# WHY IS IRON IMPORTANT?

Iron makes red blood cells and is a vital mineral for transporting oxygen throughout the body. Iron deficiency is very common. In fact, it is the world's most common nutritional deficiency. Being tired and anaemic can be a sign of low iron levels. Your doctor can check you iron levels with a blood test. There are plenty of sources of iron in a plant based diet. Remember that absorption of iron is increased by adding vitamin C with every meal.

# TOO MUCH IRON?

Consult your doctor before taking iron supplements because excessive iron has been linked to cardiovascular disease, certain cancers and other health problems.

# **IRON ABSORPTION INHIBITORS**

Because tannins, oxalates and phytates can negatively affect iron absorption, avoid consuming large quantities of the following foods, especially at meal times:

- tea and coffee (contain tannins)
- cocoa and spinach (contain oxalates)
- whole grains and bran (high in phytates)



# TIPS FOR IMPROVING IRON ABSORPTION

- ✓ Steam vegetables to retain as many of the nutrients as possible
- ✓ Drink tea between meals rather than during or straight after a meal
- ✓ Wheat bran inhibits iron absorption so avoid sprinkling it over your meal
- $\checkmark$  Include vitamin C rich foods with your meals (broccoli, green pepper, cabbage, kiwifruit)
- $\checkmark$  Drizzle lemon juice over food or make a citrus-based salad dressing
- $\checkmark$  Store vegetables in a cool, dark place. Buy fresh vegetables and eat them promptly

# FOUND THIS USEFUL? WE HAVE LOADS MORE.

Visit our website for a complete list of helpful nutrition leaflets, recommended links and vegan recipes.





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Written by Yolanda Soryl, March 2019. Medical advisor: Dr Mathew Hobbs. Thanks to the members of our vegan community for providing their photos for our leaflets.

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# CHRISTCHURCH COCIETY

# IRON AND YOUR PLANT-BASED DIET

It's a common misconception that vegans are likely to be iron deficient and therefore anaemic. However, there is no evidence that vegans, or even vegetarians, are any more likely to develop anaemia than non-vegans.<sup>1</sup>

There are two types of iron: heme (from meat) and non-heme (from plant foods). Heme iron intake has been shown to positively co-relate to coronary heart disease<sup>2</sup> and cancer.<sup>3</sup> There are plenty of sources of iron in a plant based diet.

# DID YOU KNOW?



Vegans and vegetarians are no more likely to develop anaemia than non-vegetarians

3 IRON (& VIT C)

Iron absorption is greatly increased by adding vitamin C with every meal

Dark chocolate is an excellent source of iron. Great news, right?

<sup>7</sup> Too much iron can be bad for you

#### **EXCELLENT PLANT-BASED SOURCES OF IRON**













Millions of vegans and vegetarians worldwide have lived perfectly normal lives, without the need for iron supplementation in any form, and have in fact, excelled professionally, academically and in sport.

#### THE VITAMIN C CONNECTION

Did you know that eating vitamin c foods can considerably increase the amount of iron you absorb at mealtimes? It's easy to add vitamin C to your meals – a glass of orange juice, a lemony salad dressing or a kiwifruit for dessert will do the job nicely. If you are worried about your iron levels, check that you routinely eat vitamin C foods with iron foods to ensure you are enhancing your iron absorption. Vitamin C also has many other positive health benefits.

### **GOOD VITAMIN C SOURCES**

Increase your iron absorption by including food containing vitamin C at every meal.

- citrus fruits (oranges, lemons, mandarins)
- berries (strawberries, raspberries)
- kiwifruit, pineapple, mango
- vegetables such as capsicums,

tomatoes, broccoli, kale and cabbage

# **GOOD IRON SOURCES**

In the average diet a significant proportion of plant-based iron is typically obtained from pasta, rice, cereals and breads. Iron content is higher in whole rather than refined foods. In addition to the list below, iron fortified foods are also available in some breakfast cereals, marmite, plantbased meats and milks.

#### EXAMPLES OF EXCELLENT PLANT-BASED IRON SOURCES

- 1 cup red kidney beans (4.5mg)
  1 cup baked beans (2.4mg)
  1 cup red lentils, cooked (1.8mg)
  1/2 cup hummus (1.9mg)
  1 cup quinoa, cooked (2.8mg)
  1 cup porridge (3.4mg)
  1/2 cup coconut milk (3.8mg)
  100gm tofu (5mg)
  1 cup beansprouts (.9-1mg)
  2 slices wholemeal bread (1mg)
  1 cup brown rice, cooked (1mg)
- 2 Weetbix (2mg) 1/2 cup dried fruit (1-2mg) 2 tbsp of seeds (pumpkin, sesame, hemp, flaxseed) (2-4.2mg) 7 squares of dark chocolate (3.3mg) 1/2 cup broccoli (1mg) 1 large potato (1mg) Handful of nuts (1.8-2.6mg)

# FREE DOWNLOADS

We have many other informative leaflets on health and nutrition, including raising vegan children, available at: veganchristchurch.org.nz

# **COOK WITH A LUCKY FISH!**

Try cooking with cast iron pans or a 'Lucky Iron

Fish'. In Guatemala, iron levels in the population were increased when these little iron fish were placed in the cooking pots.<sup>4</sup>







#### "Well planned vegan and other types of vegetarian diets are appropriate for all stages of the life cycle, including during pregnancy, lactation, infancy, childhood, and adolescence."

#### American Dietetic Association, Dietitians of Canada: Vegetarian Diets. Statement supported by Dietitians New Zealand.

REFERENCES: 1) Craig, W.J., (1994) 'Iron status of vegetarians.' AmJ.ClinNut. 2) Hunnicutt, J., (2014) 'Dietary iron intake and body iron stores are associated with risk of coronary heart disease in a meta-analysis of prospective cohort studies.' J Nutr. 3) Fonseca-Nunes, A. (2014) 'Iron and cancer risk--a systematic review and meta-analysis of the epidemiological evidence' Cancer Epidemiol Biomarkers Prev. 4) Rodriguez-Vivaldi, A.M., Beerman K., (2018) 'Testing the efficacy of the Lucky Iron Fish® in reversing iron deficiency anemia in rural, impoverished regions of Guatemala.' J Glob Health Rep.