DEVELOPING ICE CREAM WITH OLIGOFRUCTOSE

Mabel dos Santos, Vanessa P. da Rosa, Pablo T. da Silva, Agricultural College of Frederico Westphalen, University of Santa Maria – UFSM, Linha Sete de Setembro, s/n, BR 386, Km 40, 98400-000, Frederico Westphalen, Rio Grande do Sul, Brazil.

Besides the nutritional benefits, oligofructose is used as an ingredient in the formulation of new foods for technological reasons; it is also used as a substitute for sugar or fat or low calorie agent, even as texture improver. The aim of this research was to develop a prebiotic ice cream with, replacing sugar by oligofructose. Four formulations of ice cream were made: traditional; with replacement of sugar by 25%, 50% and 100% oligofructose. After processing and freezing was performed sensory tests of acceptability for color, aroma, flavor, texture and overall quality using a hedonic scale of nine points, the extreme value 1, given the term hedonic "dislike extremely" and value 9, given the term "like extremely". The tests were applied in the laboratory with 30 judges. The acceptance test results were evaluated by ANOVA and Tukey test at 5% level of significance. In relation to color and odor and overall quality was no significant difference (0.5%) among the samples, which had an average above 7.0 for all attributes. However, for flavor did not differ from the standard sample with addition of 25 to 50% of oligofructose, which had mean values between 7.3 and 8.1, and significantly different relative to the sample at 100%, thus replacing up to 50% oligofructose did not notice the change in consumer taste. For texture and intention to buy no significant difference between standard samples with 25 and 50% oligofructose. Thus, we conclude that it is commercially viable to produce ice cream with oligofructose.