



VITAMIN E

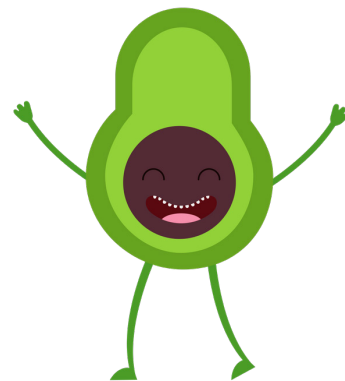
Summary

Vitamin E is made by plants. It dissolves in fats and oils, so animals – including us – can store it in their bodies. Good sources of Vitamin E include vegetable oils, avocados, seeds, nuts, and nut milks. We can also get some from certain animal foods like salmon, eggs, milk, and chicken. It's slowly broken down by light and air, but often copes well with cooking or freezing.

Vitamin E helps protect all our body's cells and repair damage to them. It also helps keep our blood moving, our nerves working, and with fighting infections. Too little of it (a deficiency) can cause problems with our nerves, and limit how much oxygen our blood can carry. Too much could make us bleed a lot if we cut ourselves because we need it to help our blood to clot (set).

What foods do we get it from?

Plants make Vitamin E, so many vegetable oils naturally contain good levels of it: try canola, corn, sunflower and soy oils, or margarines. Wheat germ, and many seeds, nuts and nut milks are also good sources. Avocados, greens like broccoli and spinach, asparagus and kiwifruit contain a bit. And because animals eat plants (or other animals which do), there's some Vitamin E in certain animal-based foods including eggs, milk, chicken, and fish.



Why do we need it?

Vitamin E mainly works to help protect our body's cells and repair damage to them caused by substances called "free radicals". Free radicals can be naturally produced in our bodies or get into them from the environment (from pollution or smoking). Vitamin E also helps our immune system, with keeping our blood vessels wide open and clear of clots, and with cell communication (passing on messages). It may help keep our eyes and nerves healthy.

What happens if we have too much or too little?

Too little Vitamin E (deficiency) is very rare and is almost always linked to diseases in which fats are not properly digested or absorbed. It can cause nerve problems and anaemia (problems with the level of the pigment haemoglobin that carries oxygen around our bodies, or with our red blood cells). It's very unlikely someone would naturally get too much Vitamin E just from everyday foods. Very high doses – from taking too many supplements – increase the risk of serious bleeding.

Is it affected by processing or storage?

Light and air will gradually degrade (break down) Vitamin E. It doesn't really mind being cooked. In some frozen foods, levels may be higher or lower than in fresh foods.

How does the Vit E content of some common foods compare?

Source	Total Vit E (mg)	Source	Total Vit E (mg)
Half cup (125 mL) wheat germ	7	100 mL fortified soy milk	1.9
1 Tablespoon (15 mL) sunflower oil	6.7	10 raw almonds	1.9
100 g king salmon, pan fried	4.3	10 raw hazelnuts	1.7
1 Tablespoon (15 mL) polyunsaturated & fortified -margarine	3.9	100 g boiled broccoli	1.6
1 large avocado (173 g)	2.9	1 gold kiwifruit (81 g)	1.1
1 Tablespoon (15 mL) Corn oil	2.4	100 g grilled chicken breast	0.55
1 Tablespoon (15 mL) Canola oil	2.1	100 mL standard blue top milk	0.06

A milligram (mg) is one thousandth of a gram (g).
Source: The Concise New Zealand Food Tables, 12th edition 2016 (2017).

The NZ Nutrition Foundation's recommended daily dietary intake (RDI) of Vit E is 8 to 9 milligrams (mg) for children aged 9 to 13. It's 7 to 10 mg for adults. Smokers and nursing mothers may need more.



Funky fact

Vit E was discovered in 1922 during work on rats. It was first identified as something they needed to be able to breed successfully. It took till 1945 to work out that its main job in animals was tidying up the damage free radicals do to their cells.



USEFUL LINKS

Twenty Fun Facts About Vitamins. Retrieved from: <https://www.multivitaminguide.org/infographic/20-fun-facts-about-vitamins.html>



REFERENCES

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