



Dietary supplements for men: Can I protect myself against cancer with selenium?



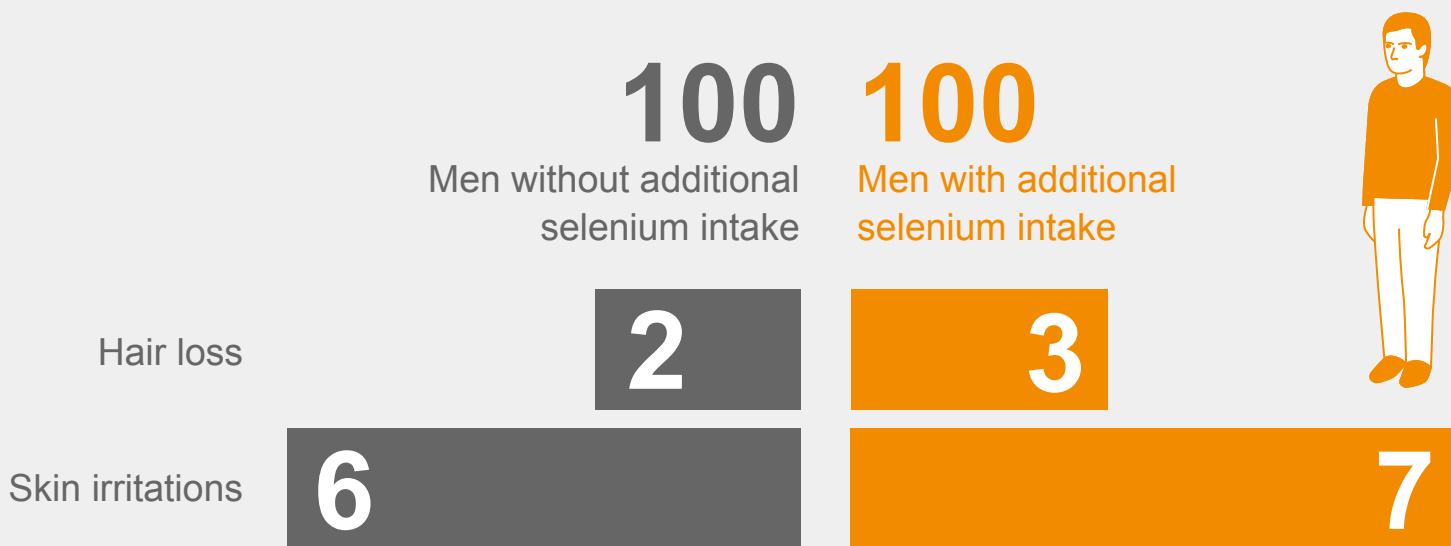
No benefit: Selenium as a dietary supplement does not prevent cancer.

	without additional selenium intake	with additional selenium intake
Men	per 100	per 100
Prostate cancer diagnosis	5	5
Cancer diagnosis	9	10
Deaths due to cancer	1	1

Explanations and sources



Side effects: Selenium as a dietary supplement can lead to hair loss and skin irritations.



Due to evidence of a link with Type 2 diabetes, a selenium study was discontinued as a precaution in 2008.

Explanations and sources

PDF download





Dietary supplements for men: Can I protect myself against cancer with selenium?



No benefit: Selenium as a dietary supplement does not prevent cancer.

	without additional selenium intake	with additional selenium intake
Men	per 100	per 100
Prostate cancer diagnosis	5	5
Cancer diagnosis	9	10
Deaths due to cancer	1	1

Explanations and sources

Selenium is a trace element found, for example, in fish, meat and eggs. Among other things, it is important for the immune system and thyroid. Too little of it can trigger deficiency diseases, which are, however, rare in our latitudes. Selenium is sold freely as a dietary supplement and is taken, among other reasons, to prevent cancer. Reliable data on its harms and benefits are only available for men.

The figures in the table indicate that of 100 men aged 50 and over not suspected of having prostate cancer, 1 died from cancer within 4 to 7 years both with and without additional selenium intake. Similarly, the total mortality rate was 4 for both groups (not shown in the table). Beyond their natural selenium intake from foods, the men in the selenium group took an additional 200 micrograms of L-selenomethionine daily. The data are rounded; the higher number of cancer diagnoses for those with additional intake is likely just a random fluctuation.

Source: The data are based on the SELECT study: Lippman et al. (2009). [Journal of the American Medical Association](#), 301, pp 39–51.



Side effects: Selenium as a dietary supplement can lead to hair loss and skin irritations.



⚠ Due to evidence of a link with Type 2 diabetes, a selenium study was discontinued as a precaution in 2008.

Explanations and sources

PDF download





Dietary supplements for men:

Can I protect myself against cancer with selenium?



No benefit: Selenium as a dietary supplement does not prevent cancer.

	without additional selenium intake	with additional selenium intake
Men	per 100	per 100
Prostate cancer diagnosis	5	5
Cancer diagnosis	9	10
Deaths due to cancer	1	1

✓ Explanations and sources



Side effects: Selenium as a dietary supplement can lead to hair loss and skin irritations.



Due to evidence of a link with Type 2 diabetes, a selenium study was discontinued as a precaution in 2008.

^ Explanations and sources

In the study on the impact of taking supplementary selenium, 17,800 men were examined in two groups. Hair loss was observed in 3 of 100 men with additional selenium intake and in 2 in 100 men without selenium intake. 7 of 100 men with additional selenium intake suffered mild to moderate skin irritations, compared to only 6 of 100 in the group without. On average, slightly more than 8 men with additional selenium intake developed Type 2 diabetes; this figure was on average less than 8 in the group without. Although this result might be coincidental, it points to an increased risk of diabetes through additional intake of selenium. For safety reasons, this study was discontinued. The data are rounded.

Source: The data are based on the SELECT study: Lippman et al. (2009). [Journal of the American Medical Association](#), 301, pp 39–51.

Scientific development: Prof. Dr. med. A. Altiner, Director at the Institute for General Medical Science at the Rostock University School of Medicine.

The AOK, the federal association of health insurance funds, is developing its fact boxes together with Prof. Dr. Gerd Gigerenzer, director of the Harding Centre for Risk Literacy at the Max Planck Institute for Human Development in Berlin.

Last updated: 26 May 2015

↓ PDF download

