An Introduction to Supplements for Coronavirus Prevention and Management —PART ONE in the Coronavirus Strategy Series—

By Steve Paulus, DO, MS

The novel coronavirus that is sweeping throughout the world is defined by the word "novel." The disease caused by this coronavirus is called Covid-19. It is by definition different, unusual, and unique. Because of the novel nature of this virus, we currently have no vaccine to prevent and no pharmacologic prescriptions to cure this infection. The basic treatment for all patients with Covid-19 is to wait for the immune system to recognize and then naturally deal with the infection. Even for those unfortunate few severe cases that require a ventilator, ultimately we are playing the waiting game—passing time in the ICU hoping for the immune system to engage sooner rather than later.

During this waiting game in the hospital, patients are given state of the art supportive treatments such as oxygen, ventilatory support, intravenous fluids, expert nursing care, and palliative medications. Patients are closely followed diagnostically with the highest level of technology that we have to offer such as CT scans, point of care ultrasound, MRIs, and cutting edge lab tests. These supportive treatments and diagnostic tests are not cures, but help to stabilize the patient's body during a time of medical crisis and help the doctors and nurses to prognosticate the severity of disease.

Yes, of course there are scientific trials of old and new medications with the hope that we can get lucky and find a real treatment for those with the most severe forms of this illness. But, we must wait for high quality research to become available before recklessly embarking upon unproven drugs that may have huge negative effects.

There is only one drug approved in the United States by the FDA for the treatment of severe Covid-19, remdesivir, and it only offers some partial anti-viral effects and slightly shortens the length of illness and only in severe illness found in hospitalized patients. However, on October 15, 2020 a large World Health Organization study was published of over 11,000 patients, in over 400 hospitals in 30 countries found no clinical benefit from remdesivir.

Other than remdesivir, all the prescription medications currently used to "treat" Covid-19 in the United States are not FDA approved. They are being used off-label in the management of a coronavirus infection.

The FDA is clear however, that the use of supplements is not to be advertised as a "treatment" for Covid-19. They have stated, "There currently are no vaccines, pills, potions, lotions, lozenges or other prescription or over-the-counter products available to treat or cure COVID-19."

ISN'T IT INTERESTING

Isn't it interesting that the cutting edge dominant "treatment" is waiting for your immune system to do the work of healing this new invader? The tried and true 21st Century medical plan is to let the innate wisdom of your body do the work of healing!

Since no drugs exist to effectively treat this infection, we can rely upon complementary treatments to assist the body in mounting an immune response faster and addressing the inflammatory side effects in the early phases before the infection overwhelms the body. It is a race against time.

Even to use the word complementary is, in this situation, awkward. In the current dominant Western medical model, complementary medicine is defined as a method of health care that combines conventional medicine with those of alternative medicines. But in this case there are no great conventional medicines for the treatment of Covid-19.

Now, complementary medicine is transformed into the dominant prevention and treatment option while we wait for conventional medicine to discover, through innovation combined with scientific experimentation, to develop *novel* medications to treat this *novel* virus.

WHAT ABOUT USING SUPPLEMENTS FOR CORONAVIRUS?

While we wait—impatiently—there is an in between solution that has some evidence-based verification, that is the use of supplements. Supplements are defined as vitamins, minerals, herbs, amino acids, enzymes, and other nutrients that support the body in the prevention or treatment of disease.

We can extrapolate data from other coronavirus infections such as SARS (Severe Acute Respiratory Syndrome) from 2002 and MERS (Middle Eastern Respiratory Syndrome) from 2012 as well as the several mild strains of coronavirus that are one of the causes of the common cold. We can also use evidence-based medicine—from treating influenza viruses—to reason which herbs and supplements can help mitigate the expression and severity of this current coronavirus outbreak.

The vast majority of the day-to-day American medical treatments in doctors' offices are founded upon empiricism—or therapies based upon the experience of the doctor rather than high quality research. In the absence of perfect information, I utilize over 30 years of educated, expert clinical experience with conventional and complementary medicine to help lessen the frequency and consequences of viral infections.

THERE IS NO MAGIC ELIXIR

Please note that these strategies that use supplements are not a panacea. Rather, they can **help** stimulate the immune system, offer limited anti-viral properties, or have **targeted** anti-inflammatory effects providing *some* protection that may very likely **decrease** overall symptoms, **shorten** the length of illness, or **lessen** the severity of this disease. I believe that the use of supplements decreases the overall viral load by multiple mechanisms of action, thus **decreasing the intensity** of the infection. In using targeted supplements, the risks are extremely low and the rewards are huge. But, there is no guarantee. One of my favorite adages is "**perfect is the enemy of the good."** We don't have an absolute treatment for Covid-19 so until conventional medicine catches up, we must use the **best** of what we currently have, and **good enough works for me**.

I have now expanded my coronavirus handout library into <u>seven</u> key subsets: PART TWO: *Prevention Strategies*; PART THREE: *Acute Management Strategies*; PART FOUR: *Acute COVID-19 Management Strategies*; PART FIVE: *Coronavirus Strategies that DO NOT Work*, PART SIX: *Ibuprofen and Coronavirus*, PART SEVEN: *Materials Needed Before You Get Covid-19*, and PART EIGHT: *Fever Management*.

Please use this PART ONE: *Introduction to Supplements for Coronavirus* as your philosophical foundation. Access the other five handouts to address the specifics of targeted prevention and supportive treatments for this complicated disease.

A TEAM APPROACH

If you are reading this article then at some point you may become a patient during this pandemic. If you become sick with the coronavirus, I strongly recommend that you DO NOT try to muddle through this unpredictable illness alone. If you are diagnosed with Covid-19, then being managed by your physician is essential. If you are able to stay at home to be treated/monitored, that is preferred. But if your condition deteriorates then you must go to the hospital. Your doctor is a key component of your health care team.

MORE IMPORTANTLY

Please remember, these strategies do not take the place of defending your sleep, eating a nutritious diet, moving and exercising regularly, decreasing stress, stopping smoking, and limiting alcohol consumption significantly, etc. They do not take the place of helping to "flatten the curve" by sheltering at home, social distancing in public, wearing a surgical mask when out in the world, and washing your hands after a potential exposure situation.

To all my patients and friends:

Stay well, stay calm, and pay attention . . .

SFP 11-16-20