

# Lifestyle factors for better Bone health



**PLANT-BASED**  
Health Professionals UK

Promoting Sustainable Health and Nutrition

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## 1. Nutrition

### Protein

**Plant sources** of proteins: vegetables and legumes, seeds and whole grains such as soya and quinoa. Soya promotes bone health, so aim for *two portions* of minimally processed soya per day - e.g. 1 cup of soya milk and 80g of tofu/tempeh/edamame beans. Older adults need *higher* intakes of protein: 1-1.2 gram/kg per day.

### Fat

**Daily consumption** of omega 3 fatty acids such as ground flax seeds, chia seeds, hemp seeds and walnuts

### Carbohydrates

All vegetables and fruits, including dried fruits such as prunes

### Vitamin D

In the UK, a daily 10mcg supplement is required October to March.

Pregnant and breast-feeding women, those over 65 years of age, babies and young children, those with darker skin and those who spend a lot of their time indoors *may need supplements all year round.*

### Vitamin C

Recommended daily intake **40mg**; a medium orange has about **70mg**. **Good sources:** all citrus fruits, strawberries, blueberries and green leafy vegetables.

### Vitamin K

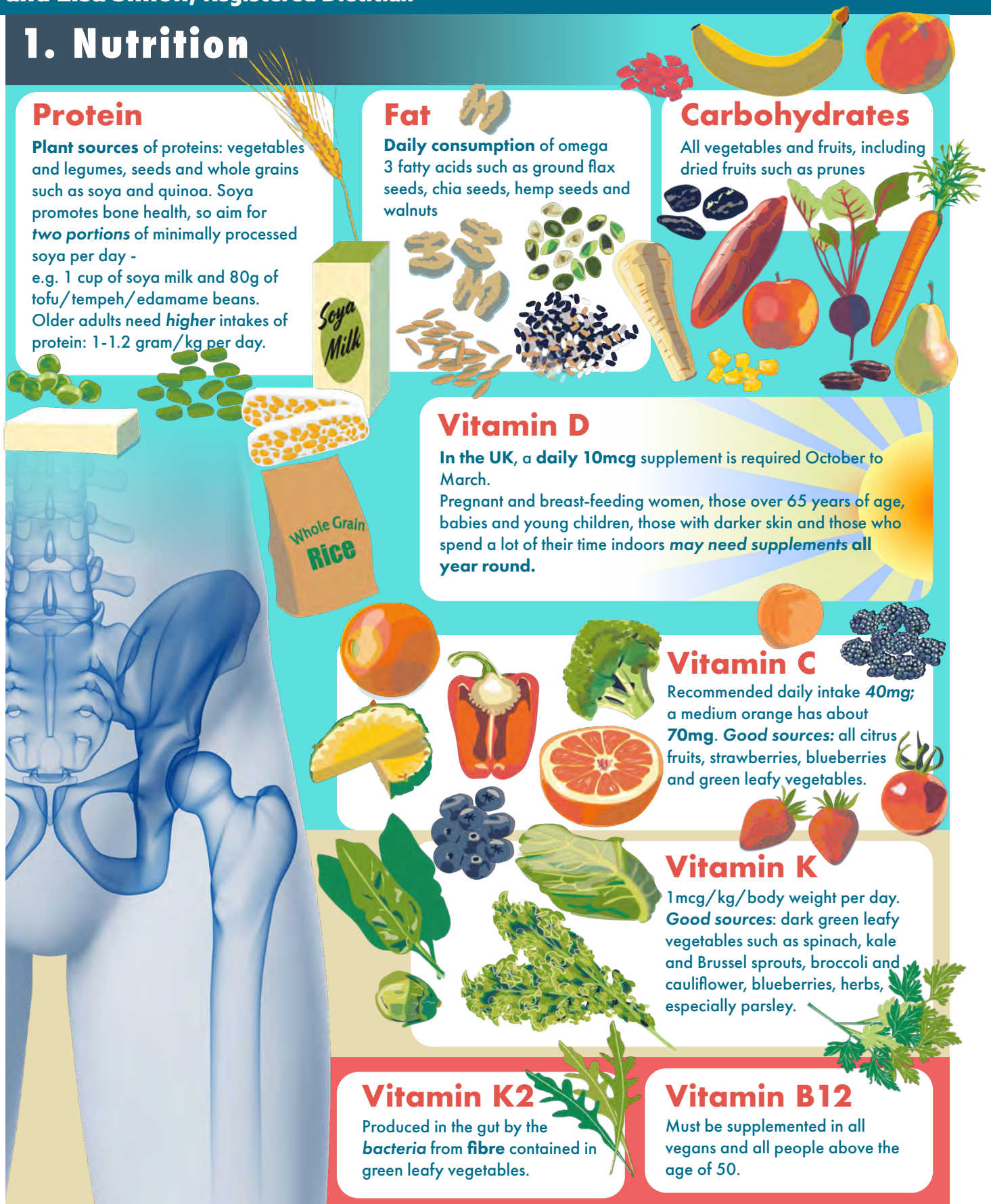
1mcg/kg/body weight per day. **Good sources:** dark green leafy vegetables such as spinach, kale and Brussel sprouts, broccoli and cauliflower, blueberries, herbs, especially parsley.

### Vitamin K2

Produced in the gut by the **bacteria** from **fibre** contained in green leafy vegetables.

### Vitamin B12

Must be supplemented in all vegans and all people above the age of 50.



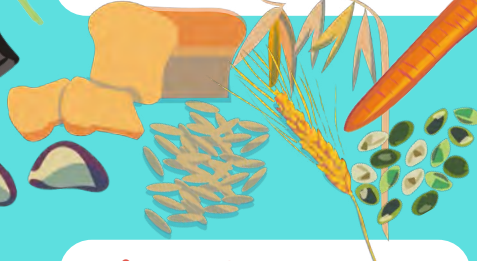
## Magnesium

RDA for men = 300mg  
women = 270mg, found in adequate amounts in nuts and seeds, green leafy veg, whole grains and dark chocolate



## Silicon

Found in green beans, carrots, nuts and seeds, whole grains, and cereals; no defined RDA in the UK



## Calcium - see below



## Phosphorous

RDA for adults 550mg/day,  
**good sources:** beans, chickpeas, lentils, soya, nuts, pumpkin seeds



## Zinc, Copper, and manganese

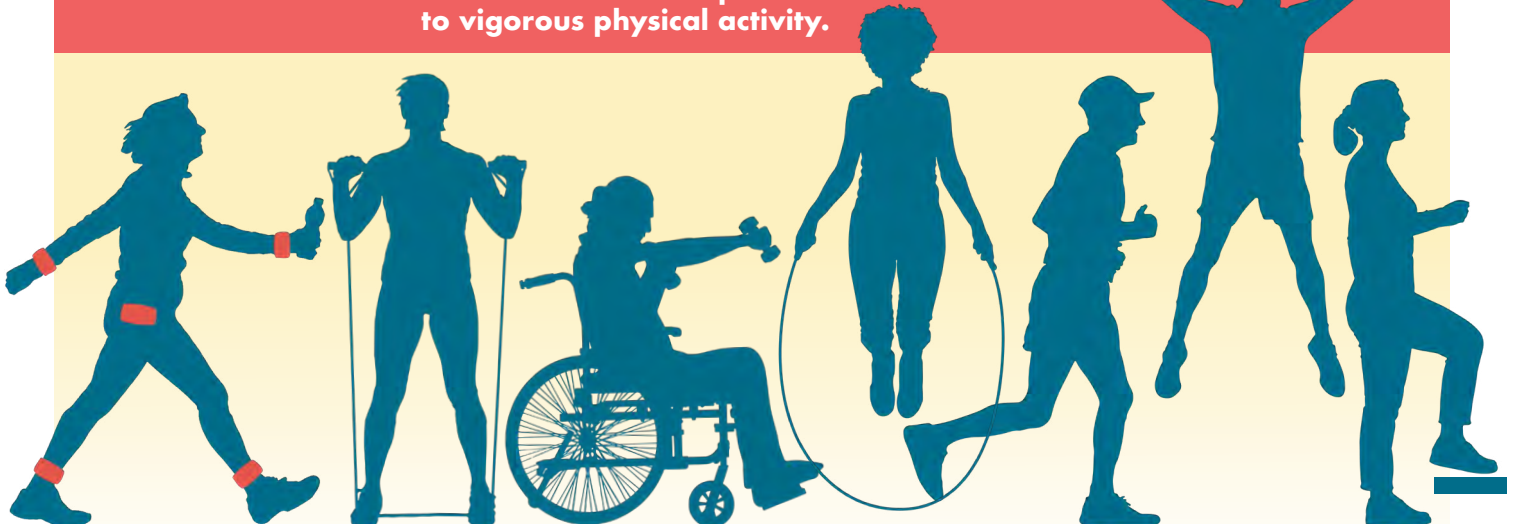
Required in small amounts; **easily** obtained in most balanced diets

## 'Calcium thieves'

Result in calcium loss: **avoid** smoking, alcohol consumption, coffee (more than 3-4 cups/day), sugar-sweetened beverages and fizzy drinks, **especially** cola drinks that have caffeine and phosphoric acid, excess salt

## 2. Exercise

Engage in regular, daily exercise and activity; at least 150 minutes per week of moderate to vigorous physical activity.



### Mixed pattern

of exercises seem to be *more effective* at improving bone strength, cardio, strength and balance training being very useful.

### Walking

**maintains bone density but you need to wear weighted jackets and wrist and ankle weighted bands to increase the joint reaction force.**

### Resistance training

**at least three times a week.**

### Impact exercises

**such as jogging, skipping, star jumps, stair climbing.**

## 3.



RESTORATIVE SLEEP

## 4.



STRESS MANAGEMENT

## 5.



AVOID SMOKING & ALCOHOL

## 6.



FORMING & MAINTAINING HEALTHY RELATIONSHIPS



# Bone health

## Calcium fact sheet

**UK adult RDA 700mg**  
**1000mg** for those with osteoporosis, coeliac disease and inflammatory bowel disease and at least **700mg** for post menopausal women who do not have the protective effects of oestrogen.

**Tip: by soaking and sprouting grains, beans and legumes you can increase the availability of calcium.**



**Calcium content (mg) Food and portion size**

108	Rocket (50g)	
85	Spinach (50g)	
35	Broccoli (80g)	
90	Kale (60g)	
6	Avocado (1/3 50g)	
110	Tahini (15g)	
35	Sunflower seeds (30g)	
280	Calcium set tofu (80g)	
150	Nigari set tofu	
63	Baked beans (150g)	
62	Chickpeas (150g)	
240	Fortified plant milk (200mls) *	
150	Fortified plant yoghurt (125g) *	
113	Almond butter (30g)	
31	6 almonds	
50	1 dried fig (20g)	
25	Raisins (25g)	
130-150	Fortified breakfast cereal (30g) *	
54	Wholemeal bread – 2 large slices (100g)	

0 50 100 150 200 250 300  
Calcium content (mg)

### Practical ways to increase your calcium intake

Always ensure plant milk and yoghurts are fortified, aim minimum **400mls** daily

Drizzle **1tbsp** of tahini over baked vegetables

Aim for two portions of fortified soy daily – **200mls** soya milk in porridge or on fortified breakfast cereal plus **80g** calcium set-tofu will provide approximately **520-650mg** calcium

Try a sliced apple drizzled with **30g** almond butter – total **120g** calcium (including the apple)

Make a mashed chickpea and avocado sandwich for lunch – total **122mg**

Homemade cocoa with fortified milk – **156mg** (if using cacao)



Note: calcium supplements are not recommended unless prescribed and monitored by your doctor.

\*Variations may occur between brands, please check