Sensory evaluation of Acerola juice (Malpighia Glabra) added of Chitosan

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A promising alternative to the use of chemical preservatives is chitosan, due to its properties that, together with the low cost of production, is ideal for use as a natural preservative. The study of the potential use of chitosan as a natural preservative of juice, replacing chemical additives was carried out by evaluation of the sensory feature. Chitosan (Sigma ®) was dissolved in 1% acetic acid (20mg/ml). Acerola juice was tested with chitosan concentrations of 2.5 and 5 mg/ml after 0, 5 and 7 days of storage. The concentration of chitosan significantly affected (p<0.05) the sensory acceptance of Acerola juice. The sensory acceptance test ranged from 4.54 "dislike slightly" to 8.32 "liked". Immediately after processing (time 0), the Acerola juice was given the highest scores, however they were reduced by the addition of chitosan. This is due to the bitter taste of the juice resulting from addition of the chitosan. These results are in agreement with other authors, who also found a reduction in the overall assessment of the juice with the addition of chitosan. In the 5th and 7th days of storage, chitosan increased the sensory acceptance due to its action on the stability of the juice. The purchase intention of the juice, by the 5th and 7th day of storage, significantly (p <0.05) increased with the addition of chitosan. Thus, if the juices with added chitosan were available in the market consumers were likely to buy it. It was concluded that it is feasible sensory adding chitosan in juices.