# Many multivitamins offer limited benefits but targeted supplements can help specific health issues



Many people in the UK view vitamin and mineral supplements as essential to maintaining their health, with nearly half the population regularly purchasing them. However, recent research and expert opinion indicate that the benefits of such supplements, particularly multivitamins, may be limited for most healthy individuals.

A significant study published last year in JAMA Network Open, involving data from almost 400,000 healthy adults over two decades in the United States, found no difference in premature mortality rates between those who took daily multivitamins and those who did not. Professor Tim Spector, genetic epidemiologist at King’s College London and co-founder of health app Zoe, noted: “Overall, evidence suggests a daily multi-vitamin doesn’t have significant benefits for preventing heart disease, cancer or any mortality cause.” He also cautioned against excessive doses, saying, “Many people assume that because vitamins are essential for optimal health, taking more is always better, but this isn’t the case. Too much of certain individual vitamins, such as A and E, can increase your risk of poorer health.”

Despite the theoretical benefits of a balanced diet, the current dietary habits of many people in the UK fall well short of recommendations. The latest data from the National Diet and Nutrition Survey show that 70% of adults consume fewer than the recommended five portions of fruit and vegetables a day, while ultra-processed foods — including ready-meals and packaged products — make up nearly 60% of food intake. Professor Spector has expressed concern about this trend, noting, “The more over-processed foods you eat, the more likely you are to have below optimal levels of nutrients.”

Nutrient depletion in crops exacerbates the issue. According to Dr Lindsy Kass, a sports and nutrition scientist at the University of Hertfordshire, modern fruits, vegetables, and grains contain substantially lower levels of essential minerals compared to those grown in the 1940s. The International Journal of Food Sciences and Nutrition reported a 50% reduction in iron, copper and sodium, and up to 40% less magnesium in recent decades. This decline is largely attributed to intensive farming practices and poor soil quality.

While experts advocate a “food-first” approach, they acknowledge that supplementation can provide a useful “safety net” for people with particular needs — such as those recovering from illness, with absorption problems, on long-term medication, or on calorie-restricted diets. Vitamins and minerals are often recommended at levels that meet minimum daily requirements but not necessarily the optimal doses for health maintenance.

Vitamin D is highlighted as a nutrient that is commonly deficient, especially in the UK where sunlight exposure is limited during autumn and winter months. The NHS advises all adults to take 10 micrograms (400 IU) of vitamin D daily from October to March, and to consider year-round supplementation for certain groups, including those rarely outdoors, individuals who wear covering clothing, and those with darker skin tones.

The article details supplements with substantive scientific backing for addressing specific health concerns:

* **Joint pain**: Turmeric (curcumin) at 500-1,000 mg daily, and collagen (5-10 g daily, preferably with vitamin C) may help alleviate inflammation and support joint regeneration.
* **Eye health**: Antioxidant blends containing vitamins C and E, lutein, zeaxanthin, and zinc, as well as omega-3 fatty acids (1-2 g daily), may slow the progression of age-related macular degeneration.
* **Sleep problems**: Magnesium supplementation in doses of 200-400 mg has been associated with improved insomnia, aiding muscle relaxation and neurotransmitter regulation.
* **Heart health**: Coenzyme Q10 (100-300 mg daily) may assist those with weakened heart function or statin-related muscle discomfort, while omega-3 fatty acids have been shown to reduce triglycerides and inflammation, lowering heart attack and stroke risk at doses up to 4 g daily.
* **Menopause symptoms**: Herbal supplements such as sage leaf (100-300 mg daily) and red clover phytoestrogens have demonstrated effectiveness in reducing hot flushes and night sweats.
* **Eczema**: Vitamin D supplementation and omega-3 fatty acids (1-3 g daily) may strengthen the skin barrier and reduce inflammation.
* **Stress and anxiety**: B vitamins (a complete B complex covering 100% of the RDA) and saffron extract (two 50 mg capsules daily) have shown benefits in mood regulation and reducing anxiety.
* **Cognitive decline**: Omega-3s, particularly docosahexaenoic acid (DHA) at 250 mg or higher per capsule, may support brain health and reduce Alzheimer’s disease risk. Certain studies also suggest targeted multivitamin blends in people over 65 could slow brain ageing and improve cognitive function.

The article also warns against relying on supplements marketed for weight loss, citing a 2021 US review that found little evidence for their effectiveness.

Practical guidance is provided regarding doses, dietary equivalents, and optimal times to take various supplements for maximum absorption. For example, vitamin C is best taken on an empty stomach before breakfast, iron first thing with orange juice, and fish oils after meals containing fat. Different supplement forms—tablets, capsules, sprays, gummies, liquids, and fizzy tablets—have varied absorption rates and suitability depending on individual needs.

Additionally, long-term use of certain medications can interfere with nutrient absorption. For example, weight-loss drugs such as GLP-1 receptor agonists may reduce vitamin B12 and zinc levels, proton pump inhibitors can impair absorption of iron, calcium, magnesium, and vitamins B12 and C, while statins can deplete coenzyme Q10. Steroid medications may affect calcium and vitamin D metabolism, and the diabetes drug metformin has been linked to reduced vitamin B12 levels. Regular blood tests are recommended for people on these medications to monitor deficiencies.

Overall, while a balanced diet remains the cornerstone of good nutrition, the prevalence of dietary shortfalls and nutrient-depleted foods has generated a role for carefully targeted supplementation. Experts interviewed for the Daily Mail emphasise the importance of choosing supplements supported by robust evidence, taking appropriate doses, and timing consumption for optimal benefit. The NHS continues to endorse vitamin D supplementation as a key component of public health guidance.

Source: [Noah Wire Services](https://www.noahwire.com)

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