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DIETARY HABIT, *HELICOBACTER PYLORI* INFECTION, AND EARLY GASTRIC CANCER

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Objectives: *Helicobacter pylori* (*H. pylori*) is now generally accepted to be strongly associated with the development of gastric cancer, as well as intake of some diets and food ingredients such as antioxidant vitamins, salt, charred food, etc. To evaluate the association of dietary habits and *H. pylori* infection and gastric cancer in Koreans, a hospital based case-control study was conducted.

Method: A total of 268 persons participated in this case-control study. 69 patients were newly diagnosed as an early gastric cancer (EGC) at the division of gastroenterology, department of internal medicine, Asan Medical Center, Seoul, Korea. One hundred ninety-nine subjects with no symptoms and visited the Health Promotion Center for their general checkups were selected as control. All subjects were examined for *H. pylori* infection and evaluated adaptive salt concentration. Dietary habit were obtained from semi-quantitative food frequency questionnaire (SQFFQ) for 24 food groups.

Result: *H. pylori* seropositivity was observed in 88.4% in case, as compared with 74.9% in controls (OR=2.5, 95% CI : 1.1-5.7). The adaptive salt concentration was associated with gastric cancer risk ($\chi^2=50.8$, $P < 0.0001$). The analysis of food intake frequency demonstrated that gastric cancer risk was reduced by the intake of clean soups ($P < 0.001$), seasoned raw vegetable ($P < 0.01$), raw vegetables ($P < 0.0001$), fruits ($P < 0.0001$), cooked beefs ($P < 0.01$), soybean curds ($P < 0.0001$) and juices ($P < 0.0001$). On the other hand, high intake of salt-fermented fish ($P < 0.01$), kimchi and traditional fermented foods ($P < 0.0001$) elevated the risk of gastric cancer. There is no different association

between EGC and control in other food groups.

Conclusion: These results suggest that some dietary factors and *H. pylori* infection have an significant association with gastric cancer development.