Calcium for bones- in a dairy free diet

WHY IS CALCIUM IMPORTANT
A balanced diet including calcium is needed to keep our bones healthy and to prevent fractures.

HOW MUCH CALCIUM DO I NEED?
Our bodies use calcium continuously, so we must replace it regularly via diet. Adults with Osteoporosis need up to 1000mg a day.
(Source: National Osteoporosis Society)

DO I NEED CALCIUM SUPPLEMENTS?
Food is the best source of all nutrients. However for people following a very restricted diet, supplements of calcium and/or vitamin D may be recommended by your doctor/local dietitian.

WHAT ARE THE SOURCES OF CALCIUM IN THE DIET? – numbers overleaf!

FRUIT & VEGETABLES
Oranges and dried fruit contain small amounts of calcium but all fruit and vegetables are a source of nutrients that improve bone health

MEAT & ALTERNATIVES
‘Bony fish’ such as sardines, pilchards, tinned salmon and whitebait
Seeds such as sesame seeds (sesame seed paste)
Some nuts, including almonds, hazelnuts and brazil nuts

STARCHY FOODS
Some breakfast cereals are calcium enriched- look out for these
Bread and foods made with white, brown and wholemeal flour are also enriched with calcium

DAIRY ALTERNATIVES
Dairy alternatives that have been enriched with calcium. For example- rice milk, oat milk, soya milk and soya yoghurts

WAYS TO INCREASE CALCIUM IN MY DIET...

DAIRY ALTERNATIVES
Aim to have one pint of enriched soya/ rice/ oat milk per day. Either on its own, in milkshakes, smoothies or hot drinks . Use it in cooking for puddings and sauces.

Alternatively, aim for three portions of a calcium enriched ‘dairy alternative’ every day. For example: fortified oat milk with breakfast cereal; soya cheese in a sandwich at lunch and a small pot of soya yoghurt after your evening meal.

BONY FISH
Aim to have two portions bony fish per week (1 portion= 100g or 3 oz). The bones contain the most calcium
You could try:
- Salmon paté: tinned salmon (with bones) blended with natural yoghurt
- Whitebait lightly coated in flour and fried
- Pilchards or sardines on toast

OTHER IDEAS
1. Try stir-frying using calcium enriched tofu instead of meat
2. Sprinkle sesame seeds as a crispy topping for potato pies, fruit salads, breakfast cereals & salads
3. Add dried fruit or nuts to fruit salads, breakfast cereals or baking

Produced by Registered Dietitians (NJ) in Oxfordshire on behalf of the Fracture Prevention Service, 2011. Review by 2015
### WHAT’S YOUR INTAKE? – use this to find out...

To find out more about the calcium content of foods and drinks visit the osteoporosis society website at www.nos.org.uk

### DAIRY ALTERNATIVES

<table>
<thead>
<tr>
<th>FOOD</th>
<th>PORTION SIZE</th>
<th>Calcium (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soya milk- enriched</td>
<td>1/3 pint (200ml)</td>
<td>178</td>
</tr>
<tr>
<td>Soya milk- not &quot; &quot;</td>
<td>1/3 pint (200ml)</td>
<td>26</td>
</tr>
<tr>
<td>Soya yoghurt- enriched</td>
<td>Small pot (125g)</td>
<td>150</td>
</tr>
<tr>
<td>Soya yoghurt- not &quot; &quot;</td>
<td>Small pot (125g)</td>
<td>18</td>
</tr>
<tr>
<td>Oat milk- enriched</td>
<td>1/3 pint (200ml)</td>
<td>240</td>
</tr>
<tr>
<td>Rice milk- enriched</td>
<td>1/3 pint (200ml)</td>
<td>130</td>
</tr>
<tr>
<td>Soya Cheese*</td>
<td>Matchbox size (30g)</td>
<td>400</td>
</tr>
<tr>
<td>First Quality Swedish Glace ice-cream</td>
<td>100ml</td>
<td>120</td>
</tr>
<tr>
<td>Tofu*</td>
<td>Medium portion (100g)</td>
<td>100-500</td>
</tr>
</tbody>
</table>

### CEREALS

| Cereals ‘enriched’          | Medium portion (30g) | 135-360 |
| White bread                 | 1 slice (28g)        | 50      |
| Wholemeal bread             | 1 slice (28g)        | 30      |
| Chapatti                    | 1 small (30g)        | 20      |

### FISH

| FISH                        | Medium portion (80g) | 688      |
| Whitebait                   | 2 fish (110g)        | 275      |
| Tinned pilchards            | ½ can (60g)          | 300      |
| Tinned sardines             | 10 pieces (150g)     | 315      |
| Breaded scampi              | Small tin (50g)      | 150      |
| Anchovies                   | Medium portion (100g) | 91  |

### FRUIT

| FRUIT                      | 1 glass (160ml) | 195      |
| Orange juice- enriched     | 1 glass (160ml) | 16       |
| Orange juice- not " "      | 1 small (120g)  | 56       |
| Orange                     | 1 (20g)         | 50       |
| Dried figs                 | 4 (32g)         | 23       |
| Dried apricots             | 1 tablespoon (25g) | 23   |
| Currents                   | 1 tablespoon (25g) | 18   |

### VITAMIN D

Vitamin D helps your body absorb calcium and use it properly. The main source is from sunlight on our skin. There is a small amount in oily fish, margarine, eggs and fortified breakfast cereal.

### NUTS/ SEEDS

<table>
<thead>
<tr>
<th>NUTS/ SEEDS</th>
<th>Portion Size</th>
<th>Calcium (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tahini</td>
<td>1 teaspoon (19g)</td>
<td>130</td>
</tr>
<tr>
<td>Sesame seeds</td>
<td>1 tablespoon (12g)</td>
<td>80</td>
</tr>
<tr>
<td>Chick peas</td>
<td>1 tablespoon (35g)</td>
<td>56</td>
</tr>
<tr>
<td>Baked beans</td>
<td>2 tablespoons (80g)</td>
<td>42</td>
</tr>
<tr>
<td>Almonds</td>
<td>6 whole (13g)</td>
<td>31</td>
</tr>
<tr>
<td>Brazil nuts</td>
<td>3 whole (10g)</td>
<td>17</td>
</tr>
</tbody>
</table>

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### FISH

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Anchovies – Small tin (50g) 150
Tinned salmon – Medium portion (100g) 91

### VEGETABLES

Okra- stir fried – Medium portion (60g) 132
Curly Kale – Medium portion (60g) 90
Spinach-boiled – Medium portion (40g) 64
Broccoli – Medium portion (85g) 34
Cabbage – Medium portion (95g) 31
Watercress – Quarter of a bunch (20g) 34

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Orange juice- not " " – 1 glass (160ml) 16
Orange – 1 small (120g) 56
Dried figs – 1 (20g) 50
Dried apricots – 4 (32g) 23
Currents – 1 tablespoon (25g) 23
Dried mixed fruit – 1 tablespoon (25g) 18

### EVEN WATER!

EVEN WATER!
Calcium enriched water – 1 Litre 300
Hard water** – 1 Litre 111
Bottled waters – 1 Litre 40-70

### REGULAR EXERCISE

Regular exercise such as walking, dancing, aerobics and football helps keep muscles strong. Muscle protects our bones and helps reduce the risk of falling.

### ALCOHOL

Alcohol in excess causes the body to lose calcium. Recommended limits are no more than 3 units a day for men and 2 units a day for women.

### SALT

Salt - high intakes can increase calcium loss from your body. Try to avoid eating too many processed foods and limit the amount of salt added to food.

### CAFFEINE

Caffeine - high intakes (more than 4 cups of strong coffee per day) may reduce bone mineral density. Caffeine is in coffee, tea & cola drinks. Be careful and moderate.

### SMOKING

Smoking causes bones to lose calcium. It’s another reason to stop!