Glycemic load, glycemic index, and carbohydrate intake in relation to risk of cholecystectomy in women.

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Abstract

BACKGROUND; AIMS: High-carbohydrate diets with a high glycemic response may exacerbate the metabolic consequences of the insulin-resistance syndrome. The effect on the incidence of gallstone disease is not clear.

METHODS: We examined the associations between high-carbohydrate diets with a high glycemic response and the risk of cholecystectomy in a cohort of women who were aged from 35 to 61 years in 1984 and had no history of gallstone disease. As part of the Nurses' Health Study, the women reported on questionnaires mailed to them every 2 years both their carbohydrate intake and whether they had undergone cholecystectomy.

RESULTS: During 16 years of follow-up, we ascertained 5771 new cases of cholecystectomy. After adjusting for age and other known or suspected risk factors in a multivariate model, the relative risk for the highest compared with the lowest quintile of dietary carbohydrate was 1.35 (95% CI: 1.17-1.55, P for trend < .0001). The relative risks for the highest compared with the lowest quintile were 1.50 for glycemic load (95% CI: 1.32-1.71, P for trend < .0001) and 1.32 for glycemic index (95% CI: 1.20-1.45, P for trend < .0001). Independent positive associations were also seen for intakes of starch and sucrose.

CONCLUSIONS: Our findings suggest that a higher intake of carbohydrate, dietary glycemic load, and glycemic index may enhance risk of cholecystectomy in women.

Comment in
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