Dietary Intake of Foods and Nutrients and Major Diseases: A Systematic Review

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Abstract: Recently, there has been growing interest in the association between the consumption of foods or nutrients and health or disease. We systematically reviewed prospective cohort studies (including some case-control studies) regarding the effect of food and nutrient intake on the incidence or mortality of various cancers, coronary heart disease, type 2 diabetes, and stroke. Using the MEDLINE (PubMed) database as well as reference lists of relevant papers, a total of 250 recent individual original papers were thus identified. No statistically significant relationship between the food and nutrient intake and each outcome was reported in many papers. However, the intake of vegetables and fruit was significantly and inversely associated with various outcomes in a relatively large number of papers. On the other hand, the consumption of meat was significantly and positively related to various outcomes in several papers. Regarding the intake of fish, dairy products, and antioxidants, some papers reported positive associations with various outcomes, whereas several papers showed inverse associations. As a result, we cannot make any clear statements about the effects of the diets on the outcomes. Due to the fact that only 19 such studies have been carried out in Japan, the differences between Japanese and Western diets should be taken into consideration when interpreting the results.

Key words: Nutrients, Systematic review, Lifestyle-related disease