

DIETARY PREDICTORS OF *HELICOBACTER PYLORI* SEROPREVALENCE IN MEXICAN ADULT POPULATION

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Background and Aims: *H. pylori* (Hp) infection is the main etiological factor for gastritis and peptic ulcer. Prevalence of infection is one of highest around the world, and it varies in different societies and geographical locations. This variability is attributed to factors such as socioeconomic status, life style, family density and other factors such as eating habits. However, factors influencing the risk of acquisition of Hp infection are not well established. The objective of this study was to identify the dietary predictors of Hp seroprevalence in adult Mexican population.

Methods: From January 2002 to December 2004 a cross-sectional study was carried out in Mexico City. A total of 349 ambulatory patients were recruited from 7 tertiary hospitals. From each participant, who had not received any previous anti-Hp treatment, Hp strains were isolated from an antral and corpus biopsy. Food and nutrients intake was estimated by a food frequency questionnaire.

Results: A significant reduction in Hp seroprevalence was observed among those who reported high vs low consumption of milk (OR=0.52, 95%CI:0.31-0.89), Oaxaca cheese (OR=0.44, 95%CI:0.26-0.76), and olive oil (OR=0.49, 95%CI:0.28-0.83), adjusted respectively by age, gender and crowding during childhood. Moreover, we can observed a significant protective effect between high vs low intake of calcium (OR=0.49, 95%CI:0.29-0.85) and fatty acids including butyric acid (OR=0.48, 95%CI:0.25-0.93), caproic acid (OR=0.55, 95%CI:0.32-0.94), capric acid (OR=0.57, 95%CI:0.33-0.98), and lauric acid (OR=0.49, 95%CI:0.29-0.85). Inversely, a significant increase in Hp seroprevalence was observed between high vs low consumption of pork stew (OR=1.72, 95%CI:1.01-2.93), cauliflower (OR=1.83, 95%CI:1.07-2.93), broccoli (OR=1.73, 95%CI:1.01-2.95) and Tomato salsa (OR=1.86, 95%CI:1.09-3.18)

Conclusions: This study suggests that consumption of fatty acids and dairy products may have a protective effect against *H. pylori* infection. Additional analytical studies are needed to determine whether consumption of fatty acids and dairy food products can prevent *H. pylori* infection.