

## COVID 19 AND OTHER VIRUSES – PREVENTION AND RECOVERY STRATEGIES

In the early 1990s while I was undertaking research to find what self help methods might prevent men with HIV progressing to the more serious AIDS status, using self help methods, I conducted a pilot study. This study was run with military precision involving shuttling blood between the Bardon Counselling centre and the pathology laboratories at Indooroopilly and South Brisbane in time to enable valid result from the centrifuging process. **The results showed that CD8 cells were more than doubled after sitting and focussing on mental activity evoking the joy emotion, but greatly diminished after activity of sitting feeling disappointed and peeved.** Unknown to me was that across the world scientists were attempting to grow CD8 cells in a Petri dish to put them back into people and they were delighted that they could get 10% growth improvement. This was because by the time my study had been approved and was underway with the plan to search for any changes across the whole Tcell subset, researchers had found that it was the CD8 that was particularly important for virus destruction.

Today I asked myself, is CD8 an important cytokine for diminishing the COVID-19? The answer is based on several studies. First a recent Chinese study (see Bo Diao et al medRxiv BMJ Yale 2020), (specific to COVID 19 and other studies on other viruses which shows CD8 has to be considered in regard to stage. In the early stages, a good supply of CD8 cells was associated with being a person who recovered early. However in those who moved to a life threatening stage an immune cascade (lots of cytokines became activated including CD8 but it seems it was too late. Therefore having a good supply of CD8 at the outset seems to be protective (see Rosenberg and JunHuang) (and this is being considered in the development of new types of immunisations). Also the proinflammatory cytokine IL6 was highest in people who had low CD8 at outset and also occurred in the group with life threatening state.

Psychophysicologists and psychoneuroimmunologists have researched the relationship between cytokines, neuropeptides, and T cells for decades. What is known is that IL6 (a pro-inflammatory) is associated with stress and depression and CD8 is associated with good mood, and my pilot study had shown that joy particularly provided a larger than expected CD8 increase.

Therefore if you are anxious today, find joy (this is a sense of wonder and awe or deep connected satisfaction, unlike more superficial happy based on getting a treat). Even short bursts of joy will be of benefit.

Use memories to evoke joyful moments and feel yourself reliving them.

Also push away negative thoughts as not able to be indulged, as their effect will bring your physical state down for a number of hours and your recovery from illness might be a little more enduring and uncomfortable. There is research that shows the mere presence of a smile on your face evokes positive hormonal response.

There are many studies about how to lift mood, including by means of cognitive reprocessing, mindfulness, and shifting attention, perceptual and attitudinal shift) and singing and yoga. Amongst this keyword search one also finds references to a daily normal dose vitamin B having a positive effect on your cytokines but that is not my field. I have not been involved in research for years but this is what I have found through key word searches. I wish you all well, Adhere to all known methods to stay viral free, but find ways to overcome fear, and negative thoughts. Peace and joy to you.

Dr. Dawn Rayner-Brosnan PhD

Fellow College of Health Psychology APS

Previous Research Fellow University of Queensland NCHSR

And previous Psychologist on call for remote area CSIRO staff and families

Now with a small private practice in Hobart Tasmania

focussing on trauma or injury recovery and workplace stress and anxiety.

Author 24 hour home and work diary planner currently Milford –more relevant than ever!

