

PALM-BASED SWEET SHORT CRUST

by: NOR AINI IDRIS; MISKANDAR MAT SAHRI; ROBERT BASKER;
AHMAD BORHAN AHMAD; HANIRAH HASSAN and CHE MAIMON CHE HA



MPOB INFORMATION SERIES • ISSN 1511-7871 • JUNE 2006

MPOB TT No. 320

Pastery used for tarts is referred to as sweet short crust pastry (*Figure 1*). Pastry doughs vary according to the type of final product intended. For instance, the crust for a pre-cooked custard pie should be different from the crust for a fruit filled pie. While the basic ingredients for most pastry doughs are similar, the amounts used and the methods of mixing the dough are different (Sultan, 1983).



Figure 1. Sweet short crust pastry.

CHARACTERISTICS OF SWEET SHORT CRUST

Fat formulations were selected for sweet short crust production. They were coded F1, 783 and 784. Butter and an imported commercial shortening were included for comparisons. Short

PRODUCTION OF SWEET SHORT CRUST

INGREDIENTS



MIXING



RESTING THE DOUGH



MOULDING



BAKING



COOLING



COATING



PACKING



crusts were prepared and before baking, their texture measurements taken. The amount of force required to penetrate the doughs ranged from 92 to 140 g (*Figure 2*). The lower the force, the softer (more tender) was the dough. A short, tender crust is very important to the consumer. When mixed properly, the fat provides tenderness or shortness to the crust. Tenderness in pastry is inhibited by preventing flour hydration. Flour hydration is inhibited if the flour granules are coated with fat and if minimal amount of water is used to form the dough (Gates, 1976). Using the current formulation, the force required to break the crusts ranged from 2440 to 5900 g. This higher force thus results in a harder crust.



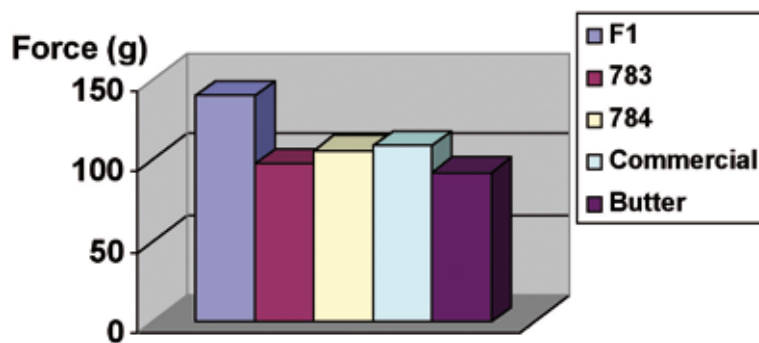


Figure 2. Texture of doughs made with formulated fats, commercial shortening and butter.

Sensory evaluation by trained panellists showed significant differences in aroma and taste among the samples made with the different fat formulations. However, the difference in crispiness was not significant.

Sensory evaluation by consumer panellists indicated no significant difference in scores among all the samples tested. Products made with all fat formulations received scores above seven which indicated that they were highly acceptable.

NOVELTY

The sweet short crust pastry formulated had good textural properties – it was crispy and yet crumbly. It is a good alternative to butter-based pastry. The

product can also be prepared well in advance, to serve as convenience food, ready-to-use for preparation of fruit tartlets.

COMMERCIALIZATION POTENTIAL

Production of palm-based sweet short crust pastry is economically feasible for any bakery with existing facilities. For automatic moulding of the short crust, the pastry machine costs approximately RM 60 000.

REFERENCES

- GATES, J C (1976). *Basic Foods*. Holt, Rinehart and Winston, New York.
- SULTAN, W J (1983). *The Pastry Chef*. The AVI Publishing Co. Inc., Westport, CN.

For more information kindly contact:

Director-General
MPOB
P.O. Box 10620
50720 Kuala Lumpur, Malaysia.
Tel: 03-89259155, 89259775
Website: <http://mpob.gov.my>
Telefax: 03-89259446