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## New studies on Covid-19 lethality in dependence of vitamin D Dear Dr Merkel,

we hope you are healthy and will remain so. Since the beginning of the **Covid-19 pandemic**, we have been following international studies on **vitamin D in** relation to **Covid-19 infections**. We would like to provide you with a compact overview of these studies. The vitae of the two signatories are linked in the appendix.

You may have read in your press review that a correlation between low vitamin D blood levels and high lethality is being discussed in relation to Covid-19. In our highly technical world, we sometimes - understandably - tend to neglect rather simple approaches. Just think of calf compresses and cod liver oil.

Researchers in **Asian countries** such as Indonesia, India and the Philippines have taken up the vitamin D thesis and are presenting impressive results. We are in personal contact with several research groups there. Their studies suggest that a causal correlation between vitamin D levels and mortality in Covid-19 patients is likely (see appendix and figure at the end of our letter).

Has a **nationwide supply of vitamin D** ever been **considered** in Germany? Sweden seems to be following this path on a voluntary basis (see literature [14]).

- The significance of vitamin D for the immune system is medically beyond question. It is also undisputed that the vitamin D level is clearly too low in large parts of the population and especially in the older risk groups. 30% of the population have a **vitamin D deficiency** of < 10ng/ml in winter. (see literature [11, 12, 13])
- Fatal courses of Covid-19 disease are often associated with pneumonia followed by an exuberant immune system (cytokine storm) and sepsis. Vitamin D can act as an immunomodulator and act as a retardant [s. literature [6, 7, 8]
- Raising the vitamin D level of the population to a healthy level greater than 40 ng/ml could **produce good results in about 6 weeks** bei sehr niedrigen Kosten erzielen (6-7 cents/day/ea).

Until a vaccine is available, vitamin D supplementation could be a preventive measure that should be discussed to reduce the **lethality of covid-19**. The available studies also suggest that vitamin D shock treatment may protect patients already infected and hospitalised with Covid-19 from lethal sepsis (see literature [4]).

We have well-founded hope that far more people affected by the Corona pandemic could be saved if the current findings presented here are applied. To paraphrase J.F.K., we are all "Berliners" and we would like - just like you - to make a modest contribution to our country.

We would therefore ask you to have the available data validated by your experienced circle of experts and, if necessary, to take the necessary steps. We do not want to have to reproach ourselves later on for not having drawn attention to an assistance that could have been realized with relatively simple means.

Attached you will find a summary of the current state of affairs and all relevant publications.

Many thanks and best wishes from Tübingen and Heidelberg

Dr. Bernd Glauner

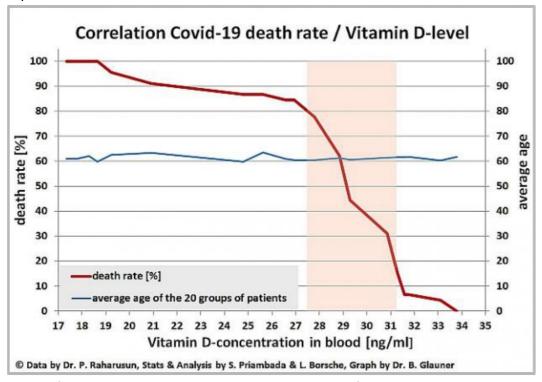
Lorenz Borsche

## facilities:

Current state of play on the subject of Covid-19 / Vitamin D

**Bibliography** 

A picture is worth a thousand words:



Results of the age-adjusted clinical study by the working group of Dr. Prabowo Raharusun.