

# Research says older people need more sun

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Spending more time in the sunshine could help older people to reduce their risk of developing heart disease and diabetes.

Exposure to sunlight stimulates vitamin D in the skin and [older people](#) are more likely to have a vitamin D deficiency due to the natural aging process and changes in lifestyle.

Researchers at the University of Warwick have shown vitamin D deficiency is significantly associated with [metabolic syndrome](#), a combination of medical and metabolic disorders that increase the risk of developing [cardiovascular disease](#) and diabetes.

The research team, led by Dr Oscar Franco at Warwick Medical School, investigated the association between vitamin D levels in the blood and the prevalence of metabolic syndrome in 3,262 people aged 50-70 years old in China.

His team found a high correlation between low vitamin D levels and the prevalence of metabolic syndrome. They found 94% of people in the study had a vitamin D (25-hydroxyvitamin D) deficiency or insufficiency. The results showed 42.3% of these people also had metabolic syndrome.

The results of the study, published in *Diabetes Care* journal, are consistent with the findings of other studies in Western populations and Dr Franco suggests vitamin D deficiency could become a global health problem.

He said: "Vitamin D deficiency is becoming a condition that is causing a large burden of disease across the globe with particular deleterious impact among the elderly. Our results are consistent with those found in British and American populations. We found that low vitamin D levels were associated with an increased risk of having metabolic syndrome, and was also significantly associated with increased [insulin resistance](#)."

Dr Franco said there were many factors which could explain why older people had less vitamin D in their blood, including changes in lifestyle factors such as clothing and outdoor activity.

He added: "As we get older our skin is less efficient at forming vitamin D and our diet may also become less varied, with a lower natural vitamin D content. Most importantly, however, the dermal production of vitamin D following a standard exposure to UVB light decreases with age because of atrophic skin changes. When we are older we may need to spend more time outdoors to stimulate the same levels of vitamin D we had when we were younger."

Vitamin D deficiency exists when the concentration of 25-hydroxy-vitamin D (25-OH-D) in the blood serum occurs at 12ng/ml (nanograms/millilitre) or less. The normal concentration of 25-hydroxy-vitamin D in the blood serum is 25-50ng/ml.

This study was carried out in collaboration with colleagues from the Shanghai Institute of Biological Sciences in China. The team recruited 3,262 community residents aged 50-70 from Beijing and Shanghai in China as part of the Nutrition and Health of Aging Population in China (NHAPC) project.

Dr Franco added: "[Vitamin D deficiency](#) is now recognised as a worldwide concern and metabolic syndrome has become a global epidemic. More research is needed to find out why older people are

more likely to have lower levels of [vitamin D](#) and how this is linked to the development of metabolic syndrome and related metabolic diseases."

More information: The study is published online ahead of publication in *Diabetes Care*.

Source: University of Warwick ([news](#) : [web](#))

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