Utilization of Malted Sorghum Flour for the Development of Multigrain Cookies

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ABSTRACT

Cereal crops like sorghum and foxtail millet have many nutritional and medical properties. However, an important problem relating to the nutritional value of sorghum is that the protein of cooked sorghum is significantly less digestible than that of other cooked cereals [1]. In the present research work, cookies were developed by addition of different blends of malted sorghum flour and fixed concentration of foxtail millet flour and the effect of malting on nutritional and antioxidant activity of sorghum was studied. To optimize the quantity of ingredients i.e. malted sorghum flour, fat content & sugar content level to be added, Response Surface Methodology was used while foxtail millet was kept constant at 10% level. It was found that cookie having composition of malted sorghum flour (30%), fat content (33%) & sugar content (50%) was found optimum and that incorporation of sorghum and foxtail millet flour increases the nutritional and bioactive components of optimised cookie when compared to control and that the antioxidants present in the sorghum and foxtail millet prevent the anti-oxidation of the fats present in the cookies.

Keywords: RSM, Malting, Bioactive Components, Antioxidant activity