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شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

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شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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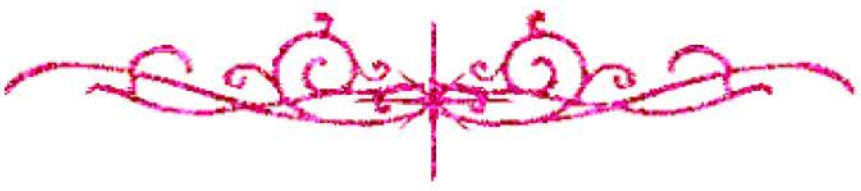

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شبكة المعلومات الجامعية

بالرسالة صفحات لم ترد بالأصل

Minufiya University

Faculty of Home Economics

Department of
Nutrition and Food Science

Studies on production low calory jams

A Thesis Submitted in Partial Fulfillment
For the Degree of
Master of Science

In

"Nutrition and Food Science"

By

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Abstract

1) A commercial, orange jam (control sample) were prepared, using "sucrose" and pectin as jelling agent, produced sample sensory evaluated it obtained degree "very good", it app. viscosity was 8111 c.p., and found that it contains 251 calory per/100 grams.

2) Seventeen investigated low calory formulas were manufacture by using four kinds of sweeteners "H.F.S., Asp., Stev., and F.P." as sucrose substitutents by several ratio, 25%, 50%, 75% and 100% for the aim of investigated a new formula of low calory jam which contains no more than 150 calory/100 gm.

3) The app. viscosity values of the produced jam were decreased by increasing the percent of sucrose replacement.

   A grater decrease of the app. viscosity were noticed in the case of Aspartam or Stevia, than in the case of using H.F.S. of F.P.

4) It was noticed no difference between the quality of the low calory jam which prepared using Aspartam or stevia.

5) Also noticed that it needs to increase the pectin percentage in the low calory jam to about 2.8% of the total weight of the formula or using a mixture of 1.4% pectin, 1.4 L.m.p., and 0.35% calcium chloride.

6) Using 3% or 5% Arabic gum gelatin as jelling agent instead of mixture of "pectin, gave a better" results.

7) The most acceptable sample that prepared by the following formula:

   a- Sweetener materials source from:

      20% high fructose syrup. + 40% aspartam + 40% stevia.

   b- Jelling agents:

      1% gelatin + 1% Arabic gum + 1% guar gum + 0.28% pectin + 0.28 Low methyl pectin + 0.2% agar.

8) The sample which prepared by using a mixture of 10% carrot fiber plus 5% naring peel, gave a better results which, it sensory evaluated as a very good plus, app. viscosity value was 7799 C.P. and it contained only 133 calory/100 gm.

9) The optimum effect were in the case of addition 1% chamomile extract tot he components of the low calory jam, it showed a significant decreasing in the total count of bacteria, yeast and fungi.

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