**B-75 : Screening and training of a product oriented sensory evaluation panel to evaluate taste and odour difference**

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Consumer acceptability is a factor of major importance in determining the marketability of a food product. This is achieved by the optimization of a food product as determined by a sensory evaluation panel. A product oriented sensory evaluation panel was formed to evaluate various new food products developed at CISIR. Initially of the seventy five panelists, all members of CISIR, were screened and fifteen were chosen. Screening was done by requesting panelists to identify basic tastes (sweet, sour, bitter and salty), common odours (Citral, Geraniol, Vanillin, Eugenol and Pentyl butyrate as odourous substances) and their different threshold levels. The selected panelists were trained in discriminating and scaling test such as the triangular test magnitude estimation test for ingredient substitution. The efficiency of this panel was determined by using 2 samples of green chilli sauce, one developed at CISIR through this project and the other a commercial sample.

The results of the Interval Scaling test revealed that there was no interacting effect between the panelists at 0.616% significant level. Hence this sensory evaluation panel could be used for product evaluation. The result of magnitude estimation test as ingredient substitution of lime juice showed that 5% (w/v) sucrose sweetness was equal to 6.2% (w/v) of glucose, since glucose is less sweet than sucrose. This panel had the ability to identify such differences The result of the triangular test showed that there was a significant difference between the 2 sauce samples at 5%, 1% and 0.1% significant levels. In this test 11 out of 12 panelists, were able to identify the odd sample. This indicated that the trained panel has the ability to identify slight changes in the sample. The result of the sensory testing which were statistically analysed were encouraging as these proved the capability of the chosen product oriented panel. Such a panel could be used in evaluating and improving other new food products as required by the Sri Lankan food industry.