

Vitamin and Mineral Guide

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Introduction

Welcome to my quick whistle-stop tour of both vitamins and minerals. In this handy guide, you will get to learn about why each specific nutrient is important, and which foods contain them. I have kept it brief as I understand that in depth information isn't always fun.

This guide is intended to help you make better food choices, and ensure you are getting as many different varieties of nutrient as possible throughout your diet. The food lists are not exhaustive mind you!

The source used to obtain the quantities of vitamins/ minerals is the McCance Widdowsons Composition of Foods Integrated Database, which can be found here:

<https://www.gov.uk/government/publications/composition-of-foodsintegrated-dataset-cofid>

(It's massive, honestly)

In terms of portion sizes, I have tried to base it off recommended/ average portion sizes, so you may have to adjust according to your own intake.

Recommended daily requirements set by NHS guidance

- mg = Milligrams

- mcg = Micrograms (1000 x smaller than milligrams)

Vitamins

Vitamin A

Vitamin B1 - Thiamine

Vitamin B2 - Riboflavin

Vitamin B3 - Niacin

Vitamin B5 - Pantothenic Acid

Vitamin B6 - Pyridoxine

Vitamin B9 - Folate

Vitamin B12 - Cobalamin

Vitamin C

Vitamin D

Vitamin E

Vitamin K

Vitamin A

A fat soluble vitamin naturally present in foods. It is important for our immune systems, vision, growth & development and reproduction.

Daily Requirements

Men : 900mcg / Women : 700mcg

Foods containing vitamin A



1 Sweet Potato
(~130g)
- **1100mcg**



80g Red Pepper
- **80mcg**



80g Carrots
- **1480mcg**



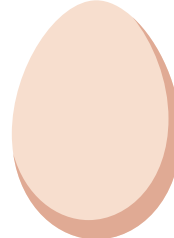
80g Baby Spinach
- **365mcg**



30g Dried Apricot
- **30mcg**



80g Mango
- **92mcg**



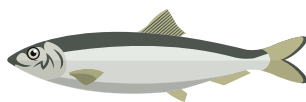
1 Large Egg
- **120mcg**



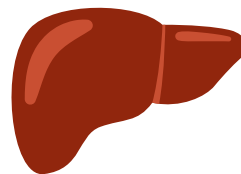
30g Cheese
Spread - **70mcg**



30g Cheddar
Cheese-
116mcg



100g Mackerel
- **61mcg**



100g Lambs Liver
- **17,300mcg**



20g Liver Pate
- **1460mcg**

Vitamin B1- Thiamine

A water soluble vitamin which assists the body in breaking down, and releasing energy from food, whilst also supporting the central nervous system

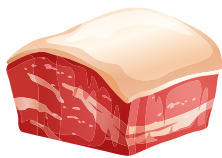
Daily Requirements

Men : 1mg / Women : 0.8mg

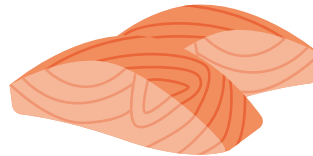
Foods containing vitamin B1



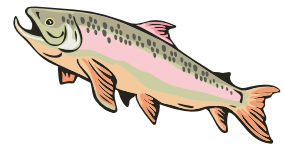
80g Peas
- **0.56mg**



100g Lean Diced
Pork - **0.46mg**



100g Baked
Salmon - **0.26mg**



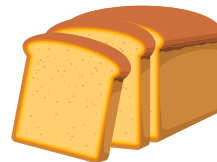
100g Rainbow
Trout - **0.13mg**



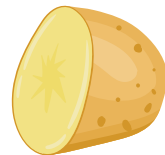
80g Baked
Beans - **0.16mg**



180g Cooked
Wholegrain Rice
- **0.2mg**



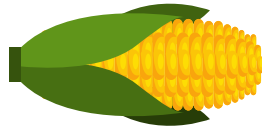
2 Slices of bread
(Average) -
0.18mg



100g Boiled
Potatoes - **0.22mg**



80g Cooked
Lentils - **0.08mg**



80g Sweetcorn
- **0.2mg**



10g Sesame
Seeds - **0.16mg**



180g Whole wheat
Pasta - **0.2mg**

Vitamin B2- Riboflavin

A water soluble vitamin which assists the body in releasing energy from foods, and helps keep the eyes, skin and central nervous system healthy

Daily Requirements

Men : 1.3mg / Women : 1.1mg

Foods containing vitamin B2



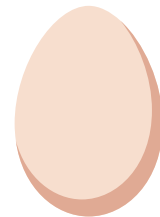
200ml Milk
- **0.48mg**



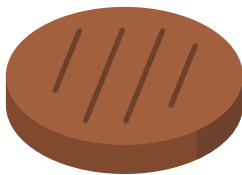
100g Plain
Yoghurt - **0.22mg**



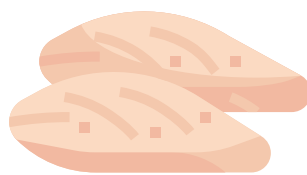
30g Cheddar
Cheese - **0.13mg**



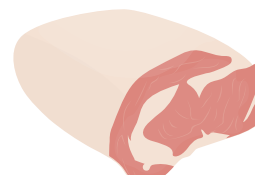
1 Large Egg
- **0.47mg**



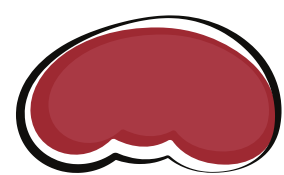
100g Lean Beef
Burger - **0.22mg**



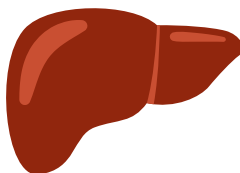
100g Chicken
Breast - **0.13mg**



100g Pork
Steak - **0.76mg**



75g Lamb
Kidney - **2.25mg**



100g Lambs Liver
- **4.64mg**



30g Whole
Almonds - **0.34mg**



80g White
Mushrooms-
0.21mg



80g Baby
Spinach - **0.16mg**

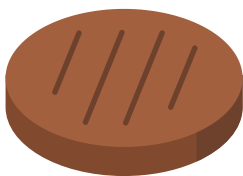
Vitamin B3- Niacin

A water soluble vitamin which assists the body in releasing energy from foods, and helps keep the, skin and central nervous system healthy

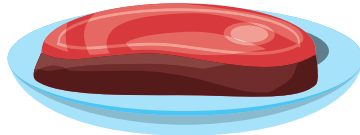
Daily Requirements

Men : 16.5mg / Women : 13.2mg

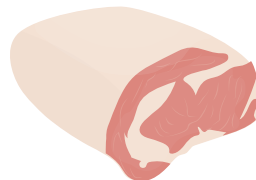
Foods containing vitamin B3



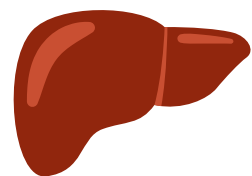
100g Lean Beef
Burger - **5.1mg**



100g Sirloin Steak
- **6.1mg**



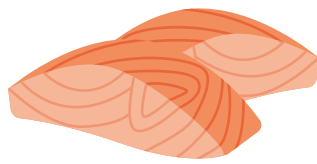
100g Lean Pork
Steak - **8.7mg**



100g Lambs Liver
- **19.9mg**



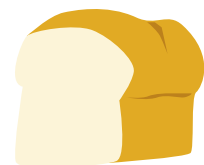
100g Chicken
Breast - **15.8mg**



100g Baked
Salmon - **8.6mg**



100g Baked
Seabass- **2.6mg**



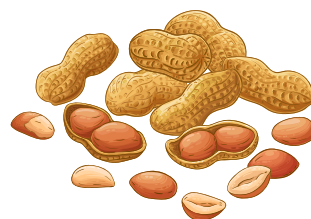
2 Slices of White
bread - **1.4mg**



180g Cooked
Wholegrain Rice
- **3.6mg**



30g Whole
Almonds- **1.1mg**



30g Dry Roasted
Peanuts- **3.9mg**



80g Cooked
Kidney Beans
0.6mg

Vitamin B5- Pantothenic Acid

A water soluble vitamin which assists the body in releasing energy from foods, and helps to make and break down fats.

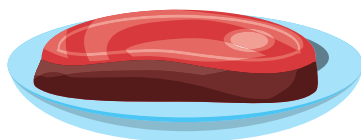
Daily Requirements

5mg in Adults

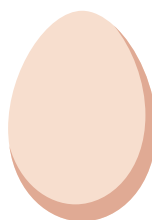
Foods containing vitamin B5



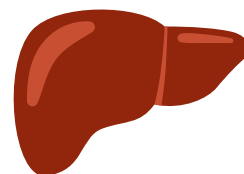
100g Chicken Breast - **1.7mg**



100g Sirloin Steak - **0.8mg**



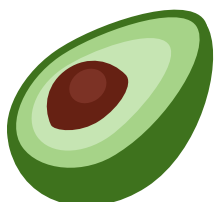
1 Large Egg - **0.85mg**



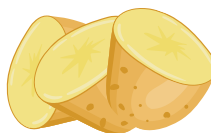
100g Lambs Liver - **8mg**



80g Mushrooms - **2.2mg**



80g Avocado - **1mg**



100g New Potatoes - **0.5mg**



200ml Milk - **1.4mg**



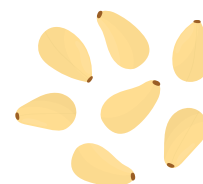
100g Greek Yoghurt - **0.56mg**



80g Boiled Broccoli - **0.46mg**



40g Oats - **0.3mg**



10g Sesame Seeds - **0.2mg**

Vitamin B6- Pyridoxine

A water soluble vitamin which assists the body in releasing energy from foods, and helps produce Haemoglobin, a substance which helps carry oxygen around the body

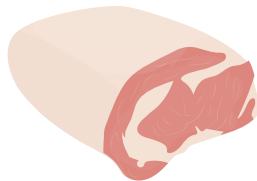
Daily Requirements

1.4mg : Men / 1.2mg : Women

Foods containing vitamin B6



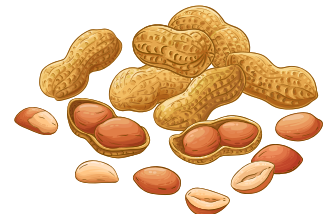
100g Turkey Breast - **0.63mg**



100g Pork Steak - **0.42mg**



100g Tinned Tuna - **0.31mg**



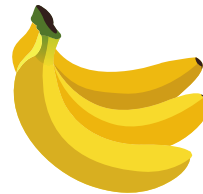
30g Dry Roasted Peanuts- **0.54mg**



40g Oats - **0.17mg**



30g Wheatgerm - **0.77mg**



100g Banana - **0.31mg**



80g Soya Beans - **0.18mg**



80g Chickpeas - **0.30mg**



80g Mature Spinach - **0.08mg**



80g Spring Greens - **0.14mg**



80g Brussel Sprouts - **0.18mg**

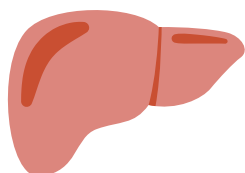
Vitamin B9- Folate

A water soluble vitamin which helps with the formation of DNA and red blood cells. It also helps reduce the risk of neural tube defects in unborn babies. Folic acid is the man-made version of folate, which is used to fortify foods such as cereals and bread.

Daily Requirements

Adults : 200 mcg

Foods containing B9



100g Chicken Liver
- **995mcg**



80g Brussel
Sprouts
- **99mcg**



80g Baby Spinach
- **108mcg**



80g Spring
Greens - **52.8mcg**



80g Boiled
Broccoli - **57.6mcg**



80g Steamed
Asparagus -
81.6mcg



80g Kale
- **77.6mcg**



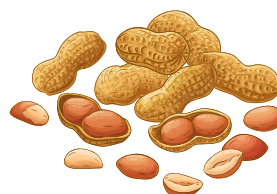
80g Peas
- **48mcg**



80g Chickpeas
- **28mcg**



80g Cooked
Kidney Beans
- **36mcg**



30g Dry Roasted
Peanuts- **13.2mcg**



150ml Orange
Juice- **42mcg**

Vitamin B12- Cobalamin

A water soluble vitamin which helps to keep blood and nerve cells healthy, helps the formation of DNA, helps the body use folate, and prevents a form of anemia, a condition in which people can feel tired and weak.

Daily Requirements

Adults : 1.5 mcg

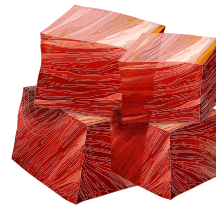
Foods containing B12



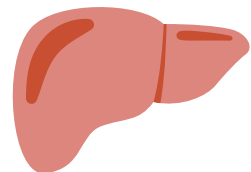
100g Turkey Breast - **1mcg**



100g Pork Sausage - **1mcg**



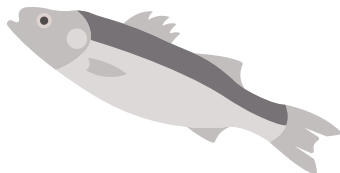
100g Braising Steak - **2mcg**



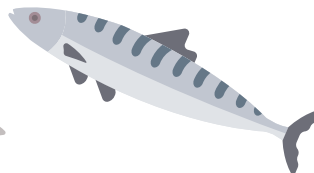
100g Chicken Liver - **35mcg**



100g Tinned Tuna - **3.4mcg**



100g Baked Seabass - **2.9mcg**



100g Mackerel - **9.1mcg**



100g Baked Salmon - **3.4mcg**



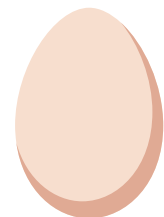
200ml Milk - **1.8mcg**



100g Greek Yoghurt - **0.2mcg**



30g Cheddar Cheese - **0.72mcg**



1 Large Egg - **1.2mcg**

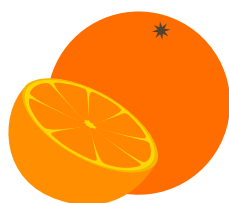
Vitamin C

A water soluble vitamin which acts as an antioxidant, protecting cells from damage caused by 'free radicals', which are produced when we convert food to energy, or from pollution such as cigarette smoke & air pollution. It also helps to make collagen, supports our immune system and helps to absorb iron from food.

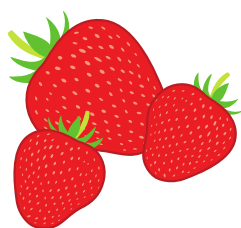
Daily Requirements

Adults : 40mg

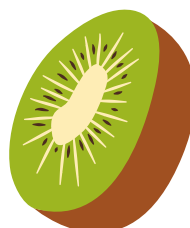
Foods containing vitamin C



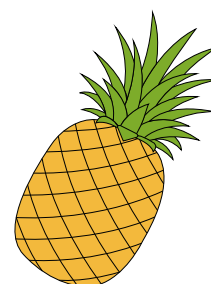
1 Average
Orange - **72mg**



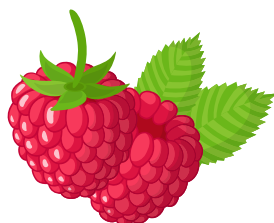
80g Strawberries
- **45mg**



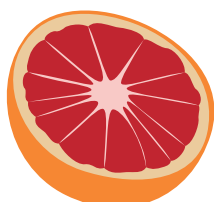
1 Average Kiwi
- **50mg**



80g Pineapple
- **42mg**



80g Raspberries
- **15mg**



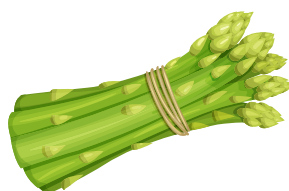
1/2 Average
Grapefruit - **35mg**



80g Green Pepper
- **96mg**



80g Boiled
Broccoli - **35.2mg**



80g Steamed
Asparagus - **8mg**



80g Brussel
Sprouts - **32mg**



80g Boiled
Cabbage - **36mg**



80g Cauliflower
- **24mg**

Vitamin D

Vitamin D helps absorb calcium, which is essential for excellent bone health. Your muscles need vitamin D to move, and your immune system requires it to help fight off infection.

Daily Requirements

Adults : 10mcg / 400 IU

Sunshine

Most of us will be able to get enough vitamin D from sunlight exposure, and here's the best way to do it...

15 minutes with maximum skin exposure when the sun is at it's brightest, typically early afternoon, without any protection.

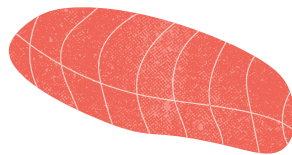
Just make sure to apply sunscreen after 15 minutes to avoid sunburn!



Foods containing vitamin D



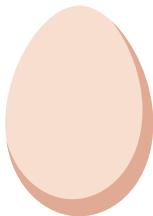
100g Baked Salmon - **7.3mcg**



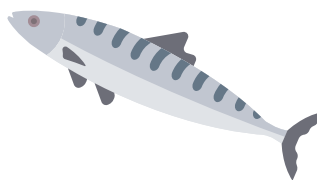
100g Tuna Steak - **3.1mcg**



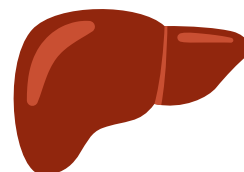
100g Tinned Sardines - **3.3mcg**



1 Large Egg - **7.3mcg**



100g Mackerel - **8.3mcg**



100g Lambs Liver - **0.5mcg**

Vitamin E

Vitamin E helps to maintain healthy eyes and skin, supports with the immune system, acts as an antioxidant and also helps to keep blood vessels widened to reduce the risk of blood clotting.

Daily Requirements

4mg : Men / 3mg : Women

Foods containing vitamin E



10ml Sunflower
Oil - **4.9mg**



10ml Safflower
Oil - **4mg**



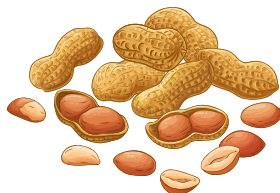
10ml Wheatgerm
Oil - **13.6mg**



10g Sunflower
Seeds- **3.7mg**



30g Whole
Almonds- **7.7mg**



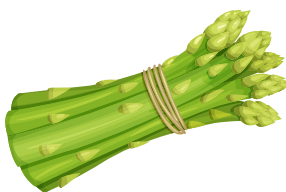
30g Dry Roasted
Peanuts- **3mg**



80g Baby Spinach
- **0.53mg**



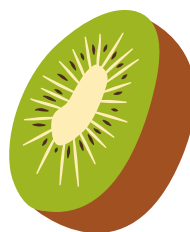
80g Red Pepper
- **0.76mg**



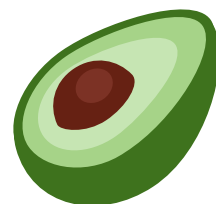
80g Grilled
Asparagus - **1.4mg**



80g Mango
- **0.76mg**



1 Average Kiwi
- **1.3mg**



80g Avocado
- **1.75mg**

Vitamin K

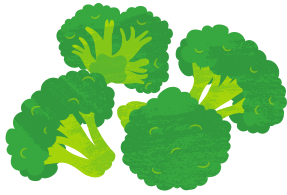
Vitamin K helps with the process of blood clotting, which helps to heal wounds. It also plays a role in keeping our bones healthy.

Daily Requirements

Approximately 1mcg/ KG bodyweight

e.g. an 80kg person would need 80mcg/day

Foods containing vitamin K



80g Broccoli
- 108mcg



80g Spinach
- 460mcg



80g Brussel Sprouts
- 101mcg



80g
Cabbage - 160mcg



80g Spring
Greens - 714mcg



80g Kale
- 498mcg



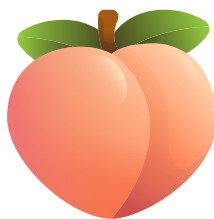
80g Lettuce
- 103mcg



10ml Olive Oil
- 5.7mcg



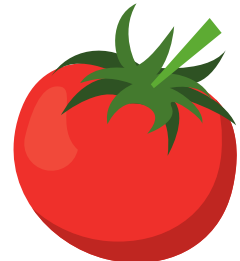
10ml Rapeseed
Oil - 11.2mcg



1 Average
Peach - 7.54mcg



80g Peas
- 31mcg



80g Tomatoes
- 4.8mcg

Minerals

Calcium

Iron

Magnesium

Zinc

Selenium

Phosphorous

Potassium

Iodine*

Copper

*Iodine not mentioned on NHS website. RDA obtained from 'National Institutes of Health, Office of Dietary Supplements'

Calcium

Calcium helps to maintain strong bones and teeth, whilst also supporting muscle contractions, and moving blood around the blood vessels.

Daily Requirements

Adults : 700mg

Foods containing calcium



200ml Milk
- **250mg**



100g Greek Yoghurt -
126mg



30g Cheddar
Cheese - **221mg**



30g Cheese
Spread - **149mg**



80g Kale
- **184mg**



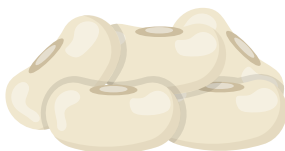
80g Broccoli
- **35mg**



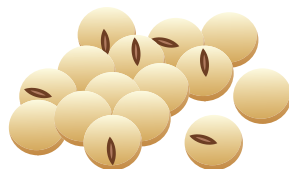
80g Purple Sprouting
Broccoli - **88mg**



30g Almonds
- **80mg**



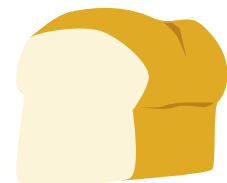
80g Haricot
Beans- **89mg**



80g Soya
Beans - **66mg.**



55g Tinned Sardines
- **275mg**



2 Slices of White
bread - **118mg**

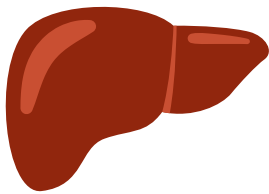
Iron

Iron helps with growth and development. It enables the production of hemoglobin, which is a protein in red blood cells responsible for transporting oxygen to all parts of the body.

Daily Requirements

Men : 8.7mg - Women : 14.8mg

Foods containing iron



100g Lambs Liver
- **7.7mg**



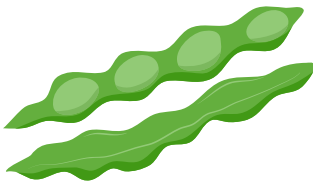
80g Mince
Beef - **1.84mg**



100g Mussels
- **3.25mg**



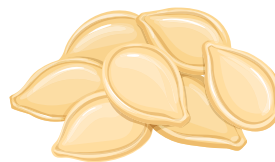
80g Kidney
Beans - **2mg**



80g Broad
Beans - **1.44mg**



80g Chickpeas
- **1.52mg**



10g Pumpkin
Seeds - **1mg**



30g Almonds
- **1.1mg**



30g Cashew
Nuts - **1.86mg**



30g Dried Apricots
- **1.23mg**



80g Red Lentils
- **1.7mg**



80g Baby
Spinach - **2.1mg**

Magnesium

Magnesium helps with energy production from foods we eat. It also plays a role in making sure muscles contract, the heart beats regularly, and supports with bone health.

Daily Requirements

Men : 300mg - Women : 270mg

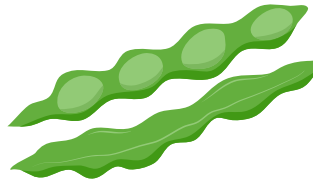
Foods containing magnesium



80g Baby Spinach
- **90mg**



80g Kidney Beans - **32mg**



80g Broad Beans - **33mg**



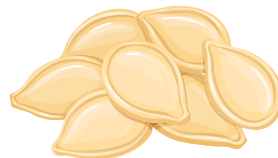
80g Soya Beans - **50mg.**



30g Brazil Nuts - **123mg**



30g Cashew Nuts - **81mg**



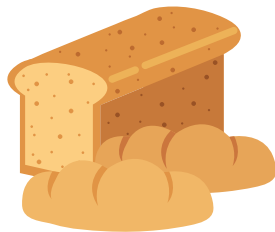
10g Pumpkin Seeds - **27mg**



10g Sesame Seeds - **37mg**



2 Average Wheat Biscuits - **41mg**



2 Slices of Whole meal Bread - **50mg**



100g Baked Potato With Skin - **27mg**



80g Banana - **22mg**

Zinc

Zinc plays a role in supporting the immune system fight off infection. It also helps with the production of cells and supports with wound healing.

Daily Requirements

Men : 9.5mg - Women : 7mg

Foods containing zinc



100g Oysters
- **59mg**



100g Crab
Meat - **7.2mg**



100g Mussels
- **3.4mg**



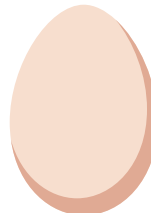
100g Cooked
Prawns - **1mg**



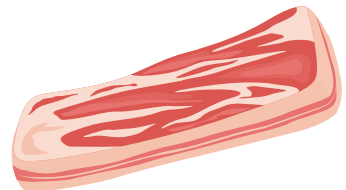
80g Mince
Beef - **4.9mg**



100g Chicken
Breast - **0.8mg**



1 Large Egg
- **0.8mg**



80g Lamb Neck
Fillet - **4.6mg**



80g Chickpeas
- **0.88mg**



80g Kidney
Beans - **0.72mg**



10g Pumpkin
Seeds - **0.66mg**



30g Cheddar
Cheese - **1.23mg**

Selenium

Selenium helps protect the body from infection, whilst also preventing damage from 'free radicals'. It plays a role in reproduction, DNA production as well as thyroid gland function.

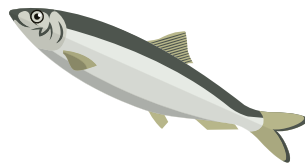
Daily Requirements

Men : 75mcg - Women : 60mcg

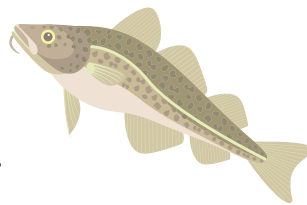
Foods containing selenium



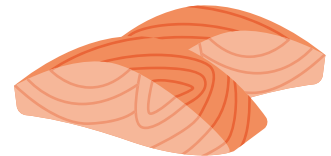
30g Brazil Nuts
- 76.2mcg



100g Mackerel
- 60mcg



100g Cod Loin
- 44mcg



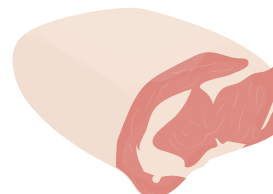
100g Salmon
- 20mcg



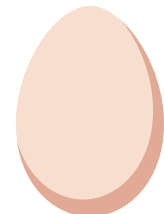
100g Tinned Tuna
- 69mcg



100g Turkey Breast
- 15mcg



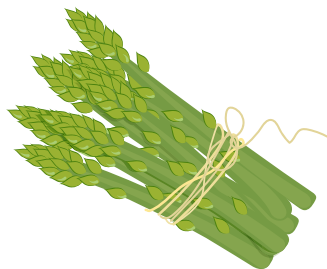
100g Pork Steak
- 29mcg



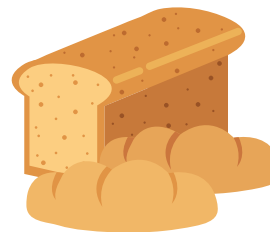
1 Large Egg
- 16.2mcg



80g Chickpeas
- 24mcg



80g Asparagus
- 8.8mcg



2 Slices Whole Meal Bread
- 5.25mcg



80g Tinned Lentils
- 14.4mcg

Potassium

Potassium plays a major role in helping the heart and kidneys function, whilst also ensuring muscles contract. It also helps with fluid balance within the body.

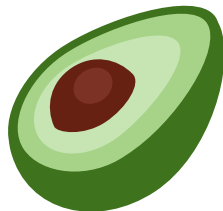
Daily Requirements

Adults : 3,500mg

Foods containing potassium



80g Banana
- 264mg



80g Avocado
- 466mg



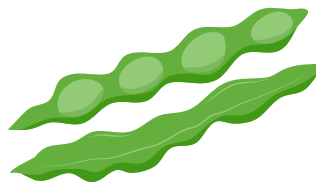
80g Broccoli
- 298mg



80g Parsnip
- 255mg



80g Brussel Sprouts
- 323mg



80g Broad Beans - 33mg



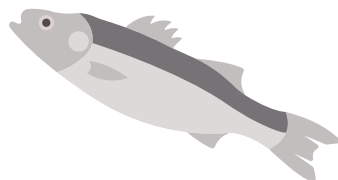
80g Baked Beans - 217mg



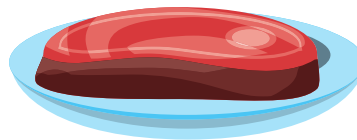
30g Cashew Nuts - 219mg



10g Pumpkin Seeds - 82mg



100g Baked Seabass - 390mg



100g Sirloin Steak - 370mg



100g Turkey Breast - 550mg

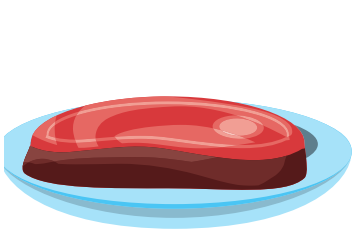
Phosphorus

Phosphorus is a mineral needed to support with healthy teeth and bones, whilst also helping to release energy from foods.

Daily Requirements

Adults : 550mg

Foods containing phosphorus



100g Sirloin Steak
- **220mg**



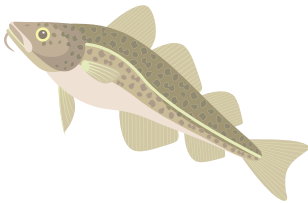
200ml Milk
- **188mg**



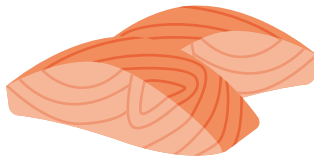
100g Greek Yoghurt -
138mg



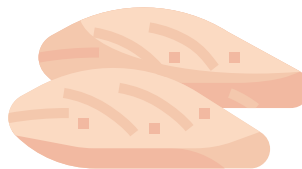
30g Cheddar
Cheese - **165mg**



100g Cod Loin
- **238mg**



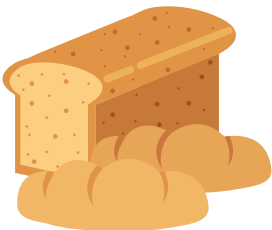
100g Salmon
- **262mg**



100g Chicken
Breast - **0.8mg**



10g Pumpkin
Seeds - **82mg**



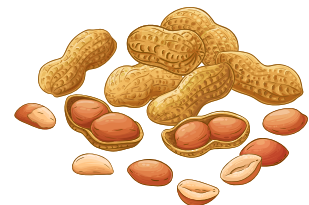
2 Slices Whole Meal
Bread - **152mg**



180g Brown Rice
- **205mg**



40g Oats
- **155mg**



30g Dry Roasted
Peanuts - **126mg**

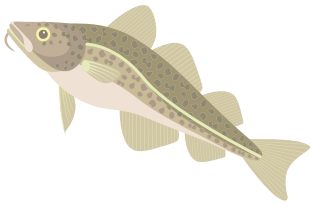
Iodine

Iodine is essential for making thyroid hormones. It also plays an active role in the development of bone and brain in infancy. It is important that pregnant women and infants in particular, get enough iodine.

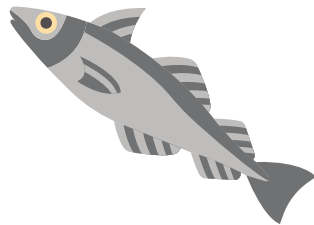
Daily Requirements

Adults : 150mcg

Foods containing iodine



100g Cod Loin
- 276mcg



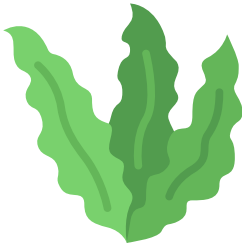
100g Haddock Loin
- 421mcg



100g Shrimp
- 100mcg



100g Tuna
- 12mcg



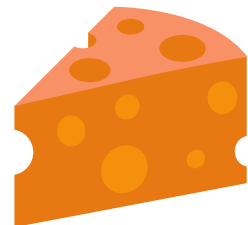
5g Dried Nori
- 74mcg



200ml Milk
- 42mcg



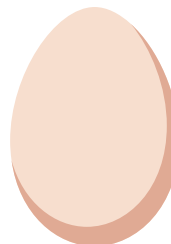
100g Greek Yoghurt -
39mcg



30g Red Leicester
- 13.8mcg



30g Halloumi -
18mcg



1 Large Egg -
31.2mcg

Copper

Copper is involved in quite a bit, including the production of connective tissue, red & white blood cells and making energy. It also plays a role in supporting both the immune and nervous system

Daily Requirements

Adults : 1.2mg

Foods containing copper



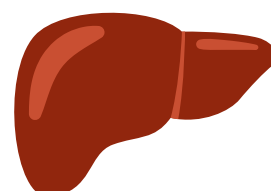
100g Crab
Meat - **0.95mg**



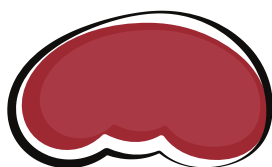
100g Mussels
- **0.17mg**



100g Prawns
- **0.28mg**



100g Lambs Liver
- **13.54mg**



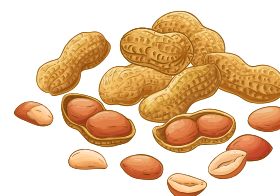
75g Lamb
Kidney - **0.44mg**



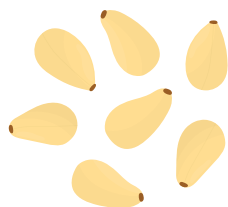
30g Pecans
- **0.32mg**



30g Hazelnuts
- **0.37mg**



30g Dry Roasted
Peanuts- **0.3mg**



10g Sesame
Seeds - **0.14mg**



10g Sunflower
Seeds - **0.23mg**



80g White
Mushrooms- **0.22mg**



100g Tofu -
0.2mg