Absorption and retention of selenium from shrimps in man

This study was undertaken to evaluate the bioavailability of selenium in shrimps, a possible good source of selenium, by measurements of the absorption and retention of selenium and the effects on plasma selenium concentration and glutathione peroxidase activity. Twelve healthy young subjects (9F and 3M) received 100 g of shrimps each day for six weeks in addition to their habitual diet. In the third week of the study a balance period was inserted in which the subjects received all food from the department and collected faeces and urine over 5 days. Blood samples were collected at commencement of the study, after 2, 4, and 6 weeks. The selenium intake increased from 39.4 +/- 15.3 mug/d to 127 +/- 5.5 mug/d with the addition of shrimps. The apparent absorption of selenium from shrimps was 83 +/- 4%, Faecal and urinary selenium excretion was 32.5 +/- 17.0 mug/d and 21.2 +/- 9.0 mug/d, respectively and the total retention of selenium was 3.1 +/- 1.1 mg. Plasma selenium concentrations were 95.2 +/- 9.7 mug/L and 101.5 +/- 9.7 mug/L before and after six weeks of shrimp intake, respectively (p

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