### IMMUNITY

- □ Think of immune protection in 3 stages;
- □ Prevention
- □ System support
- □ Recovery when ill
- □ What can I do to avoid getting ill and recover quickly if I get ill?

## MAIN IMMUNE SYSTEM SUPRESSING FACTORS

- □ Lack of fitness and health = poor health
- Lack of essential nutrients, D, C, A, zinc, selenium
- Excessive stress and lack of sleep
- □ Excessive intake of stimulants and alcohol
- □ Over training
- □ Poor gut health
- □ Multiple exposure or heavy exposure to immune challenges
- Depression and anxiety

# IMMUNE SUPPORTING NUTRIENTS AND RECIPES

Many nutrients are vital for proper immune function. In particular, vitamin A, zinc, selenium and vitamin C are required. However, all nutrients are important along with the b-vitamins.

You can see a full list of vitamins and minerals in the appendix, eating a colourful, plant-based diet with key proteins added in is key.

## Vitamin A Retinol

*Visual system, development and maintenance of skin, healthy reproduction, immune system and antioxidant activity* Liver, egg yolk, whole milk, butter and fish liver.

### Beta carotene and carotenoids

Sometimes known as pro-vitamins or precursors. The body uses beta-carotene to make vitamin A. As the body only converts what it needs; beta carotene is considered to be a safer form of vitamin A, with foods that contain it being making lower in fat, higher in fibre with a myriad of other health benefits as well.

Carrots, green leafy vegetables, yellow vegetables and orange vegetables, including: squash, yams, sweet potatoes, dried apricots, kale, spinach, broccoli spears, green peas, whitefish, ripe tomatoes, and green onions.

## Vitamin C

Manufacturer of all connective tissue, immune function, nervous system, hormone synthesis, carnitine synthesis, absorption and utilisation of other nutritional factors, important antioxidant Cherries, red chilli peppers, green and red peppers, guava, papaya, oranges, cantaloupe, broccoli, cauliflower, Brussel's sprouts, grapefruit, strawberries, kale leaves, parsley, lemon juice, and okra (levels decline quickly once foods have been picked, sliced or boiled).

## **IMMUNE SYSTEM SUPPORT - PREVENTION IS BETTER THAN CURE**

#### Zinc

*Immune function, protein synthesis, cell growth, wound healing, sensory functions, sexual function, skin health* 

Oysters, ginger root, lamb chops, split peas, brazil nuts, soy lecithin, black pepper, paprika, mustard, chilli powder, thyme, cinnamon, sardines, almonds, walnuts, rye, oats, tuna, anchovies, and haddock.

### Selenium

Antioxidant, immune system function, helps produce thyroid hormone, antagonistic to heavy metals Sea food and sea vegetables, Smoked herring, wheat-germ, apple cider vinegar, scallops, barley, sea food, turnips, lamb, most meats and seafood. Choose organic where possible since the soil content dictates the content found in the vegetables and grain.

# **EXAMPLE IMMUNE SYSTEM NUTRIENT RICH DIETARY INTAKE**

Grapefruit juice, berries, oats + manuka honey. Smoothie with tons of vegetables + immune boosting herbs. Whey protein shake with berries.

Large salad with all the colours you can squeeze in there + oily fish. Mackerel Pate + oat cakes. Large soup with added protein.

Large plates of vegetables cooked in different ways. Grilled chicken with garlic, lemon and rosemary. Steak and huge bowl of spinach and lemon / garlic.

## LIFESTYLE HABITS TO AVOID ILLNESS

- □ Basic hygiene
- □ Barrier defence
- □ Wash hands regularly
- □ Avoid ill people
- □ Avoid places where many hands meet
- □ Avoid dehydration
- □ Never share glasses or drinks bottles
- □ Immunity is lowered after intensive exercise
- D Pay particular attention to post training immune support during winter months
- □ Maintain constant temperature
- Avoid frequent extreme fluctuations in temperature\*

\*planned cold exposure and ice-baths should be fine, excessive uncontrolled temperature fluctuations may increase overall stress and increase potential for immune suppression.

## STRESS, SLEEP AND THE CORTISOL CONNECTION

- □ Exercise induced stress and mental stress are the same to the body
- Avoid becoming stressed out unnecessarily
- Use stress management techniques like meditation and visualisation to help combat mental stress
- □ If you are not sleeping well seek help, there are many natural remedies which help proper sleeping patterns e.g. Epsom salt baths + R5 aminos.

### **IMMUNE SYSTEM SUPPORT - PREVENTION IS BETTER THAN CURE**

## **NUTRITIONAL & PHYSCIAL INFLUENCES**

### If you train hard you need to pay more attention to immune system function;

- □ Higher tissue turnover
- □ Higher requirement for nutrients
- □ Modern processed food is low in essential nutrients
- Deficiency or suboptimal nutrient status in essential nutrients e.g. vitamin D and zinc
- □ Eat organic where possible
- □ Avoid anti-nutrients, see list below
- □ Avoid empty calories, see list below

## **IMMUNE SUPPORT AND TRAINING**

- □ Balance training with recovery don't go over drawn
- □ Nutritional Recovery is key to enhancing the immune response
- □ Recover Aggressively and appropriately after each exercise session
- □ Use Antioxidants as part of your recovery strategy when you feel you may be immune compromised
- Add a scoop of immune power to your recovery shake
- Always take a recovery shake after each session

## AVOID THESE (ANTI-NUTRIENTS) 90% OF THE TIME;

# Eating too many of these leaves no room for nutrient dense foods to support your health and immunity;

- □ All refined foods
- □ Sugar (except post training)
- □ Excess Caffeine (more than 2 strong coffees per day)
- □ Alcohol
- □ Cakes, biscuits and pastries
- □ Crisps and confectionary
- □ Soda Pop
- □ Refined Wheat
- □ Chips
- □ Fast and junk foods
- □ Snack a jacks
- Doughnuts
- Sugary Breakfast cereals
- □ All chemically assisted foods

# DO THIS;

Eat vegetables or fruit each time you eat

### **IMMUNE SYSTEM SUPPORT - PREVENTION IS BETTER THAN CURE**

- □ Eat the rainbow!
- □ Choose veggies or fruit which are high in antioxidants
- □ Choose organic whenever possible
- □ When it's not possible then wash all veggies and fruit thoroughly then go and buy some organic ones look at dirty dozen and clean 15 list on <u>www.ewg.org</u>

### UNDERSTAND THIS;

# If you are immune compromised or tend to get an unfair share of colds and flu you need to dig deeper into deficiencies, gut health and inflammation

### GUT HEALTH

- □ Use a quality probiotic to help gut health e.g. symprove or VSL (amazon)
- □ Eat plenty of fibre rich foods
- □ Eat the rainbow and eat lots of different foods each day diversity helps the bowel flora

### Still feeling unwell or getting an unfair share of colds and flu each year? = Digging deeper;

### Food intolerances can increase inflammation and affect immune function

- □ Excess wheat and refined wheat MAY suppress immunity in sensitive individuals
- □ Excess dairy may cause excess mucous production
- □ If you are constantly ill then food intolerance can be a cause

### **ACTION POINTS;**

- Avoid Wheat and food intolerances
- □ Choose non wheat based unrefined cereals
- □ Choose wheat free pastas and breads
- □ Use different grains like quinoa, wholegrain rice or buckwheat

Other toxicity may also contribute e.g. heavy metals, cadmium from smoking other health conditions.

## **RECOVERY WHEN ILL – AND ADDITONAL TIPS TO AVOID GETTING ILL**

- □ Chicken Soup is a proven immune boosting recipe
- □ Thai Tom yum soup has additional immune and recovery benefits
- □ Both of these will help recovery from injury and immune support

### HERBS AND SPICES;

All herbs and spices help immunity, inflammation and health use the following regularly;

- □ Turmeric
- □ Garlic
- □ Ginger and Thai ginger
- □ Lemon grass
- □ Coriander

- □ Chilli's
- □ Coconut Milk
- □ Cumin
- □ All spice
- □ Cinnamon
- □ Lemon
- $\hfill\square$  Try out our immune boosting ready mix, organic spice mix here

# AS SOON AS YOU SENSE ILLNESS

- □ Make sure you are eating lightly according to the basic principles
- □ Use immune boosting drinks 1-4 times per day
- □ Increase your intake of vitamin C from food and supplements
- Drink Cat's Claw tea and add ginger and lemon
- □ If you have a cold then take a dessert spoonful of Sambucol 4 x per day
- □ Use Manuka honey in detox tea to clear mucous and support immunity
- □ Increase use of bovine colostrum

## SUPPLEMENTAL INFORMATION

- Use the immune supplements provided to support your immunity
- Chinese Green Tea may have specific additional immune boosting properties
- Manuka honey also has immune supportive properties

# **IMMUNE RECIPE TIPS**

- Hot lemon, ginger and honey; use 1 teaspoon manuka honey, ½ lemon and 1 teaspoon or powdered or fresh ginger, add our spice mixes to this
- Use tom yum soup paste to make soup and drink this regularly
- Add shitake and other mushrooms to recipes regularly using the immune power formula
- Eat fresh lightly cooked vegetables regularly
- Eat vitamin C rich fruits regularly, lemon and kiwi are excellent