



## BONE FOODS

### Non-Dairy Calcium Rich Foods (mg Per 100g serving):

- **Nuts & Seeds:** Unhulled Sesame (1160), tahini (680), almonds (270), Brazil (180), pistachio (136) and linseed (271).
- **Grains:** Barley and rice (140) and oatmeal (50).
- **Pulses & Beans:** Chickpeas (160), haricot (180), black eyed beans (81) and cow peas (81).
- **Vegetables:** Okra (bhindi or lady's fingers, 220 and protein rich for a veggi too) + butternut squash (48), watercress (170), spinach (160), spring onions (140) and broccoli (125).
- **Fruit:** Rhubarb (93) , blackcurrant (60), blackberry (41), oranges and tangerines (30-42).
- **Fish:** Salmon with bones (490), mackerel with bones (680), sardines (460-550) and pilchards (300).
- **Eggs:** (50-60).
- **Miscellaneous:** Tofu (400-510), seaweed (e.g. wakame, 150) and Eazob (355).

### Dairy Products:

- **Dairy Milk:** Skimmed (235), semi-skimmed (231) and whole (224).
- **Cheese:** Cheddar (720), Edam (770), Camembert (350) and cottage (93).
- **Miscellaneous:** Yoghurt (160), icecream (130) and milk chocolate (220).

### Magnesium Rich Foods (roughly in descending order left to right):

- **Nuts:** Almonds, cashew nuts, Brazil nuts Pecan nuts and coconut.
- **Grains:** Buckwheat; Millet; Rye; Brown Rice; Barley.
- **Pulses:** Tofu; Soya beans.
- **Vegetables:** Kelp and dulse (seaweeds), spinach, Swiss chard, sweet corn, avocado, parsley, garlic, sweet potato, broccoli, cauliflower etc.
- **Fruit:** Dried fig, apricot, dates, prunes, raisins, banana, blackberry.
- **Miscellaneous:** Shrimp, sunflower seeds, crab, chicken.



### **Boron Rich Foods:**

- **Dried Fruit:** Prunes, raisins, dates.
- **Nuts:** Almonds, hazelnuts.
- **Fruit:** Apple, grape.
- Most fruit and vegetables.

**Vitamin K** (needed for bone mineralisation): Self-synthesised by healthy gut bacteria (probiotics) and lettuce, cabbages, dark green leafy vegetables, green tea (low status with antibiotic overuse).

**Vitamin D** (for calcium absorption): Self-synthesised in sunlight and oily fish, butter, eggs.

**Fizzy Drinks** and **Animal Proteins** in excess can lead to imbalances of phosphorus and loss of bone mass, so are advised against. Other substances/activities with an identified bone resorption and density loss effect include: excess salt, aluminium, excess alcohol and caffeine, smoking, physical inactivity, faulty digestive system (with age, coeliacs etc.), use of certain medications (including some steroids, anti-convulsants, diuretics, laxatives, heparin).

Above is a list of the **MAIN NUTRIENT REQUIREMENTS** and considerations for healthy bone production and prevention of bone mass loss Other Identified Nutrient Requirements are as follows

- **Vitamins:** Folic Acid (role via Homocysteine), vitamin B6, vitamin C.
- **Minerals:** Zinc, manganese, molybdenum, copper, silicon, chromium (picolinate via influence on DHEA), Strontium.
- **Macronutrients:** Omega 3 fats.
- **Phytonutrients:** Flavanoids (via Collagen); phytoestrogens RDA = Recommended Daily Allowance.