Acceptance of mixed juices of fruit and vegetables by Internal Preference Map

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The Brazilian juice industry stands out for its production of tropical fruits juices. However, new flavors have been developed to meet the market and its trends. This study aimed to evaluate the sensory acceptability of juice of passion fruit mixed with kale and passion fruit mixed with spinach. It was used a basis formulation of passion fruit juice (67% of water, 22% of passion fruit juice and 11% of sugar) defined by preliminaries tests; varying only the concentration of the vegetables. Four formulations were prepared, the first two being added 0.6% and 1.0% of spinach and the remaining added 1.6% and 2.4% of kale. The formulations were evaluated for 100 tasters using hedonic scale with 9 points. The data of acceptability were submitted to the analysis of variance (ANOVA) randomized block, by the test Tukey by the probability level of 5% and after, by the intern preference map. A scattering in the acceptance among consumers was observed through the Preference Map, indicating that there wasn’t greater acceptance by a specific formulation of mixed juice. The first two main components explained 78.43% of the variability among the samples. The same results were observed by the Tukey test, since the beverages didn’t differ on the acceptance (p>0.05), being classified among the hedonic like slightly and like moderately. These formulations of fruit juice mixed with vegetables presented good acceptance and marked potential, meeting the tendency of the current consumers that look for healthy, attractive and high nutritional value of foods.