

Is the consumption of sweets a risk factor for thyroid cancer?

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Background:

Several studies have investigated the role of diet as a risk and/or protective factor on the development of the thyroid cancer but the results are unclear. The aim of this study was to investigate the role of eating habits on the risk of thyroid cancer.

Methods:

We carried out a hospital-based case-control study. The eating habits of the participants were investigated through a validated Lifestyles Questionnaire. The frequency of consumption of the different types of food was reported on a 4-level scale (never, 1 time per week, 2-3 times a week, 6 times a week). Logistic regression models were used to estimate the ORs and their 95% confidence intervals adjusted for age, gender and BMI. Statistical data analysis was conducted using the IBM SPSS Statistics 21.0 program.

Results:

One hundred and six cases (91.2% CA papillary type) and 217 controls were recruited. A positive association was observed for BMI (OR: 1.085; IC95% = 1.022-1.152), consumption of complex carbohydrates (OR: 2,324; IC95%: 1,364-3,960) and a low consumption of legumes, cereals, potatoes, fruit and vegetables (OR: 2.285, 95% CI: 1.330-3.926). The consumption of sweets decreased with age (Rho: -0.445, N = 318, p = 0.000), but at the same age the cases had a higher consumption than controls. In particular, the consumption of sweets was higher in the age group between 39 and 52 years old.

Conclusions:

Our study adds new and relevant information to support the hypothesis that a sugar rich diet may increase the risk of developing thyroid cancer.

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Key messages:

- Future studies need to clarify the mechanisms that associate the diet with the risk of thyroid cancer.
- More research is also needed to explain the differences in thyroid cancer among women and men.