



## [Intake of whole grains and incidence of oesophageal cancer in the HELGA Cohort.](https://arctichealth.org/en/permalink/ahliterature285601)

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Abstract: Few prospective studies have investigated the association between whole-grain consumption and incidence of oesophageal cancer. In the Scandinavian countries, consumption of whole grains is high and the incidence of oesophageal cancer comparably low. The aim of this paper was to study the associations between consumption of whole grains, whole-grain products and oesophageal cancer, including its two major histological subtypes. The HELGA cohort is a prospective cohort study consisting of three sub-cohorts in Norway, Sweden and Denmark. Information regarding whole-grain consumption was collected through country-specific food frequency questionnaires. Cancer cases were identified through national cancer registries. Cox proportional hazards ratios were calculated in order to assess the associations between whole grains and oesophageal cancer risk. The analytical cohort had 113,993 members, including 112 cases, and median follow-up time was 11 years. When comparing the highest tertile of intake with the lowest, the oesophageal cancer risk was approximately 45 % lower (adjusted HR 0.55, 95 % CI 0.31-0.97 for whole grains, HR 0.51, 95 % CI 0.30-0.88 for whole-grain products). Inverse associations were also found in continuous analyses. Whole-grain wheat was the only grain associated with lower risk (HR 0.32, 95 % CI 0.16-0.63 highest vs. lowest tertile). Among whole-grain products, the results were less clear, but protective associations were seen for the sum of whole-grain products, and whole-grain bread. Lower risk was seen in both histological subtypes, but particularly for squamous cell carcinomas. In this study, whole-grain consumption, particularly whole-grain wheat, was inversely associated with risk of oesophageal cancer.

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