

## VITAMIN C

Stimulates anti-viral immune responses in the body

Used by immune cells to fight infections. Levels decrease during an active infection.

Antioxidant – helps protect the body from damage

### FOODS HIGH IN VITAMIN C

Kiwifruit	Tomatoes
Oranges	Kale
Lemon	Brussel sprouts
Berries	Cauliflower
Papaya	Bok choy
Mango	Yellow capsicum
Grapefruit	Broccoli

Vitamin C is destroyed by cooking. Eat these foods raw or lightly steamed for best benefits.

## ZINC

Needed for the production and action of all white blood cells

Strengthens physical barriers to infection such as the skin and lining of the gut and lungs

Helps to make antioxidants which protect the body from damage

### FOODS HIGH IN ZINC

Tofu	Lamb
Pumpkin seeds	Beef
Baked beans	Chicken
Chickpeas	Salmon
Nuts	Snapper
Wholegrains	Oysters
Grapefruit	

## VITAMIN D

Needed for release of anti-viral chemicals

Strong anti-inflammatory to protect against respiratory complications.

Strengthens physical barriers to infection such as the skin and lining of the gut and lungs

Most adults in Melbourne are deficient in vitamin D in winter

Vitamin D in the body is derived primarily from the reaction of direct sunshine with the skin. Vitamin D is low in foods.

### FOODS WITH VITAMIN D

Egg yolk	Salmon
Dairy products	Tuna
Cod liver oil	Mushrooms left in the sun for a few hours before eating



## IMMUNE BOOSTERS

Garlic	Reishii mushrooms
Ginger	Shiitake mushrooms
Turmeric	

To active the immune boosting chemicals in garlic, crush the garlic and leave on the bench for 10 minutes before using.

Always consume turmeric with black pepper or a source of fat (i.e. coconut milk/cream, meat, fish, nuts or milk) to help absorption.

## **GUT HEALTH**

70% of the immune system is in our gut

Our gut microbiome – the collection of trillions of microbes living inside the gut – influence immune health all around the body.

We need a diverse microbiome with many different type of 'good bugs' for a healthy immune system.



## **PREBIOTICS**

Fertiliser for our gut microbes

Help increase the number of 'good' bugs in the gut and the production of chemicals which support the immune system.

### **PREBIOTIC RICH FOODS**

#### **FRUITS**

Custard apples, nectarines, white peaches, persimmon, tamarillo, watermelon, rambutan, grapefruit, pomegranate, green (unripe) bananas

#### **VEGETABLES**

Jerusalem artichokes, chicory, garlic, onion, leek, shallots, spring onion, asparagus, beetroot, fennel bulb, green peas, snow peas, sweetcorn, savoy cabbage, cooked and cooled potato.

#### **LEGUMES**

Chickpeas, lentils, red kidney beans, baked beans, soybeans

#### **CEREALS**

Barley, rye bread, rye crackers, pasta, gnocchi, couscous, wheatbran, wheat bread, oats

#### **NUTS & SEEDS**

Cashews, pistachio nuts, flax seeds

## **PROBIOTICS**

Fermented foods containing live bacteria that temporarily interact with our gut microbiome to help promote antimicrobial defenses and suppress the growth of 'bad' gut bugs.

### **FOODS HIGH IN PROBIOTICS**

Yoghurt	Raw Apple Cider Vinegar
Kombucha	Sauerkraut
Keffir	Kimchi
Miso	

## **SUPPORTING THE MICROBIOME**

Limit all processed foods

Avoid fried foods and foods high in refined sugar

Limit alcohol intake

Limit meat intake. Try having 3 meat free days a week.

Increase intake of plant-based foods - fruits, vegetables, nuts, seeds & wholegrains.

## IMMUNE BOOSTING MEAL PLAN

<b>BREAKFAST</b>	Oat porridge (Prebiotic) with berries (source of vitamin C), half an unripe banana (prebiotic), a dollop of yogurt (probiotic) and a big sprinkle of pumpkin seeds (source of zinc)
<b>SNACK</b>	Kiwi fruit (source of vitamin C) + handful of nuts (prebiotic) Fresh ginger + lemon tea
<b>LUNCH</b>	Roasted carrot and ginger soup (immune boosters) topped with cooked chickpeas (prebiotic) OR Vegetable frittata (source of vitamin D, prebiotics and vitamin C)
<b>SNACK</b>	Healthy apple muffin (gluten free + vegan) + 1 glass kombucha
<b>DINNER</b>	Lentil 'Bolognese' sauce (immune boosters + prebiotic) with a sweet potato spud/ zucchini noodles OR Baked salmon (source of vitamin D and zinc) marinated with ginger, garlic and soy sauce (immune boosters) served with stir fried shiitake mushrooms (immune boosters) and fresh bok choy (vitamin C)

## RECIPES

### ROASTED CARROT & GINGER SOUP

#### INGREDIENTS

- 1 kg carrots - cut into small chunks
- 1 onion - sliced
- 4 tablespoons olive oil
- 4 cloves of garlic - minced
- 3 large thumbs of ginger - grated
- 1-2 tsp cinnamon
- Salt and pepper to taste
- 6 cups of vegetable stock
- Half a can of coconut milk

#### METHOD

- Preheat oven to 180 degrees Celsius
- Coat carrots in 2 tablespoons of olive oil, salt and pepper, lay on a baking tray in a single layer and roast for 45 minutes.
- In a large pot heat the remaining 2 tablespoons of olive oil on high heat. Add onions and fry for 3 minutes or until translucent.
- Add garlic and ginger and fry for 1 minute
- Add the roasted carrots and the rest of the ingredients, excluding the coconut milk, and bring to the boil.
- Turn heat down to low/ medium, cover and simmer for 15-20 minutes.
- Turn off heat, add coconut milk, and blend with a handheld blender (you can also mash or transfer to a food processor in batches).
- Add more water for a thinner soup.



## **VEGAN LENTIL 'BOLOGNESE'**

### **INGREDIENTS**

- 1 onion - diced
- 1 carrot - diced
- 2 celery sticks - diced
- 250g mushrooms - chopped
- 3 cloves garlic - minced
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- 2 tablespoons olive oil
- 1 can lentils - rinsed and drained
- 1 can tinned tomatoes
- 1.5 cup vegetable stock
- 3 tsp combined dried Italian herbs - e.g. rosemary, thyme, basil and/ or oregano.

### **METHOD**

- Heat olive oil in a large fry pan on medium/high heat and add onions. Fry until onions become translucent (around 3-4 mins)
- Add in the rest of the vegetables and garlic, and fry for another 3 minutes.
- Add
- in the tinned tomatoes, vegetable stock, lentils, dried herbs and salt
- and pepper to taste. Bring to the boil, cover the pan and turn heat to
- low/ medium. Simmer for 15 minutes, stirring occasionally.
- Uncover and simmer for an extra 5 minutes or until sauce has reached desired consistency.
- Serve with pasta, zoodles or a sweet potato spud.

## **HEALTHY APPLE + SULTANA MUFFINS**

### **INGREDIENTS**

- 2 apples - grated
- 2 cups almond meal
- 1 tsp baking powder
- 1 tsp bicarb soda
- 2 eggs
- 1/3 cup sultanas (can swap for walnuts)
- 1/4 cup raw honey
- 1/3 cup soy milk
- 1 tsp cinnamon
- 1/4 cup coconut oil - melted

### **METHOD**

- Preheat oven to 180 degrees Celsius. Line a tray with muffin liners or grease a muffin tin with extra coconut oil.
- In a large bowl mix together the almond flour, baking powder and bicarb soda.
- In a separate bowl mix together the remaining ingredients (apple, eggs, sultanas, honey, milk, cinnamon and coconut oil).
- Fold the wet mixture into the almond flour mixture until well combined.
- Pour into muffin holders - filling around 3/4 way. This mixture should make 10-12 muffins.
- Bake for 20-25 minutes or until muffins start to brown.

