Supplementary material bmjnph

Reviewer(s)' Comments to Author: Reviewer: 1

Comments to the Author

Abstract

"Whilst many public health strategies have evolved there has been little mention of the immune system and how this could be strengthened". Please expand on the statement to reflect why the immune system needs to be strengthened, ie. help protect against virus infection?. **Many thanks this had been added.**

Introduction

It might be useful to indicate the origin and/or regions most affected by SARS and MERS as you recount their history. Thank you – this has been added - Severe Acute Respiratory Syndrome (SARS) was first detected in Guangdong, southern China in 2002 and Middle East Respiratory Syndrome (MERS) followed and first emerged in Saudi Arabia in 2012.

"Most strategies being employed are currently reactive". Incomplete statement, ie strategies for what? **Public Health – this has been added.**

SARS-CoV-2

Figure 1: Is a graphical representation of the number of deaths (label your y-axis) and not fatality rate which is calculated based on the total number of deaths in relation to the total number of individuals diagnosed with the disease. Edit title or change graph. **Ok, many thanks – the title has been changed.**

Immunity Focus.

"Professor Philip Calder is undoubtedly one of the leading experts..." The use of "undoubtedly" might be an extraneous adverb to avoid. **This has been removed.**

Vitamin C

Please consider deleting the last 2 statements of the first paragraph and the entire second paragraph because they do not strengthen your argument for vitamin C in any way. See comments below: **OK many thanks these have both been removed.**

"The UK National Diet and Nutrition Survey does not currently publish data on habitual vitamin C intakes nor status in its appendices and tables. It would be beneficial to have updated data on vitamin C intakes/status in older populations" **Removed**

Give specific examples of how such data could be used to help strengthen your argument.

Second paragraph- "Thus older populations who are more likely to be materially deprived are more likely to be align with such data figures". (Correct align to aligned)

The scientific basis of your claim/inferences is questionable unless there is enough supporting evidence, particularly, if you're going to compare the elderly to an unrepresentative target population of low-income/materially deprived UK citizens. **Removed.**

Paragraph fourth: Please provide results to show the effect of the various dosages in the various studies. **Further results have been added.**

Summary and Perspective.

Available human data suggest that supplemental daily doses of vitamin C up to about

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1 g in addition to normal dietary intakes are not associated with adverse gastrointestinal effects.- Not having an adverse effect is not indicative of a benefit either, statement might be irrelevant. **OK I have added this**.

In the next sentence, correct For Vitamin D "and" to "an" Upper Limit... Thank you - corrected.

Suggestion 6: limits the lack of studies to just cost and side effects ignoring other equally important reasons. **This has been expanded.**

Reviewer: 3

Comments to the Author
The paper has much improved

- 1. In the abstract it would be appropriate in the end to add that further studies are needed. **This has been included.**
- 2. "Amongst those with established respiratory conditions or pneumonia, specific nutrients, such as vitamin C, D or zinc could be considered as potential adjunctives to conventional treatment pathways."

Some potential risks with high intakes of supplements should also be highlighted, ex how vitamin C and D together might increase risk of kidney stones. – Therefore the amount should be carefully considered when going higher than RDS and preferably should be clinically validated for critically ill patients. This has been added into the end summary points where tolerable upper limits are discussed.

3. "Available human data suggest that supplemental daily doses of vitamin C up to about 1 g in addition to normal dietary intakes are not associated with adverse gastrointestinal effects. For vitamin D and Upper Limit of 50 μ g/day is advised and for zinc, an upper limit of 25 mg/day is recommended."

Please rewrite the above sentence so as the UL are not confused for recommendations of intake, which they should never be. **This has been defined and clarified in the summary end points.**

3. I would like to see a recommendation for more research needed as one of the bullet points at the end. **This has been added.**

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ⁱ Roujian Lu *et al.* (2019) Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. The Lancet Volume 395, Issue 10224: 565-574