

Vitamin & Mineral Guide

Eugene Gristock, BSc, Anutr



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-foods-integrated-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)

Hope it helps! *Eugene*



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



30g Dried Apricot



80g Red Pepper - **80mcg**



80g Mango - **92mcg**



80g Carrots - **1480mcg**



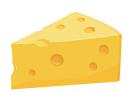
1 Large Egg -120mcg



80g Baby Spinach - **365mcg**



30g Cheese Spread - **70mcg**



30g Cheddar Cheese-**116mcg**



100g Mackerel - **61mcg**



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



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



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



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**



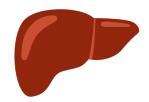
100g Chicken Breast - **0.13mg**



100g Pork Steak - **0.76mg**



75g Lamb Kidney - **2.25mg**



100g Lambs Liver



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



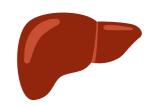
100g Lean Beef Burger - **5.1mg**



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**



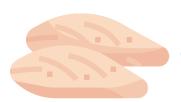
80g Cooked Kidney Beans **0.6mg**



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



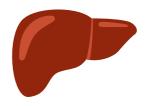
100g Chicken Breast - **1.7mg**



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



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**



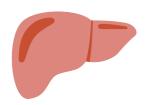
Vitamin B9- Folate

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 - **995mcq**



80g Brussel
Sprouts
- 99mcq



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**



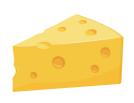
100g Baked Salmon - **3.4mcg**



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



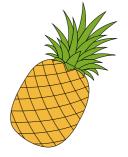
1 Average Orange - **72mg**



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**

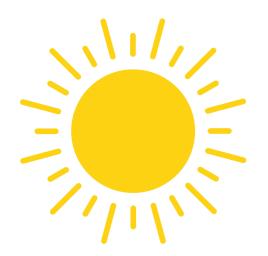


Vitamin D

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!



100g Baked Salmon - **7.3mcg**



1 Large Egg - **7.3mcg**



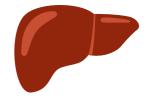
100g Tuna Steak
- **3.1mcg**



100g Mackerel - **8.3mcg**



100g Tinned Sardines - **3.3mcg**



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



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 80g Red Pepper - 0.53mg



- 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



80g Broccoli
- 108mcg



80g Spinach - **460mcg**



80g Brussel Sprouts
- 101mcq



80g Cabbage - **160mcg**



80g Spring Greens - **714mcg**



80g Kale - **498mcg**



80g Lettuce - 103mcg



LOMI Olive Ol - **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
Potassium
Phosphorous
Iodine*
Copper



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**



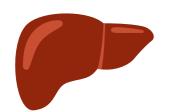
Iron

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



Biscuits - 41mg



2 Average Wheat 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**



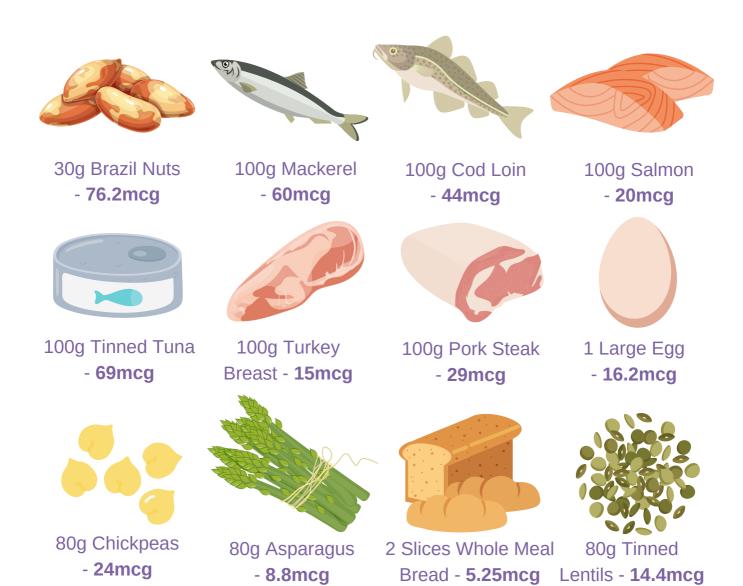
Selenium

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





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 Parsnip255mg



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**



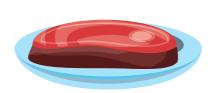
Phosphorus

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



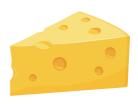
100g Sirloin Steak - **220mg**



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

lodine 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





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



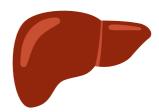
100g Crab Meat - **0.95mg**



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**