



# Suggestions for Combatting COVID-19 by Natural Means in the Absence of Standard Medical Regimens

Harry G. Preuss & Okezie I. Aruoma

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EDITORIAL

## Suggestions for Combatting COVID-19 by Natural Means in the Absence of Standard Medical Regimens

At this point in time, the COVID-19 pandemic appears relentless with no end in sight. Dire predictions of a continuance for as long as an additional two years or more have been voiced. A beneficial vaccine appears to be a long way off. The current standard treatment based on hand washing, face masks, quarantines, and distancing have produced some beneficial progress, but have also brought on a multitude of psychological perturbations. These have been amplified in turn largely by an array of serious economic woes which make the bad situation even worse. Further, while the appearance of a scientifically accepted near 100% cure could end the alarming situation immediately, there are not any readily acceptable ones in plain sight that would satisfy the majority of experts.

In order to come close to finding a rational cure for COVID-19, more precise knowledge about this novel deadly virus must be forth coming. Much has been learned to date but suffice it to say much more is needed. One piece of important information gained recently concerns the individuals most susceptible to the worst outcomes from the virus. Repeated constantly is the fact that the most vulnerable group suffering the worst outcomes is the elderly. So, it goes that if you're 65 years of age, you're in trouble. Nevertheless, calm down, because those 75 years of age are even in far more trouble. Is it necessary to compare the problem at 85 years of age?

The one rejoinder to all of this is that the aforementioned elderly's situation worsens considerably if they possess chronic maladies associated with aging. That last statement is the one comeback that is almost always mentioned in any discussion of the prognosis of COVID-19 in senior patients. In truth though, is this the major reason behind the frequently poor outcome in the elderly—debilitating health issues rather than aging itself? If so, healthy, fit mature individuals may not have that bad a prognosis all things considered. This possibility provides increased optimism. Simply, we can't do much about aging. It is an unavoidable circumstance, but one can often do something about improving general health. While aging chronologically is unstoppable, aging physiologically can be mitigated and slowed within a proper setting.

This leads to what should be obvious. A feasible major solution is for the vulnerable to build up their overall health status to ward off the pathogen, mitigate the symptomatology, and/or prevent death from the virus. While such should be the goal in a normal lifestyle, it is even more imperative under current circumstances. With the possibility, perhaps

the probability, that this pandemic could be long and drawn out, one must think of long-term regimens and remedies to battle the COVID-19 that themselves do essentially no harm.

Putting forward guidance concerning the present pandemic is somewhat difficult—more so in a background of insufficient scientifically proven information to do such. Obviously, with the emergence of this pandemic involving a new agent, there would be insufficient randomized, double-blinded, placebo driven studies present to rely upon. In this situation, however, it is our contention that there may be enough “reasonable background knowledge” to at least begin instituting measures that might prevent or mitigate COVID-19 infections. Suffice it to say, it seems logical to turn to experts in the field and discover under the current circumstance just what they are doing themselves. Enough information may be provided to allow the consumer to make rational choices for themselves.

As mentioned above, the tolerating principle behind any proposal based more on background knowledge than actual scientific facts is that the regimen do no harm and in this case over long stretches of time. A possible answer to consider is whether this could be accomplished by taking a “natural” approach to the situation? This is the method that will be discussed in this report. The suggested natural regimen considered here consists of two stages—one that could be referred to as “directly” antiviral and the other “indirect” to increase the overall health to mitigate the response to COVID-19 (Table 1).

So, with trepidation, our suggested course of action will be described in more detail. Concerning the antiviral aspects, two safe, potential antivirals are offered to be taken on a daily basis—monolaurin and oil of oregano. These had been examined in the past concerning their effects on bacteria and fungi (1–3).

When the pandemic arose, Dr. Preuss dug into his files and found some preliminary *in vitro* work concerning their antiviral potential that had been performed but never published. Some success was discovered for both agents against the lipid encapsulated respiratory syncytial virus (RSV). A viral syncytial assay was established using a HEp-2 culture assay based on the concept that when an RSV infects human lung epithelial cells (monolayer), it replicates and invades the adjoining or surrounding cells. A syncytium is formed when infected cells fuse. These infected centers can be visually examined directly or with a phase contrast microscope. Accordingly, effects of oregano oil and monolaurin in

**Table 1.** One suggested daily regimen based upon natural agents.

<i>Direct antiviral</i>	
Monolaurin	2–3 teaspoons per day
Oil of Oregano	1 pill per day
<i>Indirect general health</i>	
Vitamin D3	10,000 IU
Vitamin C	500 mg
Trivalent chromium	800 mcg
Zinc glycinate	30 mg
Turmeric	1000 mg
Co enzyme Q10	200 mg

comparison with Ribavirin, an antiviral drug on the infection and the development of syncytia were conducted (Table 2).

Monolayers of HEp-2 cells at 80% confluency (in duplicates) were infected with 50 ml of  $10^{-4}$  dilutions of the virus stock (approx.  $6 \times 10^2$  PFU).

Similar to the effects of a drug, Ribavirin, both oregano and monolaurin were able to destroy the ability of the virus to produce syncytial formation (Table 2). This strengthens the postulate that oregano and monolaurin can destroy lipid-encapsulated viruses.

Lipid encapsulation is mentioned for a specific reason. A major basis behind the effects of monolaurin and oregano has been postulated to be their ability to destroy the protective lipid encapsulation of organisms (1–9). Accordingly, because of the long-term safety records of these natural products, they seem to be reasonable agents to consider therapeutically in the absence of effective drugs.

Concerning the indirect approach to combatting COVID-19, one intriguing aspect mentioned previously is that many of the deceased viral victims had elements of the Metabolic Syndrome (obesity, diabetes, hypertension) which is promoted by insulin resistance. Hence, improving insulin resistance could theoretically provide a better situation to prevent and/or successfully control COVID-19, especially in the elderly. What is insulin resistance? In many people over time, organs such as muscle do not respond to insulin properly. To compensate for this, the body increases insulin release. This is frequently an ongoing process that can result in higher circulating levels of both glucose and insulin which are not ideal for our general health. Insulin resistance with hyperinsulinemia is commonly linked to a general condition of inflammation along with a compromised immune system (10, 11). Unfortunately, insulin resistance is more likely found in the elderly and may explain, at least in part, why the elderly population is especially prone to death from COVID-19.

The postulate is that victims could battle the virus more successfully in a healthy state with the best possible immune reaction. Fortunately, safe inexpensive natural products that can overcome insulin resistance and produce greater immunity are available. In regards to this, vitamin D3 is an “insulin sensitizer” and should be on the first line of defense for two very vital reasons: (1) it may overcome the ravages of insulin resistance and improves the immune system and (2) it has the potential to ameliorate the cytokine storm that is the primary cause of the deaths in the elderly and others with COVID-19 (12–14). A reasonable daily dose of vitamin

**Table 2.** Effect of oregano oil and monolaurin on the infection HEp-2 cells by RSV *in vitro*.

Groups tested	Cytopathic effect
1. Control uninfected	None
2. Solvent control	None
3. Virus alone (no treatment)	+ Too many foci
4. Ribavirin 5.0 mcg/ml	None
5. Ribavirin 2.5 mcg/ml	None
6. Ribavirin 1.25 mcg/ml	A few foci
7. Oregano oil 0.5 mg/ml	None
8. Oregano oil 0.25 mg/ml	None
9. Oregano oil 0.125 mg/ml	+ A few Foci
10. Monolaurin 0.5 mg/ml	None
11. Monolaurin 0.25 mg/ml	None
12. Monolaurin 0.125 mg/ml	+ A few foci

D3 would be 10,000 IU. A good daily routine to favor optimal health might also include: 500 mg Vitamin C, 800 mcg trivalent chromium, 30 mg zinc glycinate and 1000 mg turmeric. These agents do much good to reduce general inflammation and strengthen the immune system (15).

A healthy body is the best means to avoid and/or combat the virus. Much still can be achieved by advancing general health and bolstering the defenses against viral devastation until standard proven scientifically regimens arrive on the scene.

*Notes: Dr. Preuss was introduced to monolaurin by the late Mary Enig PhD and learned more about it from telephone conversations with the late Jon Kabara PhD, the genius behind its development. Concerning oil of oregano and other essential oils, valuable information was gathered from Cass Ingram DO, who sponsored research on the subject. Later, Dr. Preuss coauthored a paper with the late Shari Lieberman PhD discussing the antiviral potential of monolaurin (3).*

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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Harry G. Preuss

Department of Biochemistry and Department of Medicine,  
Georgetown University Medical Center, Washington, DC,  
USA

✉ [preushg@georgetown.edu](mailto:preushg@georgetown.edu)

Okezie I. Aruoma

Department of Chemistry and Biochemistry, California  
State University Los Angeles, Los Angeles, California, USA

✉ [oaruoma@calstatela.edu](mailto:oaruoma@calstatela.edu)