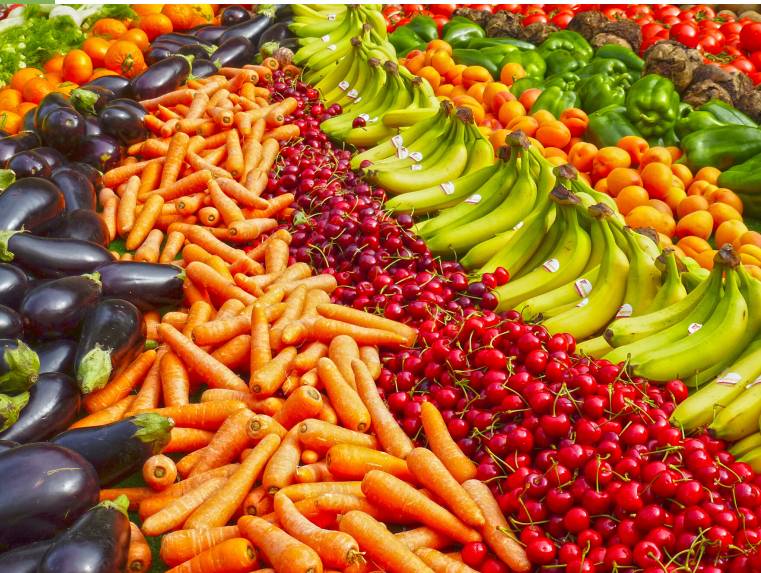


IMMUNE SUPPORT FOR THE EQUESTRIAN

Written by

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With the recent pandemic outbreak there has been much confusion and panic about life moving forward. We would like to offer our nutritional advice for those struggling through this time in understanding how this may affect them. We highly recommend if you are immunocompromised, are suffering from chronic illness or are over the age of 60 that you take extra care and more attention to self-isolation. Research has found these categories of people are at more risk of suffering symptoms to the covid-19 virus.

There are many things we can do to support our immune system to its full capacity making dietary changes and focusing in on high nutrient density is essential. There is no reason to be panic buying pasta, meat pies and frozen meals as this is not going to support your immune function. Instead, opt for shopping from local grocers, farm-gates, butchers and local stores where possible. Not only will support the vulnerable community, it will improve the nutrient quality of your diet, by providing your body with more wholefoods. It will also reduce your exposure to masses of people and assist with the social distancing guidelines. Elimination of highly processed foods, refined sugar and refined carbohydrates is highly recommended, these foods provide very little nutritional value with a high calorie content. This type of food has been found to suppress white blood cells, limit their activity and therefore suppress the immune system. Excessive amounts of caffeine increase cortisol in the body and therefore the stress response. When cortisol is elevated the immune system begins to slow down, so limiting your coffee intake to 1 per day is ideal. Majority of your immune system starts in your digestive tract, this is where our bacteria lies to defend our body from pathogens, where nutrients are absorbed and where our gut-associated lymphoid tissue (GALT) lies.

The GALT is the digestive systems first defence from invasion along with the microbiome. Eating excess sugar and fatty foods can cause certain bacteria to proliferate and disrupt the balance of bacteria in the microbiome, therefore reducing the function of your immune system. There are many things we can do to support our body's immune system and general health. Increasing the amount of fresh fruit and vegetables we eat on a day to day basis. Aiming to have 2-3 servings of vegetables at each meal will provide the body with powerful antioxidants, phytochemicals and nutrients needed for optimal function. Focusing on a wholefood, nutrient dense diet will go a long way to improving immune function. Key nutrients that have been studied for their benefit on immune function include zinc and vitamin C. Zinc is found in many organ meats, legumes, pumpkin seeds, shellfish and eggs and is responsible for regulating immune cell division and proliferation. Even slight deficiencies in zinc have been found to significantly reduce the effectiveness of immune function (Childs et al, 2019). Vitamin C has found to have many immune modulating benefits. It is involved in T-cell gene expression, specifically signalling immune cells to function optimally. Vitamin C is found in many fresh fruit and vegetables; kiwifruit, oranges, grapefruit, capsicum and pineapple just to name a few (Murray & Pizzorno, 2012).

As the COVID-19 virus is a rather new and novel virus there is very limited research and development of the virus, particularly in the natural and alternative medicine category. Some scientific articles have suggested there to be a potential benefit in high dose vitamin C injections with patients diagnosed with COVID-19 (Erol, 2020; Von Hohenheim 2020). Vitamin C is an essential antioxidant and enzymatic cofactor, involved in almost all physiological reactions.

Stress and how to deal with it

Unlike horses humans cannot synthesise their own vitamin C, therefore we need to source it externally. The paper has suggested high dose intravenous vitamin C therapy along with restriction of glucose (vitamin C and glucose use the same uptake transporters) could be beneficial in improving alveolar fluid clearance and to fight acute inflammation when used in the early stages of COVID-19 infection (Erol, 2020; Von Hohenheim 2020). Get outside and expose your skin to the sunlight for 15-20mins per day to ensure adequate vitamin D absorption. Our favourite way to do this is by spending some time with our horses. Not only does this give you exposure to vitamin D, but it supports relaxation and reduced cortisol levels which is fantastic for immune function. Taking supplements such as glutathione, vitamin E, vitamin C, beta carotene, lipoic acid and coenzyme Q 10 can have a real positive impact on your health. One of the biggest concerns with the immune system is stress and currently it is almost impossible to avoid it. As horse owners we are very fortunate that we can spend time with our horses which can have a major effect on de-stressing. There are some great recommendations to lower stress levels and this includes exercising, yoga, meditation and of course riding our horses. I think it is also important to remove any pressures that you may have been placing upon yourself with your riding goals. Now that competitions are temporarily a thing of the past the pressure of competing has certainly been removed. This is the time to reassess how you are training and working with your horses and lower that pressure on yourself. Making your training sessions more enjoyable by mixing it up is a great idea. If it incorporates a horse ball, cavalletti training, going out on the trail if you have access and even some groundwork with your horse can also improve the connection you have with your horse.

We have learned from this article so far that to support the immune system is essential for your health and well-being and antioxidants play a superior role in this instance. Science also tells us that when there is a shortage of antioxidant nutrients there can be an increase in disease states. So, it stands to reason that the inclusion of powerful antioxidants and an antioxidant rich diet will be very beneficial. Our antioxidant nutrients status may prove to be one of our most vital statistics in the future. The best way to approach what to consume every day is to eat a wide variety of natural foods from every colour of the rainbow as clichéd as that may sound. Science has shown how antioxidants and phytonutrients can talk directly to our genes and alter our genetic expression.



Free oxidising radicals are the bodily equivalent of nuclear waste and in simple terms must be disarmed. So, to protect our bodies we need to find the right balance between the intake of antioxidants and exposure to free radicals. Making simple changes to your antioxidant intake each day can reduce the risk of disease and support your body long-term. Reducing oxidative stress is essential for our health long term and providing ample antioxidants every day can also have an impact on this. Oxidative stress can relate to several causes but stress is one of the primary factors. Antioxidants can help to boost your immune system and increase the resistance to infection. We can't stress enough that the best way to ensure you are receiving enough antioxidants is through your diet, even if you're buying organic produce please make sure you wash all your produce. If at all possible, if you are in self-isolation at the moment try and organise to have your produce delivered, there are some great online stores that are delivering organic and commercially grown produce which also include eggs, milk and most of the necessities that you will need week to week. To become more self-sufficient seems to be the message here that many of us have taken on board. We have finally planted our vegetable garden that has sat bare for quite a few months. We have added a list of produce that we recommend as practitioners to provide you an excellent level of antioxidants each day. Prunes, raisins, blueberries, blackberries, kale, strawberries, spinach preferably raw, raspberries, plums, alfalfa sprouts, spinach, broccoli, beets and avocado, always remember every colour of the rainbow.

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Following government guidelines and using common sense is paramount to get through this pandemic. Please contact us if you need further information or if you suffer from a medical condition and would like more specific and individualised nutritional advice. info@prosportsnutragenomix.com