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LOW-FAT ICE MILK MANUFACTURED WITH FRUITS OF NABQ (ZIZIPHUS SPINA-CHRISTI L.)

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ABSTRACT

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Ice milk is one of the most popular frozen desserts in Egypt and nowadays consumers are interest of healthier and functional food. Therefore, the aim of this study was to produce a low- fat ice milk by replacing cream with nabq fruits pulp (NFP) at 25, 50, 75 and 100% to obtain a product with functional characteristics. The chemical composition, total phenolic compounds, antioxidant activity, mucilage content, physicochemical characteristics and sensory acceptance of the ice milk were analyzed, beside, sensory acceptance. Ice milk containing NFP had a higher concentration of phenolic compounds and posteriorly had higher antioxidant activity compared to the control samples at zero time and after 40 days for all concentration of NFP. %Overrun increased significantly in T3 compared to other treatments, whereas freezing time decreased by the increasing of replacement percentage of NFP. Also, the high level of NFP (100% replacement) led to increase viscosity as this fruit contain mucilage and fibers. Our findings purported that the best percentage of replacement was 50% for panelist's acceptance. Nabq fruit pulp potentially recorded as a natural source of antioxidants and mucilage to fortify and develop new products.