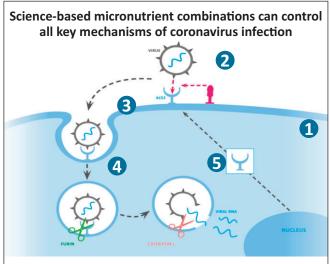
To the Brazilian Government! To the People of Brazil!

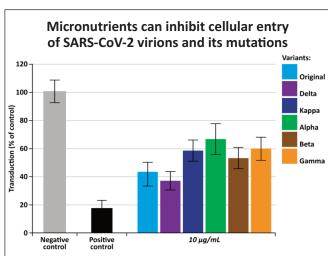
To the Brazilian Government: Considering the health threat of the COVID-19 pan- To the People of Brazil: There exists only one barrier for the people of Brazil to use demic for millions of people in Brazil, there exists an urgent need for effective, safe, sustainable health solutions. The scientific information provided below documents that such solution exists, based on a combination of plant-derived, natural molecules. Since the beginning of the COVID-19 pandemic, the Dr. Rath Research Institute has researched natural adjuncts and alternatives to gen-based vaccines. The sciencebased combination of vitamins and other micronutrients described below is currently one health approach available worldwide that can significantly inhibit infections of human cells from all known variants of the coronavirus - including the Omicron mutation. The Dr. Rath Institute - a non-profit organization - offers its entire knowhow free of charge to the Brazilian government to be used to save millions of Brazilian lives and billions in health care costs.

this lifesaving information. Under the undue influence of the multi-trillion dollar pharmaceutical investment business, plant derived molecules are defined as prescription medicine in Brazil. Abusing the Brazilian Health Regulatory Agency (AN-VISA), large exporters of patented vaccines and drugs from Europe and North American prevent Brazil from seeking help in natural answers to COVID-19 pandemic. Over many decades, this multi-trillion dollar investment business has brought Brazil and over 150 other countries in a fateful dependency from patented drugs and vaccines. If you, as a citizen of Brazil want to help end the COVID-19 pandemic and to prevent future pandemics, you must write to your President to immediately remove all legal barriers for the use of natural health solutions in Brazil. Email protocolo@planalto.gov.br

COVID-19 — Progress in Science-Based Natural Health

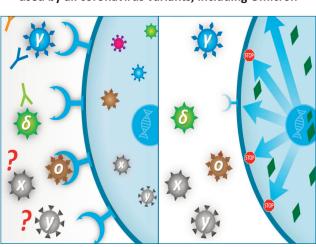


Micronutrients can inhibit all major mechanisms of COVID-19 infections simultaneously: 1. Inhibition of viral 'doorway' (ACE2 receptor). 2. Inhibition of virus binding to these receptors. 3. Inhibition of enzymes required for viral entry into body cells. 4. Inhibition of enzymes required for viral processing inside body cells. 5. Inhibition of viral multiplication and spread. Source: Publication and presentation (link below)



Micronutrients can significantly inhibit the cellular entry of the original coronavirus (light blue) and its viral mutations Alpha (green), Beta (brown), Gamma (orange), Delta (violet) and Kappa (dark blue). Binding of the Delta variant, for example, could be inhibited by more than 60%. Source: Publication and presentation (link below)

Specific micronutrient compositions significantly decrease ACE2 receptors, the viral 'entry doors' to the human body used by all coronavirus variants, including Omicron



Scientifically researched combinations of micronutrients inhibit the production the cellular entry doors for coronavirus infections, the ACE2 receptor. Left: A 'vaccine-only'-based strategy may require the development of new vaccines to induce specific antibody production for every new mutation of the coronavirus. Right: Micronutrients (green diamonds) can significantly down-regulate the production/expression of the ACE2 receptors essential for all mutations of COVID-19, including the latest variant, Omicron. Source: Publication (link below)

DEAD END STRATEGIES

The advent of the COVID-19 pandemic was followed by a global race for effective vaccines against the newly emerged coronavirus (SARS-CoV2). Yet, it soon became clear, that the high mutation rate of this virus poses a major challenge for the development of effective and safe vaccines - and ultimately for the control of the pandemic.

Already for the industrialized world simultaneously fighting a multitude of coronavirus mutations with current vaccines requiring short-term booster campaigns became a medical and economical challenge. For Brazil and other threshold and developing nations, the currently propagated 'vaccine-only' strategies signify a 'dead end' already for economic reasons.

Common sense dictates that a globally effective strategy to contain and eventually end the COVID-19 pandemic requires an effective and save public health strategy that is affordable for all nations and can be readily and sustainably implemented by billions of people around the world.

The world needs entirely new approaches towards ending the pandemic on a world-wide scale.

AN ENTIRELY NEW APPROACH

From the very onset research at the Dr. Rath Institute did not focus on developing vaccines against the original coronavirus or one of its mutations. We took a fundamentally different approach based on the following scientific analysis:

- 1. All coronaviruses use the same molecular 'doorway' (ACE2 receptor) to enter the cells of the lung and other organs to infect the human body.
- 2. Any therapy that significantly down-regulates the production/ expression of these ACE2 receptors in our body must lead to a significant protection against COVID-19 infec-
- 3. Since all mutations of the coronavirus use this very same 'doorway', such an approach would also signify a major step towards effective prevention of all future mutations of the coronavirus – a precondition to end the COVID-19 pandemic.
- 4. Completely blocking these 'doors', e.g. with a vaccine/antibody strategy directed against the ACE2 receptors, could lead to severe health problems - since a minimum level of these receptors are essential for health.
- 5. Understanding how these 'doorway' molecules can be down-regulated to a minimum is a key step to develop effective public health strategies that can protect infections with current coronaviruses - as well as future, yet unknown, mutations.

EFFECTIVE MICRONUTRIENTS

Our research identified combinations of vitamin C and other bioactive micronutrients, including extracts from black tea, turmeric, broccoli and curcuma to meet all the above criteria.

These plant-derived bioactive molecules are not only able to significantly lower the production of the 'doorway' molecules by up to 90%. These natural molecules are also able to inhibit all essential mechanisms of coronavirus infections (see graph), including the inhibition of viral binding, viral cell entry, viral multiplication as well as infectious spread. Moreover, these micronutrient combinations were able to inhibit cellular binding not only by the original coronavirus but also by the Alpha-, Beta-, Gamma-, Deltaand Kappa-variants.

Most importantly, micronutrients are known to improve the function of the immune system in general, including the biological removal (phagocytosis) of viruses and other infective microorganisms.

THE OMICRON CHALLENGE

The world community is currently exposed to yet another coronavirus mutation, designated Omicron. This Omicron variant of the coronavirus also uses the ACE2 receptor for infection. Thus, the micronutrient combinations described here are currently the most promising approach to reduce the public health risk posed by the Omicron variant.

COVID-19 – A HUMAN-**SPECIFIC PANDEMIC**

Largely unknown to the people of the world is the fact that COVID-19 is a human-specific pandemic. Animals can get infected with coronaviruses but do not fall sick in pandemic proportions. The major genetic difference between humans and the animal world is, of course, the inability of man (and subhuman primates) to produce vitamin C in their own bodies by conversion from sugar (glucose).

During the 20th century, several Nobel prizes have been awarded for the discovery of micronutrients and their health benefits. Their importance for optimum immune system function is documented in every leading teaching textbook of biology.

PUBLIC HEALTH CARRIED BY THE PEOPLE

Vitamins and other micronutrients, are known to improve the body's overall immune function and are effective against specific infective agents. Public health measures promoting vitamin-rich food and nutrition as well as optimum dietary supplementation should be imple-



Dr. Matthias Rath has been a close colleague and friend of the late Nobel Prize winner Linus Pauling. Dr. Pauling is considered one of the most influential scientists of the 20th century and has made groundbreaking scientific contributions in immunology, protein structure, genetic diseases, vitamin research and other scientific fields.

Dr. Rath and his research team have continued this pioneering work in the field of science-based natural health focussing on the health benefits of micronutrients in the prevention of cardiovascular disease, cancer and infectious dis-

The Dr. Rath Research Institute is an independent non-profit research center located in San Jose, California. It is one of the global leaders in the field of micronutrient research and preventive natural health. Since the beginning of the COVID-19 crisis, the search for science-based natural approaches to control this pandemic has been a research focus.

Born in Germany, Dr. Rath also sees his responsibility to expose the role of the German chemical/pharmaceutical corporations as an economically driving force behind Germany's attempt at world conquest during World War I and World War II. The Dr. Rath Foundation broke decades of global silence about these crimes against humanity by publishing online the official records of the Nuremberg War Crimes Tribunal the German against chemical/pharmaceutical cartel IG Farben (see link below).



mented at all levels of society - from schools to senior homes. This would elevate the protection of the population against infectious diseases far beyond the COVID-19 pandemic.

This information provides the basis for an effective, safe and affordable way for the people of Brazil - and the world – to help end the current pandemic and improve the health of the country in a sustainable way.

Further information: www.dr-rath-education.org/corona-research