EFFECT OF DIFFERENT FIBRES ON THE CONSUMER PREFERENCE OF ICE-CREAMS

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Introduction

✓ Some benefits about the ingestion of fibers are reported by the scientific community, increasing the their consumption.

✓This research aimed to evaluate the consumer preference of ice creams produced with different fibers (*Z-trim*, *Vitacel WF600*, i*nulin* and *Nutrassim*) with total replacement of fat.

Material and Methods

Manufacture of Ice-creams

✓Weighing of the ingredients involved (milk, emulsifiers, stabilizers, milk powder, sugar).

✓Increasing temperature until 40 ºC for addition of the different fibers, under agitation;

✓Pasteurization of the mix (85ºC/30 min);

✓Cooling to T=40 ºC and addition of the vanilla flavor;

✓Homogenization (200 Bar);

✓Maturation (5ºC / 24 hours);

✓Incorporation of air (overun),

Consumer Test

✓100 people, aged 18-32, typical ice-creams consumers, evaluated the samples using Preference-Raking test towards the atributtes color, taste and aroma;

✓In addition, purchase intent were evaluated using a binomial scale (yes/no). Between tasting each sample, the participants were requested to eat a cream cracker biscuit and drink some water. The first order and carry over effects were balanced using a specific design (Mac Fie,Greenhoff, & Valis, 1989).

Statistic Analysis

✓The results were tabuled and analysed according the Fridman Test, using the table Newel & Mac Farlene;

✓ The positive frequency test was calculated towards the purchase intent.

Results and Discussion

✓It was noted that the fat substitution in ice-cream can be made by the supplementation of low amounts of ice-cream to avoid undesirable texture;

✓It was noted that is not significant difference occurs towards ice-cream processed with different fibers to the color and texture attribute, except for the attribute taste;

✓Ice cream supplemented with inulin presented the largest preference in all attributes, what it was confirmed by the high result of the purchase intent.

Table 1 – Preference-Raking of Ice-creams supplemented with fibers

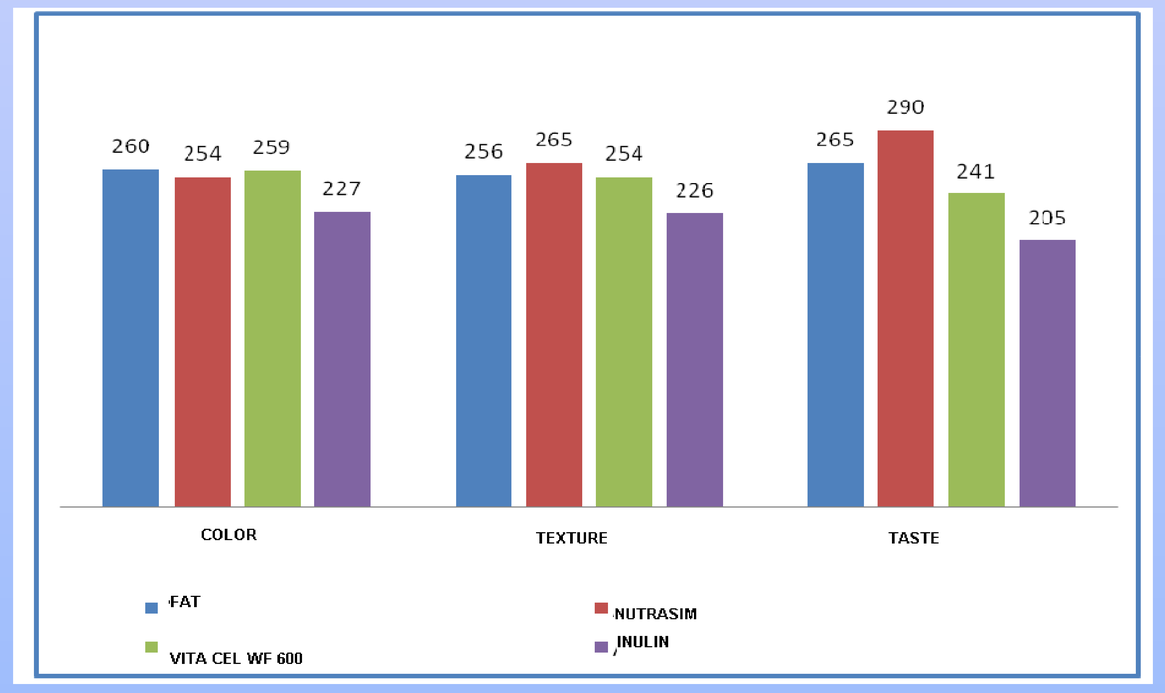
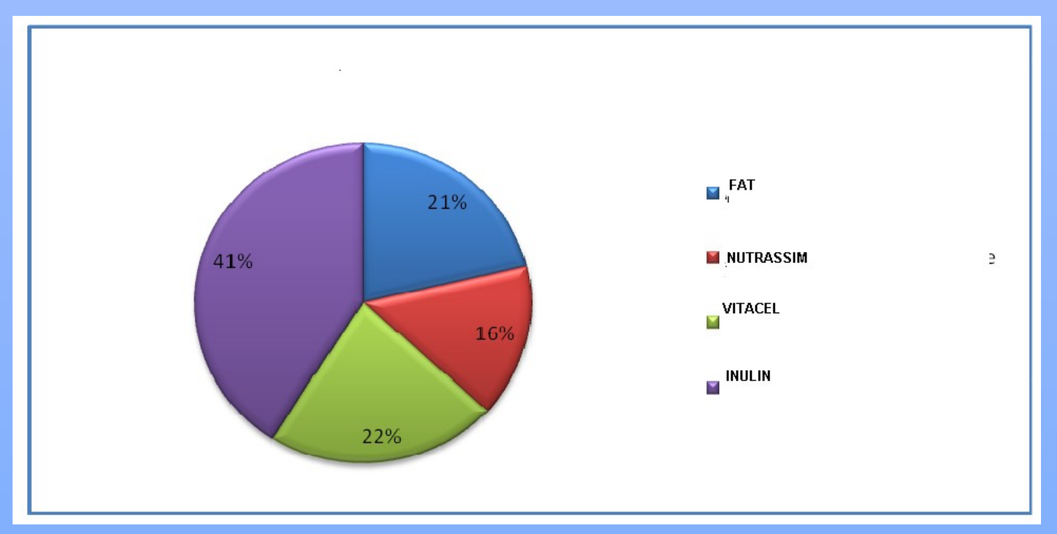


Table 2 – Purchase Intent of Ice-creams



Conclusion

✓It is possible the development of ice-cream with incresead-fiber with good sensorial acceptance content using inulin, which besides the fat replacement, it presented the prebiotic effect

Acknowledgement

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