Abstract

Title: The relation between alcohol and abdominal obesity

Author: Anna Eriksson och Karin Edenholm

Supervisor: Fredrik Bertz
Examiner: Ingrid Larsson
Programme: Dietician study programme, 180/240 ECTS
Type of paper: Examination paper, 15 hp
Date: May 30, 2013

Background: Abdominal obesity is a part of the metabolic syndrome, which has a worldwide prevalence of 20-25%. The problem with abdominal obesity is the accumulation of visceral adipose tissue, which is an important risk factor for cardiovascular disease. Alcohol has effects on metabolism, and can also lead to an increase in total energy intake; these two factors can lead to an increase in accumulation of visceral fat. Besides this there are studies that show that a moderate alcohol intake could be good for your health. The context gets more complicated since different studies have shown contradictory results concerning the association between alcohol, different types of alcoholic beverages and measurements of abdominal fat.

Objective: The objective of this article review is to assess the evidence of whether alcohol intake is associated with accumulation of visceral adipose tissue, using the measurements waist circumference (WC) and waist-hip ratio (WHR).

Search strategy: The databases used in the literature study were PubMed and Scopus. The search strings were "(spirits OR beer OR wine) AND (waist circumference OR waist hip ratio)" and "alcohol drinking pattern AND (waist circumference OR waist hip ratio)".

Selection criteria: Studies which investigated alcohol intake and WC or WHR and also made adjustments for confounders were included.

Data collection and analysis: Five studies matched the inclusion criteria. They were all estimated to be of low study quality. The conclusions were graded according to GRADE on the endpoints of WC and WHR.

Main results: Positive linear or j-shaped correlations between alcohol and WC and/or WHR were seen in four of the five studies. Considering type of alcoholic beverage, the results were heterogeneous.

Conclusions: As of today there is no evidence for making changes in the Nordic Nutrition Recommendations concerning alcohol. The scientific basis is insufficient and more research in this area is needed.