

CONSUMER ACCEPTANCE AND CAROTENOID CONTENT OF BIOFORTIFIED PUMPKIN MUFFIN.

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Cucurbita moschata D. (pumpkin) has been traditionally eaten by Northeastern Brazilian population. *Cucurbita moschata* constitutes an important source of pro-vitamin A and presents high levels in carotenoids, especially β -carotene and lutein. There are several culinary uses for this crop, either as a vegetable or as an ingredient in food preparations like pies, soups, stews, breads and cookies. The use of pumpkin in product development as nutrient supplier will promote an increase in its cultivation as not only bringing benefits to the farmers, but also to agribusiness. The aim of this study was to evaluate the sensory acceptance of *muffin* receipts, total carotenoids and β carotene contents with the use of 30, 50 and 70% biofortified pumpkin (biofortified pumpkin is an improved variety with higher content of pro-vitamin A). The acceptability was assessed through a hedonic scale of 9 points by 104 untrained panelists of both gender, and the attributes evaluated were appearance, texture and global acceptability. Total carotenoids and β carotene content were analyzed by high performance liquid chromatography (HPLC). The products evaluated had good acceptance for all the attributes, however, 50% formulation presented L.S.D at 5% significant difference between the formulations with 30 and 70%. Muffin with 50% of pumpkin was the preferred by consumers presenting acceptance scores of 7.65; 7.39 and 7.41 (appearance, texture and global acceptability respectively). The formulations with 30, 50 and 70% pumpkin presented the following levels of total carotenoids: 2020.5; 2650.5; 4043 $\mu\text{g}/100\text{g}$ and β -carotene 1261.5; 1816.5; 2766 $\mu\text{g}/100\text{g}$. These results confirm that adding pumpkin as an ingredient in *muffin* preparations can promote a nutritional and well sensory accepted product.