

The association between dietary lifestyles and hepatocellular injury in Japanese workers

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Tohoku J Exp Med. 231(4), 257-63, 2013

Elevated alanine aminotransferase (ALT) in serum, relevant to nonalcoholic fatty liver disease, has been often reported from Asian countries and the U.S., and it may be associated with lifestyle behavior. To clarify whether specific dietary behavior is associated with hepatocellular injury, we explored liver markers and dietary lifestyles (e.g., breakfast-skipping, eating for lunch, and snacking) in 1,809 male employees, aged 19-59 years, belonging to a health insurance union of automobile dealerships in Japan. ALT, γ -glutamyltransferase, and aspartate aminotransferase (AST) were positively correlated with age and body mass index (BMI) ($P < 0.0001$). Odds ratios (ORs) of instant noodle ingestion for lunch to ALT elevation (> 30 IU/L), after adjusting for possible confounders including age, BMI, and drinking, were 1.33 (95% confidence interval, 1.01-1.75) at 1-2 times/week and 1.47 (1.07-2.01) at ≥ 3 times/week, compared to those who seldom ate instant noodles. Likewise, the OR of the ingestion at ≥ 3 times/week to γ -glutamyltransferase elevation (> 50 IU/L) was 1.42 (1.02-1.99), but the OR to elevated AST (> 30 IU/L) was not statistically significant. Habitual ethanol intake was significantly associated with hepatocellular injury, though the threshold of daily ethanol intake differed among liver markers. Despite the low OR, habitual instant noodle ingestion for lunch is associated with ALT elevation. Since the average content of saturated fatty acids in instant noodles is considerably high among cereal foods in Japan, workers with this habit should be advised to avoid having unbalanced diets.

環境水中の有機フッ素化合物による環境汚染
Pollution of Environmental Water by Perfluoro Organic Acids

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水環境学会誌、Vo.36(No.9), 314-317, 2013

著者らは、環境中での有機フッ素化合物 (PFAA) の挙動を追跡するにあたり、分析法開発を行って 2002 年から日本および中国でさまざまな環境調査を行ってきた。2000 年当時の PFAA 汚染は PFOS および PFOA だけの問題であったが、世界情勢や時代動向を反映して分析対象となる PFAA の数も増え、その利用状況にも変化が生じている。本稿ではこれまで蓄積したデータを基に、ヒトや生物曝露にとって重要な河川や水道水について、日本における PFAA 汚染の変遷と現状および今後の課題について言及した。