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**Coffee silverskin as fat replacer in cake formulations and its effect on  
physical, chemical and sensory attributes of cakes**

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**Abstract**

Coffee silverskin untreated and treated with water has been studied as a potential fat substitute in cake and the effects of the replacement of 20, 25 and 30% of fat by coffee silverskin on physical, chemical and sensory attributes of cakes were evaluated. Replacement of fat by coffee silverskin did not significantly alter the specific volume and weight loss of the cakes. L\* and b\* values of crumb decreased, whereas a\* value increased, hardness and chewiness of the cakes increased, whereas springiness and cohesiveness decreased. Ash and antioxidant activity of cakes increased with coffee silverskin and water treated coffee silverskin enhanced the moisture content of cakes. Sensory quality of cakes with water treated coffee silverskin showed similarity with control cake in terms of crumb porosity, cohesiveness, moistness, oiliness and sweetness. As the substitution level of water treated coffee silverskin increased perceived oiliness of cakes did not change. Coffee and bitter taste intensity was not found to be strong in cakes with water treated coffee silverskin. Water treated coffee silverskin could

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