

Fortifying the body during the influenza season - by Peter Brodhead CN

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The information in this handout is for educational purposes only and should not be considered Medical advise or instruction. An individual considering this information should consult first with their physician about any of the information provided in this handout.

Here are some of my ideas on how to protect yourself and bolster your defenses during the influenza months

First and foremost - get adequate quality sleep - minimum of 7 max 8.5 hours of sleep

Eat a low sugar healthy diet. Sugar suppresses the immune system. The Mediterranean diet is my favorite diet. Eating loads of colorful vegetables, berries, fruits, nuts, seeds, fish and olive oil. There are flavonoids that have noted anti-viral properties - include these in your diet see the bottom of this document.- Mark Hyman MD. Drink green Tea (no sugar) and herbs containing Rosmarinic Acid - Sage, Rosemary, Holy Basil, Lemon Balm these help ACE2 work better. Licorice, Scullcap help ACE2 also . Nettle may be one of the most important teas to drink (the lectins in it glue up the virus inhibiting its function). *You can make a tea blend with these herbs as a daily tonic.*

Exercise - get out in the sun and fresh air - move the lymphatic system with exercise.

1. The Coronavirus family of viruses are a big family of viruses they are lipid coated viruses - Monolaurin and Lauric Acid found abundantly in virgin unrefined coconut oil contains generous amounts of these 2 compounds. These have been found to help dissolve the coating surrounding the virus. Doses found in a Philippine study showed 3 tablespoons a day contain the proper levels of these. Coconut Oil tastes great - you can sauté your vegetables in it or use it as a butter substitute on toast. If your are taking Monolaurin as a supplement - use 1,800 - 2 to 3x a day for acute use (*Monolaurin booklet - Educational Resource - Ecological Formulas - 2011*)
2. Vitamin C is very important - 500mg - 2x a day - if you can get one with bioflavonoids in equal ratios take that. Eat at least 1 orange a day - oranges contain Hesperidin a flavonoid
3. Keep your vitamin D3 levels good. Blood work is the best way to find out how much you need - 2,000 - 5,000iu's can get your blood levels up in most people to a decent level. Remember when you take it - it needs fat to help it absorb properly. Vitamin D is a regulatory hormone - it is the orchestrator for the immune system regulating cytokines, B-cells, T-cells and natural killer cells.
4. Vitamin A (Retinol form) not Beta-Carotene. This is the form that often comes from fish. Vitamin A protects the epithelial tissue from infection. That means it supports the health of the lung tissue, esophageal tissue - gut tissue as well as eyes and skin. 10,000iu's is a very safe conservative dose. It loves fat like vitamin D also.
5. Selenium 100 - 200mcgs a day or eat 4 Brazil nuts a day. Selenium prevents viruses from mutating and makes them less virulent.
6. Andrographis - a very potent support herb from the Ayurvedic tradition from India. One of the best anti-flu botanicals. It has potent anti-viral effects and protects the respiratory system - a perfect combo. Terry Naturally might be the strongest product I've seen but Gaia Herbs, Planetary Formula's and Herb Pharm have quality products.
7. Propolis - well researched anti-viral, anti-bacterial properties. Natura Nectar's regular Brown Propolis or their Immune Support formula are excellent. Herb Pharm has a high quality liquid extract also. Propolis throat spray is a great thing to use - the stickiness of the propolis adheres to the throat directly and directly inhibits bacteria and viruses in the throat.
8. Zinc Lozenges - keep zinc levels under 60mg a day - too much can suppress immunity and deplete copper and Vitamin C also to support the body - Probiotics are important for

immune function - gut health is critically important to Innate immunity. Mushroom extracts can be very supportive to the immune system and modulate under and over expression of the immune system Reishi mushroom in particular. Cook with Shitake Mushrooms.

9. Several different other natural compounds act as mucolytics and break down mucous - Bromelain taken between meals is one of the best, Serrapeptase enzyme and NAC - N-acetyl Cysteine (sulfur amino acid) NAC helps glutathione production in the liver and supports its function - NAC has been found to lessen the intensity of the influenza virus. These can be very supportive if the lungs or sinuses are full of mucous.

More Ideas from Mike Smith MD - who works with Life Extension

Listen to the podcast The Holistic Navigator - hosted by Ed Jones - Nutrition World March 2020 #66 Arm Yourself Against Viral Infection

These are my notes from listening to the podcast

1. You can up your vitamin D for the first few days - he goes to a high dose for 2 or 3 days after exposure to a virus
2. Lactoferrin very supportive in the early stages - it works with the antigen presenting cells - which help activate the immune systems recognition of viruses so the B & T cells kick in. It activates the front line defenses - he uses 1,200mg a day for the first few days
3. DHEA - an adrenal hormone - it super activates B cell and T cell maturation use it short term 200 to 400mg for a week
4. Melatonin - works with antigen presenting cells, Interleukin 2, and B & T cell up-regulation - take at bedtime 6 to 9mg for 3 to 4 days
5. Garlic has a direct viral killing effect - 5,000mg a day for a few days
6. Zinc Lozenges 24mg - 1 - 2 to 3x a day - Zinc blocks the binding of viruses in the mucosal lining
7. Tagamet - *look into the research on it. It blocks stomach acid which might not be a good idea.*
8. Viruses hate bitter herbs - Andrographis is one of the best bitter herbs for respiratory viruses.

Medicinal Mushrooms - info from Jerry Angelini - educator for Fungi Perfecti (Paul Stamets) - #68 *The Holistic Navigator* podcast hosted by Ed Jones

If you are working in public or shopping in public - Fungi Perfecti - **Myco Sheild** throat spray contains 5 different mushroom extracts 4 sprays - 4 to 5x a day can offer good protective support.

Mushrooms can be very supportive for the second phase of the virus in balancing the immune system over rev'd up by cytokine activity.

Agaricon (*one of the strongest single mushrooms*) - 1,000mg - 2x a day

My Community (a blend of 17 different mushrooms) - use a high dose for a short duration of time 2 to 4 caps - 6x a day for 3 to 5 days

Cordyceps - can be very supportive for the lungs - cordyceps can liquify mucous and help the lungs clear mucous. The **Cordi Chi** formula contains Cordyceps and Reishi is another good supporting formula.

Suggestion from Dr. Aviva Romm MD

Gargling 3x a day even with plain water has been found in research to help prevent upper respiratory infections.

Ideas from Donald Yance

Licorice Root, Baikal Scullcap, Citrus Bioflavonoids - Hesperetin may inhibit the docking of the virus - binding to ACE2

Quercetin, Apeginin, Luteolin compounds found in many foods and botanicals may also support the inhibition of the virus.

(see the separate handout on essential oils)

Ideas from Leo Galland MD

Rosmarinic Acid (found in rosemary, sage, holy basil, lemon balm) may support proper ACE2 functioning - diminished functioning in older people might contribute to pneumonia in Covid-19

Flavonoids with anti-viral properties - from Mark Hyman MD - (*A functional Medicine Approach to COVID-19*)

1. **Kaempferol** - (Kale, Mustard Greens, Arugula, Radish Sprouts, Watercress, Collards, Dill, Endive, Turnip Greens)(Blueberries, Watermelon, Kiwi, Strawberries, Apricots, Elderberries, Peach, Blackberries, Cherry)
2. **Quercetin** - (Watercress, Cilantro, Radicchio, Asparagus, Okra, Onions, Red Leaf Lettuce, Serrano Peppers, Kale)(Elderberry, Cranberry, Blueberry, Blackberry, Figs, Apples, Mulberry)
3. **Hesperidin** - Oranges & Tangerines
4. **Oleuropein** - Olives, Olive Oil, Olive Leaf
5. **Catechins** - Green Tea, Apples, Blackberries, Dark Chocolate, Red Wine, Cherries, Guava, Pears, Fava Beans, Sweet and Purple Potatoes
6. **Lauric acid** - Coconut Oil

Anti-Viral and Immune Boosting Herbs and Spices - include plenty of these in your diet:
Ginger, Garlic, Turmeric, Rosemary, Chili pepper, Oregano

My thoughts on the “cytokine storm” in late stage Covid-19 - High dose fish oil Omega 3 Fatty acids enhance the production of resolvins which after an acute inflammatory situation help down regulate the over production of inflammatory compounds such as IL-6 and TNF α which can damage the body when produced in excess. Likewise Medicinal Mushrooms such as Agaricon or Mushroom Blends ie. My Community and natural anti-inflammatory spices such as Turmeric - in theory may support the resolution of late stage Covid infections. (*please note this has not been proven or tested and I am in no way saying this could treat this*). Fully supporting the body with natural compounds just makes common sense.