

Top foods high in zinc

Zinc is an essential mineral so you need to obtain it from the diet as your body cannot make it. This mineral is involved in approximately 100 enzymatic reactions in the body and plays a role in immunity, protein synthesis, wound healing, DNA synthesis and cell division. Zinc is also required for a proper sense of taste and smell as well as growth and development during pregnancy, childhood and adolescence.

This mineral is essential for men's health. Zinc plays a role in fertility by helping to improve the quality of sperm (1). Research has shown that men with lower levels of seminal zinc had lower sperm counts as well as more abnormal sperm, which may be due to the protection of zinc against oxidative damage.

Zinc may also help to protect the health of the prostate. Men with low levels of zinc in their diet tend to have higher chances of developing an enlarged prostate, which is known as benign prostatic hyperplasia or BPH (2).

Zinc has long been associated with immunity and the common cold and some evidence points towards the benefits of this mineral in lessening the symptoms by way of zinc lozenges (3). Zinc also not only increases the production of white blood cells that fight infection, but also helps them fight more aggressively. It also increases killer cells that fight against cancer and helps white cells release more antibodies. Zinc increases the number of infection-fighting T-cells, especially in elderly people who are often deficient in zinc and whose immune system may weaken with age (4).

Skin and hair health may also benefit from getting enough zinc from your diet. Zinc plays an important role in overall skin health, and it may also treat eczema, psoriasis, dandruff, burns and boils (5). It also helps skin wounds heal faster. Low intake of zinc has also been associated with hair loss (6)

Like many nutrients, zinc also acts as an antioxidant in the body. Antioxidants help to reduce the damage done by excess free radicals that can increase cell aging and build up as a result of a poor diet, lifestyle and environmental factors. Antioxidants also play a role in reducing inflammation in the body. Prolonged inflammation is thought to be at the root of many serious health conditions such as heart disease and cancer.

How much do you need?

UK Adult men require 9.5mg per day

UK Adult women require 7mg per day

Average intakes in the UK

Women consume more zinc than men

Most men and women have intakes above 100% of the RNI for zinc

9% of adult men have very low intakes of zinc

10% of teenage boys have very low intakes of zinc

Groups most at risk of deficiency

The bioavailability of zinc from vegetarian diets is lower than from non-vegetarian diets because vegetarians do not eat meat, which is high in bioavailable zinc. Vegetarians and vegans also typically eat high levels of legumes and whole grains, which contain phytates that bind zinc and can inhibit its absorption.

Vegetarians can sometimes require more zinc than non-vegetarians. Certain food preparation techniques can help to reduce the binding of zinc by phytates and increase its bioavailability such as soaking beans, grains, and seeds in water for several hours before cooking them and allowing them to sit after soaking until sprouts form. Vegetarians and vegans can also increase their zinc intake by consuming more leavened grain products (such as bread) than unleavened products (such as crackers) because leavening partially breaks down the phytates; thus, the body absorbs more zinc from leavened grains than unleavened grains.

Alcoholics can have low levels of zinc because alcohol decreases intestinal absorption and increases urinary excretion of zinc. Alcoholism can also affect food intake, which can limit the amount of zinc consumed.

Be aware that high intakes of zinc can inhibit copper absorption, sometimes producing copper deficiency and associated anemia so be wary of supplement containing very high doses of this mineral.

How to increase your intake of zinc

- *Add seeds as a topping to salads, cereals and porridge*
- *Include plenty of dried herbs and spices to your meals*
- *Include shellfish in your diet, which can be used to make salads, stews and stir-fry's*
- *Include plenty of pulses and lentils in your diet, which can be added to salads, stews, casseroles, soups or made into dips*
- *Cocoa powder is high in zinc so the occasional treat of high cocoa dark chocolate is a good source of try making a cup of cocoa or homemade nut milks flavoured with this ancient ingredient*
- *Try switching to wholegrains such as breads, rice and pseudo grains such as quinoa*
- *Oats are high in zinc and make great breakfasts or toppings for sweet dishes such as crumbles and even savoury toppings*
- *Nuts and seeds are high in zinc so try making your own healthy granola or flapjacks*
- *Go veggie a few times each week and swap meat for tofu or Quorn*
- *Eggs are the breakfast of champions and also make a great snack when boiled (try serving with smoked paprika, celery salt or tabasco sauce)*
- *Don't skip breakfast! Even a small bowl of your favourite wholegrain cereal can add a useful source of zinc to the diet. You can also use cereals as savoury toppings*

Foods highest in zinc (data taken from McCance and Widdowson)

<i>Food</i>	<i>Portion size</i>	<i>Nutrition per serving</i>	<i>Nutrition per 100g</i>
<i>Shellfish</i>			
<i>Raw oysters</i>	<i>80</i>	<i>47.4</i>	<i>59.2</i>
<i>Boiled lobster</i>	<i>100</i>	<i>5.5</i>	<i>5.5</i>
<i>Boiled lobster</i>	<i>100</i>	<i>2.5</i>	<i>2.5</i>
<i>Cooked mussels</i>	<i>100</i>	<i>2.3</i>	<i>2.3</i>
<i>Boiled prawns</i>	<i>100</i>	<i>2.2</i>	<i>2.2</i>
<i>Sardines canned in oil</i>	<i>50</i>	<i>1.1</i>	<i>2.2</i>
<i>Anchovies canned in oil</i>	<i>10</i>	<i>0.3</i>	<i>3</i>
<i>Meat and offal</i>			

<i>Fried calf's liver</i>	100	15.9	15.9
<i>Lamb neck fillet grilled</i>	100	6.4	6.4
<i>Grilled sirloin steak</i>	100	4.3	4.3
<i>Fried chicken liver</i>	100	3.8	3.8
<i>Grilled pork steak</i>	100	2.9	2.9
<i>Roast turkey</i>	100	2.5	2.5
<i>Grilled gammon steak</i>	100	2.2	2.2
<i>Ham</i>	100	1.8	1.8
<i>Grilled back bacon</i>	50	1.6	3.1
<i>Roast chicken</i>	100	1.5	1.5
<i>Pulses</i>			
<i>Cooked aduki beans</i>	80	1.8	2.3
<i>Tempeh</i>	100	1.8	1.8
<i>Cooked chickpeas</i>	80	1.0	1.2
<i>Cooked red kidney beans</i>	80	0.8	1
<i>Cooked pinto beans</i>	80	0.8	1
<i>Cooked lentils</i>	80	0.8	1
<i>Tofu</i>	100	0.7	0.7
<i>Miso</i>	30	1.0	3.3
<i>Grains</i>			
<i>Quinoa</i>	180	5.9	3.3
<i>Wheatgerm</i>	30	5.1	17
<i>Wholegrain rice(boiled)</i>	180	3.2	1.8
<i>Wholemeal bread</i>	80	1.3	1.6
<i>Oats</i>	50	1.2	2.3
<i>Oatcakes</i>	40	1.3	3.3
<i>Dark rye flour</i>	30	0.9	3
<i>Cereals</i>			
<i>All bran</i>	40	2.4	6
<i>Bran flakes</i>	40	1.0	2.5
<i>Shredded wheat</i>	40	0.9	2.3
<i>Muesli</i>	40	0.9	2.3
<i>Weetabix</i>	40	0.8	2
<i>Special K</i>	40	0.8	2

<i>Fruit n fibre</i>	40	0.6	1.5
<i>Cheese and eggs</i>			
<i>Parmesan cheese</i>	30	1.5	5.1
<i>Eggs</i>	100	1.3	1.3
<i>Edam</i>	30	1.1	3.8
<i>Cheddar cheese</i>	30	0.7	2.3
<i>Brie</i>	30	0.6	2
<i>Goats cheese</i>	30	0.3	1
<i>Nuts and seeds</i>			
<i>Cashew nuts</i>	25	1.5	5.9
<i>Pecan nuts</i>	25	1.3	5.3
<i>Brazil nuts</i>	25	1.1	4.2
<i>Peanut butter</i>	30	1.1	3.5
<i>Peanuts</i>	25	0.9	3.5
<i>Tahini</i>	15	0.8	5.4
<i>Almonds</i>	25	0.8	3.2
<i>Poppy seeds</i>	5	0.4	8.5
<i>Pumpkin seeds</i>	5	0.3	6.6
<i>Pine nuts</i>	5	0.3	6.5
<i>Cocoa powder</i>	15	1.0	6.9
<i>Sesame seeds</i>	5	0.3	5.3
<i>Sunflower seeds</i>	5	0.3	5.1
<i>Vegetables</i>			
<i>Quorn</i>	100	7.0	7
<i>Dried mushrooms</i>	40	1.9	4.8
<i>Frozen peas</i>	80	0.7	0.9
<i>Seaweed (nori)</i>	10	0.6	6.4
<i>Asparagus</i>	80	0.6	0.7
<i>Spinach</i>	80	0.6	0.7
<i>Okra</i>	80	0.5	0.6
<i>Brussels sprouts</i>	80	0.4	0.5
<i>Sundried tomatoes</i>	40	0.3	0.8
<i>Mushrooms</i>	80	0.3	0.4
<i>Parsnips</i>	80	0.2	0.3
<i>Endive</i>	80	0.2	0.2

<i>Herbs and spices</i>			
<i>Dried chervil</i>	5	0.4	8.8
<i>Fenugreek</i>	5	0.3	6.9
<i>Dried thyme</i>	5	0.3	6.2
<i>Dried basil</i>	5	0.3	5.8
<i>Mustard seeds</i>	5	0.2	4.7
<i>Dried oregano</i>	5	0.2	4.4
<i>Cumin seeds</i>	5	0.2	4.2
<i>Curry powder</i>	5	0.2	3.7
<i>Dried cardamom</i>	5	0.1	2.6

References

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