

Coronavirus: What To Do

“ My thanks to Dr. Ray Bisevac who has taken the time to share a unique perspective in addition to the antiviral strategies we have been discussing from Dr. Vasquez.. ”

Here is Dr. Bisevac: There is an untold story about the Coronavirus that you may want to know about, and you won't read about it on CNN, Fox News, Yahoo... or likely anywhere else. But here at Metabolic Management we don't want you to deal with fear; we want you to be at the forefront of scientific coverage and ahead of the game.

First, find the time to attend our Functional Medicine seminar coming to Bloomington, MN on March -19, Oak Brook, IL on March 21, and Madison WI on March 22, where we will present a more in-depth analysis of the current crisis and potential protection strategies.

Second, meet one of the mystery agents in this story: **ACE2** (human angiotensin-converting enzyme 2). Recent studies have found that SARS-CoV-2 and SARS-CoV share around 80% of homology and use the same cell entry receptor, ACE2. ACE2 has a remarkably high affinity for binding to the current coronavirus - even more so than in past epidemics. ACE2 was found to be much more actively expressed in goblet cells of current smokers and Alveolar Type II cells of former smokers. (Goblet cells are typically found in the respiratory, reproductive and gastrointestinal tracts). The other two receptors involved in Coronavirus (DC-SIGN and L-SIGN), present a similar story (1).

The fact that children don't smoke and have more robust immune systems seems to have spared them from the attacks.

Third, are you among shoppers tempted to raid Trader Joe's shelves to stock up on essential items? Similar paranoia with the Year 2000 crisis eventually turned out to be senseless. I would like to suggest that you stock up on sugars instead!



“Sugars!?” ... you may ask.

But I don't mean ordinary sugars. These are really special and **complex sugars**.

Let me explain...

For the Coronavirus to be effective, cleavage of the cell's **glycoprotein** coating is needed for entry into the cell.

This coating made of polysaccharides assists in cell to cell communication and **CELL TO CELL IMMUNITY**.

Four of the last eight Nobel Prizes in medicine have dealt with the cellular communication process. The **1999 Nobel Prize** for Medicine was awarded to Dr. Gunter Blobel for his work in this new field of Science - Medicine called Glycobiology.

I will further explain at our seminars why I consider one of these polysaccharides - **ARABINO GALACTANS** (Biotics IAG) - the shining star among them and why a particular concentration might be essential.

For now, it might suffice to say that stocking up on IAG might be more essential for your immune system than

hoarding food supplies. **I use 1 tsp a day for prevention and 1 Tbsp. tid therapeutically**

In addition to IAG, you may follow up on several basic nutrients Dr. Vasquez has suggested in his antiviral series to support the immune system and prevent viral replication. The lower dose can be used with people less than 180 pounds and a higher dose if over 180 pounds or under excessive stress.

- Bio-Immunozyne Forte 1-2 bid
- NAC 1-2 bid
- Bio DK Caps 1 bid
- Bio Ae Mulsion Forte 2 drops
- Selenomethionine 1 a day.
- Bio C Plus 2 three times a day or Mixed Ascorbate Powder 1 tsp
- Children's ENT1 bid

1. Cai, G.; Cui, X.; Zhu, X.; Zhou, J. A Hint on the COVID-19 Risk: Population Disparities in Gene Expression of Three Receptors of SARS-CoV. Preprints 2020, 2020020408 (doi: 10.20944/preprints202002.0408.v1).

*It is critical to follow
a clean diet
to go with the nutrients.*

Immune Boosting Strategy

For _____

Date _____

Take the following supplements until your re-evaluation on (date) _____

Purpose	Supplement	per day	with breakfast	with lunch	with dinner	before bed
Immune Boosting <i>Nutrients listed in order of importance</i>	IAG	1tsp-1tbsp				
	Bio Immunozyne Forte	2-4	1-2		1-2	
	NAC	2-4	1-2		1-2	
	Bio DK Mulsion Forte	5 drops or 1 capsule				
	Selenomethionine	1	1			
	Mixed Ascorbate Powder	1	1			
	Acti-Mag Plus Powder	1	1			
	Children's ENT lozenge	2	1		1	

IAG

This highly refined powder contains up to 99% pure arabinogalactans. Arabinogalactans function as immune modulators, enhancing or decreasing the immune function as needed. It is the arabino- galactan content of Echinacea which is responsible for its anti-microbial reputation, and it *only* contains about 6% of these arabinogalactans, IAG contains up to 99%! One researcher calculated that 1 tsp of IAG has the power of 3-5 bottles of commercially available liquid echinacea. This powder mixes well with juice; it is the perfect immune enhancing food for children with chronic or acute infections.

Bio-Immunozyne Forte

A multiple that is high in vitamin A, zinc, phosphorylated B vitamins as well as other immune support nutrients: Bio-Immunozyne Forte is my choice. I am taking 1 twice a day normally and 2 twice a day when stressed out.

NAC

NAC 1-2 capsules bid. Dr. Vasquez has several hours on his website discussing the benefits of NAC on viral protection. He lists about 10 different mechanisms that NAC offers. It has particular protection against lung and respiratory infections.

Bio DK Mulsion Forte

Bio-DK Mulsion Forte 5 drops of the liquid or one

capsule. This gives me 5,000 IU of vitamin D and 300 mcg of K.

Selenomethionine

Selenium has been studied individually and shown to inhibit viral replication, so to use it in conjunction with supportive nutrients will give it an added edge.

Mixed Ascorbate Powder

Use 1 tsp and mix it in water or a little juice. Vitamin C reduces histamine which is an issue if people get the virus. We discussed the multiple benefits of vitamin C on another TM and reminded viewers that high dose vitamin C has been used successfully with polio and rabies back in the 40's and has multiple benefits. The beauty of the powder is that I can mix it with Aqua Mag Plus to get my 400 mg of magnesium.

Act-Mag Plus Powder

Acti-Mag Plus powder contains the 400 mg of a form of magnesium that won't cause diarrhea and contains beet powder and some B vitamins.

Children's ENT

Finally I always want to support the microbiome, specifically oral microbiome so take 2 Children's ENT a day.