



## ANALYSIS AND COMMENTARY ● ● ● ● ●

These data confirm previous studies demonstrating associations between obesity and thyroid cancer risk. Study strengths include the large sample size and the uniform diagnostic strategy for thyroid cancer. It is not possible to assess causality on the basis of a cross-sectional study, and the study is also limited by the use of a selected population and by assessment of a relatively small number of covariates. Importantly, most cancers in this study were papillary microcarcinomas <1 cm, and it is unclear whether results apply to cancers with greater clinical significance.

The reasons for the association between obesity and thyroid cancer risk remain poorly understood. Although no association between serum TSH and

thyroid cancer was observed in this study, high serum TSH has been associated with increased thyroid cancer risk in other studies (7) and is thought to promote tumor growth. Hyperinsulinemia is thought to be mechanistically important for the development of some other types of cancer, but no association between fasting insulin levels and thyroid cancer risk was noted in this study. Adipokines and markers of inflammation and oxidative stress were not examined in this study, but are also potential mediators of the effects of obesity on oncogenesis and tumor growth.

Obesity and thyroid cancer rates are both increasing rapidly. It remains to be seen whether there is truly a causal relationship between the two. Prospective studies are needed to better define risks and to elucidate mechanisms for this relationship.

## References

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