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Development of Greek peasant type bread fortified with vitamin D

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Vitamin D is essential to calcium absorption and bone health while current studies suggest that adequate vitamin could help prevent certain diseases. Due to insufficient amount of vitamin D in staple foods, bread fortification may be an alternative. For the enrichment of Greek, peasant type bread, different preparations containing vitamin D₂ or D₃ were used. To analyze the vitamin content in the tested breads, various sample preparation methods and chromatographic analyses were employed, in order to optimize the process. Finally a liquid chromatographic method (HPLC) after a saponification and extraction step was followed in order to study the stability of vitamin D in the bread. The enrichment of bread with vitamin D is technically feasible and the vitamin D seems stable in this food. The Greek peasant type bread has a potential to act as functional food for the treatment of hypovitaminosis D. This research has been co-financed by the European Union (European Social Fund- ESF) and national funds through the Operational Programme "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF) - Research Funded Project: Archimedes III.

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