## Healthy You

# 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

- $\mathrm{mg}=$ Milligrams
- mcg = Micrograms (1000 x smaller than milligrams)

Hope it helps!

# 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


## Healthy You

## 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

- 0.56 mg


80g Baked Beans - 0.16mg


80g Cooked
Lentils - 0.08mg


100g Lean Diced Pork - 0.46mg


100 g Baked
Salmon - 0.26mg


100g Rainbow Trout - 0.13mg


180g Cooked Wholegrain Rice $-0.2 \mathrm{mg}$


80g Sweetcorn $-0.2 \mathrm{mg}$


2 Slices of bread (Average) - Potatoes - 0.22mg 0.18 mg

10 g Sesame Seeds - 0.16mg


100 g Boiled


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 : $1.3 \mathrm{mg} /$ Women : 1.1 mg

Foods containing vitamin B2


200ml Milk

- 0.48mg


100g Plain
Yoghurt - 0.22mg


30g Cheddar
Cheese - 0.13mg


100 g Pork
Steak-0.76mg


80g White
Mushrooms0.21 mg

Kidney - 2.25mg


75 g Lamb


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 : $16.5 \mathrm{mg} /$ Women : 13.2 mg

## Foods containing vitamin B3



100 g Lean Beef Burger - 5.1mg


Breast - 15.8mg


180g Cooked
Wholegrain Rice $-3.6 \mathrm{mg}$


100g Sirloin Steak - 6.1 mg


100g Baked
Salmon -8.6mg


30 g Whole Almonds- 1.1mg


100 g Lean Pork 100 g Lambs Liver
Steak - 8.7mg

100g Baked
Seabass-2.6mg
2 Slices of White bread - 1.4mg


30g Dry Roasted
Peanuts- 3.9mg


- 19.9mg


80g Cooked
Kidney Beans

## 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

## 5 mg in Adults

## Foods containing vitamin B5



## 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


## 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



## 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 : $\mathbf{1 . 5} \mathbf{~ m c g}$

## 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 9.1 mcg


100g Baked Salmon-3.4mcg


200ml Milk - 1.8 mcg

100g Greek Yoghurt

- 0.2 mcg


30g Cheddar
Cheese -0.72 mcg


1 Large Egg

- 1.2 mcg


## 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 Raspberries - 15mg


80g Steamed
Asparagus - 8mg


80g Strawberries - 45mg


1/2 Average
Grapefruit -35mg


Sprouts - 32mg


1 Average Kiwi - 50mg


80g Green Pepper

- 96 mg


80 g Boiled
Cabbage - $\mathbf{3 6 m g}$


80g Pineapple - 42mg


80g Boiled Broccoli - 35.2mg


80g Cauliflower - 24 mg

## 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: $10 \mathrm{mcg} / 400 \mathrm{IU}$

## 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


1 Large Egg 7.3 mcg


100g Tuna Steak - 3.1mcg


100g Mackerel 8.3mcg


100 g Tinned Sardines - 3.3 mcg


100g Lambs Liver - 0.5 mcg

## 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



30g Whole Almonds- 7.7 mg


10ml Safflower
Oil - 4mg


30g Dry Roasted Peanuts- 3mg

80g Mango

- 0.76 mg



10ml Wheatgerm
Oil - 13.6mg


80g Baby Spinach - 0.53mg

1 Average Kiwi - 1.3 mg


$10 g$ Sunflower Seeds- 3.7 mg


80g Red Pepper - 0.76 mg


80g Grilled
Asparagus - 1.4mg


80g Avocado

- 1.75 mg


## 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 $1 \mathrm{mcg} / \mathrm{KG}$ bodyweight

e.g. an 80 kg person would need $80 \mathrm{mcg} /$ day

## Foods containing vitamin K



# Minerals 

Calcium<br>Iron<br>Magnesium<br>Zinc Selenium<br>Potassium<br>Phosphorous<br>Iodine*<br>Copper

## Healthy You

## 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


80 g Kale

- 184mg


80g Haricot
Beans- 89mg


100g Greek Yoghurt 126 mg


80g Broccoli

- 35mg


80g Soya
Beans - 66mg.


30g Cheddar
Cheese - 221mg


80g Purple Sprouting
Broccoli - 88mg


30 g Almonds

- 80mg


55g Tinned Sardines

- 275 mg


2 Slices of White bread - 118mg

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## 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



100 g Lambs Liver $-7.7 \mathrm{mg}$


30g Cashew
Nuts - 1.86 mg


80g Mince
Beef - 1.84mg


80g Chickpeas

- 1.52 mg


30g Dried Apricots

- 1.23 mg


100g Mussels

- 3.25 mg


10 g Pumpkin
Seeds - 1mg


80g Red Lentils
$-1.7 \mathrm{mg}$


80g Kidney Beans - 2mg


30 g Almonds - 1.1 mg


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

- 90 mg


30g Brazil
Nuts - 123mg


80g Kidney
Beans - 32mg


30g Cashew
Nuts - 81mg

2 Average Wheat 2 Slices of Whole meal


Bread -50mg

2 Average Wheat
Biscuits - 41mg




80g Broad
Beans - 33mg


10 g Pumpkin Seeds - 27mg


100g Baked Potato With Skin - 27mg


80g Soya
Beans - 50mg.


10 g Sesame Seeds - $\mathbf{3 7}$ mg

## Healthy You

## 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



80g Mince
Beef - 4.9mg


80g Chickpeas

- 0.88mg


100g Crab
Meat - 7.2mg


100g Chicken
Breast - 0.8mg


80g Kidney
Beans - 0.72mg


100 g Mussels - 3.4 mg


1 Large Egg - 0.8mg


10g Pumpkin
Seeds - 0.66mg


100g Cooked
Prawns - 1mg


80g Lamb Neck Fillet - 4.6mg


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

- 76.2 mcg


100g Tinned Tuna -69mcg


80g Chickpeas

- 24mcg


100g Mackerel
-60mcg


> 100g Turkey
> Breast - 15mcg


80g Asparagus - 8.8mcg


100 g Cod Loin -44mcg


100g Pork Steak

- 29mcg


2 Slices Whole Meal


100 g Salmon

- 20mcg


1 Large Egg

- 16.2 mcg


80g Tinned Bread - 5.25mcg

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## 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: $\mathbf{3 , 5 0 0 \mathrm { mg }}$

## Foods containing potassium



## Phosphorus

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

## Daily Requirements

## Adults: 550 mg

## Foods containing phosphorus



100g Sirloin Steak - 220 mg


200ml Milk

- 188mg


100g Greek Yoghurt 138 mg


30g Cheddar Cheese - 165mg
 - 238mg

100 g Salmon

- 262mg

100g Chicken
Breast - 0.8mg


10 g Pumpkin
Seeds - 82mg


30g Dry Roasted
Peanuts - 126mg

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## 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



## Healthy You

## 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



100 g Crab
Meat - 0.95mg


75 g Lamb
Kidney - 0.44mg


10 g Sesame Seeds - 0.14mg


100 g Mussels $-0.17 \mathrm{mg}$


30g Pecans - 0.32 mg


10g Sunflower
Seeds - 0.23mg


100 g Prawns

- 0.28mg


30g Hazelnuts $-0.37 \mathrm{mg}$


80g White
Mushrooms- 0.22 mg


100 g Lambs Liver - 13.54 mg


30g Dry Roasted
Peanuts- 0.3 mg


100 g Tofu -
0.2 mg

