Long-term intake of iron fortified wholemeal rye bread appears to benefit iron status of young women

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] μg/l to 5 mo: 20.2 [17.5-23.3] μg/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.