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## Vitamin D Protects Breasts

*It decreases the risks of cancer*

Enjoying sunbaths and the daily milk cup? That's really good, and if you are a woman, this decreases your risk of developing breast cancer. This is the result of a research led by Sascha Abbas and Dr. Jenny Chang-Claude at the German Cancer Research Center, collaborating with a team at the University Hospitals in Hamburg-Eppendorf. Unlike previous researches, focusing mainly on nutritional vitamin D, this study analyzed complete vitamin D status. 25-hydroxyvitamin D (25(OH)D) was used as a marker for both endogenous vitamin D and nutritional vitamin D (present in the body after food is digested). The study involved 1,394 breast cancer patients and a similar number of healthy postmenopausal women. Subjects with a very low blood amounts of 25(OH)D displayed a significantly higher breast cancer risk. The effect was even more powerful in women not using hormonal therapy against menopausal symptoms. But the researchers signaled that chemotherapy or lack of sunlight after prolonged hospitalization could lower the levels of vitamin levels in many cancer patients. The study also analyzed the role of the vitamin D receptor. The gene encoding for of this protein is encountered in several variants (these genes are called alleles and the phenomenon, polymorphism). The team detected that the persons carrying the TaqI allele have a slightly higher risk of breast tumors. The team has attempted to explain the cancer-preventing effect of the vitamin D by hampering the growth-promoting effect of estrogens. Vitamin D would impact also cell differentiation and apoptosis (programmed cell death). Vitamin D is more familiar for us because of its role in the calcium metabolism. Diet sources abundant in vitamin D include sea fish (cod liver oil), eggs, milk and dairy products. Still, the body synthesizes most of its necessary vitamin D in the skin under the action of sunlight.