

Designing a Functional Bread Premixes Recipes Involving White Mulberry Fruit

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Abstract : The object of this study was to develop recipes and technology of production of functional bread with morus alba fruit addition. There were prepared four samples of functional breads and the control sample also. Bread recipe was designed for supporting the treatment of anemia, diabetes, obesity and cardiovascular diseases. Samples of bread were baked with mixes directly after preparation and after three months' storage, each time preparing the water and methanol extracts. The sensory analysis and nutritional value were estimated. The antioxidant activity were estimated used tests such as the ability to scavenge free radical DPPH, the ability to scavenge the ABTS cation, chelating properties and the total content of polyphenols. The study results showed that the prepared sample of functional breads were characterized by a high nutritional value with high concentration of biologically active compounds which showed antioxidant activity. In addition, the profile sensory of bread samples was highly rated. However, to determine whether they can be considered as a new product preset pro-health properties require additional nutritional studies - clinical trials.

Keywords : functional food, breads, white mulberry, bioactive components

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