



## GRAVES' DISEASE

### Drinking alcohol reduces the risk of developing Graves' disease

#### BACKGROUND

Drinking alcohol has been reported to have a protective effect in preventing some cardiovascular diseases and autoimmune disorders. Drinking alcohol in moderation has been reported to decrease the risk for developing hypothyroidism. There is, however, a lot of controversy regarding a possible link between drinking alcohol and developing hyperthyroidism. Graves' disease, an autoimmune disorder, is the most common cause of hyperthyroidism. The present study reports the findings from the Danish iodination program in drinking alcohol and developing Graves' disease.

#### THE FULL ARTICLE TITLE

Carlé A et al Graves' hyperthyroidism and moderate alcohol consumption: evidence for disease prevention. *Clin Endocrinol* 2013;79:111-119. Epub April 19, 2013.

#### SUMMARY OF THE STUDY

From 1997 to 2000 the populations of two districts of Denmark were enrolled in a study of iodine deficiency and all newly diagnosed cases of hyperthyroidism were studied. A diagnosis of Graves' disease required positive blood levels of the Graves' antibody and/or typical results from a thyroid nuclear scan. A total of 484 patients with Graves' disease were identified and patients were asked to fill out a questionnaire that asked information on alcohol consumption and the presence of other existing medical conditions. A total of 272 patients identified with newly diagnosed Graves' disease and 1018 patients without Graves' disease from the same population were evaluated. Alcohol consumption was evaluated during the year before the diagnosis and at the maximum during any calendar

year of the subjects' lives. The age of the patients ranged from 20 to 79 years. About 30% of the patients with Graves' disease had cardiovascular diseases.

Approximately 88% of the patients without Graves' disease reported some degree of alcohol consumption while only 72% of patients with Graves' disease drank alcohol. This protective effect was true even at low levels of alcohol consumption and was slightly more pronounced at higher level of alcohol consumption. There was no difference noted between types of alcohol consumption—beer, wine or spirits.

#### WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study suggests that even a small amount of weekly alcohol consumption (one bottle of beer or one glass of wine) seems to reduce the risk of developing Graves' disease, independent of age, sex and smoking. This effect is higher with moderate alcohol consumption (1-2 glasses of wine or similar amount of any other kind of alcohol per day). This study adds to the potential health benefits of mild to moderate alcohol consumption.

— M. Regina Castro, MD

#### ATA THYROID BROCHURE LINKS

Graves' disease: <http://www.thyroid.org/what-is-graves-disease>

Hyperthyroidism: <http://www.thyroid.org/what-is-hyperthyroidism>

#### ABBREVIATIONS & DEFINITIONS

**Autoimmune thyroid disease:** a group of disorders that are caused by antibodies that get confused and attack the thyroid. These antibodies can either turn on the thyroid (Graves' disease, hyperthyroidism) or turn it off (Hashimoto's thyroiditis, hypothyroidism).

**Hyperthyroidism:** a condition where the thyroid gland is overactive and produces too much thyroid hormone. Hyperthyroidism may be treated with antithyroid meds (Methimazole, Propylthiouracil), radioactive iodine or surgery.

**Graves' disease:** the most common cause of hyperthyroidism in the United States. It is caused by antibodies that attack the thyroid and turn it on.