup>st</sup>, 2019 to November 23<sup>rd</sup>, 2020.

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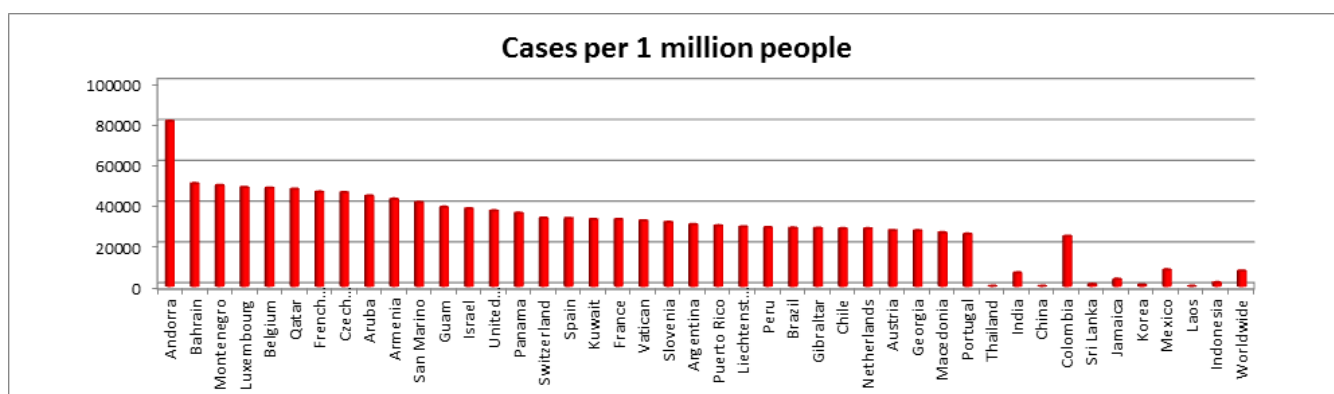
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Data collection: The data will be collected from the records of World Health organisation during the pandemic of Covid-19 during the years 2019-2020.

Data Analysis: Analysis of data and results was processed using statistical features of Microsoft Excel.

### 3. Results

The SARS-CoV-2 as we see in the announced numbers of World Health organisation a significant discrepancy is seen in terms of number of infected cases to the total population in each county and by 1 million populations. The number of SARS-CoV-2 infected patients witch was announced at 23.11.2020 by countries in Andorra, Bahrain, Montenegro, Luxembourg, Belgium, Qatar, French Polynesia, Czech Republic, Aruba, Armenia, San Marino, Guam, Palestine, United States of America, Panama, Switzerland, Spain, Kuwait, France, Vatican, Slovenia, Argentina, Puerto Rico, Liechtenstein, Peru, Brazil, Gibraltar, Netherlands, Austria, Georgia, Macedonia and Portugal had more than 25 thousands infected cases per 1 million population and they are not known to have high capsaicin in their diet (nonenamamide) is an active component of Chilli peppers, which are plants belonging to the genus Capsicum or it is not a part of their cuisines except China and Republic of Korea, which they have limited infected cases a the spread of infections is low (case per 1 million population) [2].



Graph No 1 Total cases/ 1 M population in several countries, with spiciest food and low or mild spiciest food

### 4. Discussion

In the countries which, use capsaicin in daily cuisine with high Scoville scale [9] with the Spiciest Food [8] like India, Bangladesh, Nepal, Pakistan, Sri Lanka, Indonesia, Mexico, Nigeria, Singapore, Colombia, Jamaica, South Korea, Laos had low incidence of infection of Covid 19 due to world health Organisation.

### 5. Conclusion

Knowing that it is early do evaluate the spread of COVID-19 among the world countries, but it seems to be that having high capsaicin diet can evidently prevent from Covid-19 infection and stimulate antiviral immune responses.

#### Recommendations

With further information about Covid-19 pandemic disease and the spread in the world wide we will specify our opinion study.

#### Limitation of our study

We would have liked to compare specific data with other data from countries outside of Europe with similar populations, such as in Asia or in Africa.

## Compliance with ethical standards

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The authors declared that the research was conducted in the absence of any commercial or financial relationship that could be construed as a potential conflict of interest.

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