

THE EFFECTS OF HYDROCOLLOIDS AND SQUASH ON THE TEXTURE AND COLOR OF SCONES WITH REDUCED FAT

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ABSTRACT

Obesity has become a major issue in the United States due to poor food choices of individuals and limited low fat items on the market that consumers are willing to eat. By making products that are lower in fat, consumers may be able to reduce their chances of obesity by making healthier choices. In this study, a scone recipe was chosen and the fat content was lowered by removing ingredients that provide fat and replacing them with select hydrocolloids (Carrageenan, Locust Bean Gum, and Guar Gum) and squash. These scones were then tested for texture and color difference against the original recipe. All three hydrocolloids gave a variety of results for all tests. Locust bean gum and guar gum gave a product that was similar to the original scone recipe in texture and color. Overall, carrageenan gave a product that was most like the original scone recipe. It was then taken and tested in three extreme amounts to see if there was a more desirable percent of carrageenan that should be used. The manufacture's suggestion of 0.5% tested the closest to the original recipe in texture and color. This resulted in a reduced fat product that was comparable to the original scone recipe in texture and color.

