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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