Long-term intake of iron fortified wholemeal rye bread appears to benefit iron status of young women - DTU Orbit (10/12/2018)

The efficacy of intake of iron fortified, wholemeal rye bread on iron status of young women with low iron stores was evaluated in a 5 month single-blind intervention study. Two parallel groups of women (20-38 y) were given 144 g of rye bread/d either fortified with 6 mg iron as ferrous fumarate/100 g bread (i.e. 8.6 mg iron/d) (n=21) or unfortified (n = 22) in addition to their normal diet. Blood samples were taken at 0, 2.5 and 5 months. Serum ferritin in the control group changed significantly from 0 mo: 24.6 [21.0-28.8] mu g/l to 5 mo: 20.2 [17.5-23.3] mu g/l. There was no change in serum ferritin in subjects given iron fortified bread. Haemoglobin was unchanged in the control group, 124 +/- 8 g/l. In the fortification group, there was a non-significant increase from 0 to 5 months: 124 +/- 6 and 126 +/- 8 g/l. Intake of fortified wholemeal rye bread resulted in a stabilisation of iron stores of young women with poor iron status which were otherwise reduced by intake of the unfortified control bread.

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