

**E2-25:THE ROLE PLAYED BY TROPICAL FRUIT JUICES IN THE
FORMATION OF GELS IN CERTAIN PRODUCTS - CONTRIBUTION
OF FRUIT PULP/JUICE TOWARDS GEL STRENGTH**

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Introduction of a series of fruit juices - Beli, Mango, Melon, Passion Fruit, Pineapple and Mixed Fruit Juice (Mango, passion fruit, pineapple, lime mix) - to a gel forming medium consisting of pectin (OBI - Brand) acids and sugar solids resulted in steady gaining of gel strength - (940g at 10% pulp to 1140g at 30% pulp) - until the resultant pH of the medium exceeds the recommended pH level of 2.8 - 3.0. Gel strength of the fruit product was found to increase steadily with increase of juice content but on reaching a certain level the final gel strength began to weaken due to the loss of conditions - i.e in pH value to form a gel. Thus maintaining a specific fruit content for certain jams results in a weak gel strength below 900g with a running texture. Adjustment of pH with organic acids to give a firm texture results in a high acid gel which is unpalatable. A mixed fruit gel of specified fruit content which has a running texture at pH 3.5 has palatable acidity of 0.6% (m/m) citric acid gains an acidity of 1.0% (m/m) citric acid when adjusted to the required pH of 2.8 - 3.0. It gains a sour unpalatable taste. Thus a reduction of the specified fruit content is therefore unavoidable to achieve the required texture of the product.