PETIT SUISSE DIET: ACCEPTANCE AND TIME INTENSITY ANALYSIS

Luíza Pinheiro Carvalho, Vanessa Rios de Souza, Telma Melo Brandão, Ana Carla Marques Pinheiro, Helena Maria André Bolini. Department of Food Science, Federal University of Lavras – UFLA, Caixa Postal 3037, Lavras, Minas Gerais, Brazil.

The time intensity technique measures the sensory perception of intensity of a specific attribute and allows monitoring the changes in the intensity perception during the evaluation of the products. The objective of this study was to characterize the time-intensity profile and to evaluate the sensory acceptability of traditional petit suisse and different diet formulations. We evaluated the traditional formulation (sucrose) and the diet formulations by the addition of the sweeteners: sucralose, sucralose/acesulfame-K (4:1), thaumatin/sucralose (2:1) and cyclamate/saccharin (1:1). The time-intensity analysis was performed with six selected and trained tasters using the "System Data Collection Time-intensity" (SCDTI), was evaluated the attributes sweet and bitter taste. Acceptance testing was performed with 60 children between 7-9 years. The formulations of petit suisse with sucralose, sucralose/acesulfame-K (4:1) and thaumatin/sucralose (2:1) showed very similar sweetness profile of the formulation with sucrose, for the attribute bitterness, the formulations with sucralose/acesulfame-K (4:1) and thaumatin/sucralose (2:1) showed more similar profile of the traditional formulation. For the acceptance test, it was found a preference by consumers for petit suisse sweetened with sucrose, sucralose and sucralose/thaumatin (1:2). Of all of the sweeteners studied, sucralose/thaumatin (1:2) is recommended for use in strawberry petit suisse diet, once it has been pointed out by the time intensity test the sweetener with sweetness and bitterness profile more similar to sucrose and also was one of the most accepted samples for acceptance testing.

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