

High serum insulin levels and risk of prostate cancer

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Elevated insulin levels in the normal range appear to be associated with an increased risk of prostate cancer, according to a new study published online August 21 in the *Journal of the National Cancer Institute*.

Insulin-like growth factors appear to be involved in the development of [prostate cancer](#), but the relationship between circulating [insulin](#) levels and prostate cancer risk has been unclear.

Demetrius Albanes, M.D., of the Nutritional Epidemiology Branch, Division of Cancer Epidemiology and Genetics at the National Cancer Institute in Bethesda, Md., and colleagues investigated the relationship of the level of [serum](#) insulin and glucose, as well as surrogate indices of [insulin resistance](#), to the development of prostate cancer. Researchers conducted a prospective case-cohort study nested within a cancer prevention study of Finnish men (100 case subjects with prostate cancer and 400 non-case subjects without prostate cancer). Levels of insulin were determined in fasting serum that had been collected 5-12 years before diagnosis of prostate cancer.

The authors found that when subjects in the second through fourth quartiles of serum insulin concentration were compared with those in the first or lowest quartile, higher insulin levels within the normal range were associated with statistically significantly increased risk of prostate cancer. Risk was not associated with serum glucose concentration.

"These findings support a role for higher circulating insulin in prostate

[carcinogenesis](#), especially in early-stage disease," the authors write.

Source: Journal of the National Cancer Institute ([news](#) : [web](#))

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