

How to eat well for your age

Our bodies' dietary needs change as we get older. Anna-Marie Julyan looks at what foods will give us the right nutrients to maximise each stage of our lives

Eat food, not too much, mostly plants,' is the now-famous piece of advice on a healthy diet by American author Michael Pollan. By 'food' he means unrefined and fresh, rather than processed. And if you follow his maxim, you won't go far wrong.

At different times of our lives, however, there are certain nutrients we, as a population, tend to lack.

Almost half teenage girls are not getting enough iron, in later life we require extra calcium to protect our bones and a shortage of vitamin D is of concern across all ages, owing to its limited availability in food and a scarcity of its other main source, sunlight, from October to April.

'From conception through to later life our nutritional needs vary,' says Emma Williams, Waitrose senior nutritionist.

'For example, children need adequate nutrition to grow and develop, whereas older adults require some help and support to counteract the effects of ageing.'

The role of vitamin D

It's known as the sunshine vitamin because there are two sources: sunlight and diet. Without it, children are at risk of bone deficiency and even rickets, a disease that can cause skeletal deformities. In fact, rickets is on the rise, with two children having died from it in Britain in the past couple of years.

As a nation, however, all ages are at risk of low levels of vitamin D. The latitude and strength of the sun in the UK means the skin can only make vitamin D between 11am and 3pm, from April to October.

It works as a hormone, regulating calcium and phosphorus metabolism, which are essential for bone health. Dietary sources include oily fish, eggs and fortified cereals, but it's hard to get enough vitamin D from diet alone. That's why supplements are so important – 10 micrograms per day is recommended.

'Vitamin D is particularly important for the dark-skinned population, which is at the highest risk of deficiency and its complications,' says Dr Wolfgang Högl, consultant endocrinologist at Birmingham Children's Hospital.



Babies and toddlers

Don't forget your supplements

The consumption of recommended supplements by infants in the UK is particularly low compared to the rest of Europe – around 5-20% rather than 80% and more in countries such as France and Germany.

The UK Department of Health and Social Care advises that breastfed babies and those drinking less than 500ml of formula per day should be given a daily supplement of vitamins A and D. This advice stands from birth until the age of five. We don't seem to be getting the message, so is it really necessary?

'There are very few food sources of vitamin D in the diet, so by giving a supplement you're ensuring that infants are getting enough,' explains Williams.

Vitamin D is also made in the body when the skin is exposed to sunlight, and it is essential in helping to maintain healthy bones, muscles and teeth, as well as the immune function.

Children aged four to 10

Breakfast boost time

You might have noticed children of this age tend to move. A lot. To meet the extra demands of growth they have higher energy and nutrient requirements for their size compared to adults.

Breakfast is a great time to set your child up for the day. Go for nutrient-dense options such as scrambled egg on wholegrain toast, or porridge with raisins, which both release energy slowly.

Children should have no more than one small glass (150ml) of unsweetened 100% fruit juice a day, which is one portion of their 5-a-day of fruit and veg. It is best drunk with a meal to help protect teeth from the juice's natural acids.



Adolescents

Increase the iron and calcium

Unfortunately, diet in general is quite poor among this age group, with teenagers typically having a low intake of most vitamins and minerals.

Iron levels among teenage girls is a concern. According to the National Diet and Nutrition Survey, around 50% don't get enough from what they eat and drink. Girls of course also lose iron when they have a period.

The mineral is important for cognitive and immune function, energy and fighting fatigue. Good sources include red meat and liver, whole grains, dark green vegetables, beans, dried fruits and seeds (handy for snacking).

Calcium is also crucial because adolescence is the time to promote good bone health because the skeletal material is growing in size and density. At least 90% of peak mass (the bones' maximum strength and density) is acquired by the end of the teenage years, meaning youth is the optimal time to invest in a high-calcium diet. In fact, teenagers have a higher daily requirement (1,000mg for males and 800mg for females) than adults (700mg).

Adult women

Minerals to watch

Adult women aged 19 to 50 have higher requirements for iron compared to men and older women. This is because menstruation can use up iron reserves, especially with heavy periods, or a diet low in iron.

A special mention also deserves to go to magnesium. One in five women aged 19 to 34 (and half all teenage girls) have a low intake of this mineral, which is essential for energy, psychological function and for combatting fatigue. Who couldn't do with a bit of that? Sources include green leafy vegetables, nuts, bread, fish, meat and dairy products.

Adult men

Veg out

No, unsurprisingly this is not an instruction to collapse on the sofa, but to increase the amount of fruit and vegetables you eat. Only a quarter of men in the UK reach the five or more portions a day target.

Apart from providing a variety of different nutrients, fruit and veg also give our bodies much-needed dietary fibre, which helps reduce the risk of type-2 diabetes, cardiovascular disease and gut disorders such as bowel cancer.

Later life

Bones, B vitamins and protein

We lose bone mass as we age, so it is necessary to keep up your calcium levels. Following the menopause, women have a higher risk than men of developing osteoporosis (thinning of the bones) and reduced bone density.

Smaller portion sizes need to be especially nutrient-rich as appetite decreases.

'Try to include protein, which helps prevent muscle wastage,' says Williams. 'This happens naturally as we age due to hormone changes and in some cases by being less active. Getting older means you are also more prone to falls. In that way, protein is as important as calcium, but keep active too. Remember the old adage: "If you don't use it, you lose it."'

Finally, boost those B vitamins that have a range of functions in the body, including contributing to healthy red blood cells, metabolism, nerve function, healthy skin, vision and reducing tiredness and fatigue. Sources include peanuts, poultry and white fish (B6), almost all foods of animal origin (B12), and green leafy vegetables and brown rice for folate, which works together with vitamin B12 to form healthy red blood cells.

Ways to get more calcium

- A 200ml glass of semi-skimmed milk provides 232mg.
- A 30g chunk of Cheddar cheese will give you 222mg.
- Four heaped tablespoons of curly kale (80g) contains 120mg.
- Half a can of canned sardines (50g) provides a whopping 340mg.
- If you don't drink milk, make sure your alternatives are fortified.



Fi Glover

In my opinion



The BBC Radio 4 journalist airs her views

There is no Planet B.' Surely that is the soundbite of 2018 so far, uttered by President Emmanuel Macron in a speech to Congress at the end of his state visit to the US. It was the punchline to a timely reminder that we need to have a word with ourselves about how we are treating the environment, and all of it was part of what was a treat of a visit by the French premier to The White House.

Macron pulled off a feat of impressive diplomatic skill where he and President Trump struck up a bromance of embarrassing physical camaraderie. I couldn't watch another clip of them hugging and hand holding, and dusting dandruff off shoulders without wanting the translation for 'get a room!'. But at the same time, Macron was to the point with criticisms of US policy on climate change, nationalism or nuclear deals. He reminds me of a charismatic boyfriend who can charm your upright mother and your louche father, as well as befriending the brother whose attention-seeking tendencies always bring a family occasion to an early close...

Anyway, the soundbite is a corker. The turtles and whales of the world would've been cheering from the rafters if they weren't so caught up in bubble wrap we've carelessly thrown away. Environmental campaigners must be thrilled, and let's

'The turtles and whales of the world would've been cheering from the rafters if they weren't so caught up in bubble wrap we've thrown away'

not forget editors and journos who watch these long speeches like meerkats waiting for the scent of supper on the breeze – you need a soundbite to sell a story, and this one does just that.

A background check reveals it's not the first time the sentence has been used – you can buy it on campaign T-shirts, along with phrases like Don't Kill My Buzz Save The Bees, all made by a company powered by organic wind somewhere in the UK.

The phrase stands out not only because it rings so true, but because it comes amid a dearth of decent quotes. We're in a parched desert of magnificent oration in every area of life. This week Robbie Fowler was part of Radio 5 Live's commentary team for the Liverpool Roma Champions League semi-final. He said something along the lines of: 'They say Rome wasn't built in a day, it's only taken Liverpool an hour to dismantle it,' which is almost brilliant but not quite, and nowhere near as daft as Sky's Kay Burley's 'he's quite a porker', which she said of Prince Louis. That just seems a bit mean. You've had nine months to think of something better to say Kay!

Given that we're days away from a royal wedding and the world is watching our every move... and hanging on our every word... I hope we can step up.

@fifiglover

Tune in to *The Listening Project*, afternoons on BBC Radio 4