

# **DEVELOPMENT OF COMPOSITE FLOUR BASED COOKIES**

**By**

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the degree of Master Science in Food science and Technology,  
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## Declaration

The work described in this thesis was carried out by me at the laboratory of the Food Science and Technology of University of Sri Jayewardenepura under the supervision of Prof. Arthur Bamunuarachchi and Dr. K.K.D.S. Ranaweera and a report on this thesis has not been submitted to any university for another degree and has not been presented or accepted in any previous application for a degree.



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We, Prof. Arthur Bamunuarachchi and Dr. K.K.D.S. Ranaweera certify that the statement in preceding page made by the candidate is true and this thesis is suitable for submission to the university for the purpose of evaluation.

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**Dedicated to my loving husband parents and little son**

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## Abbreviation

C.F.B.C	-Composite flour based cookie
M.C.F.B.C	- Composite flour based cookie with germinated finger millet and green gram
C.F.B.C (W)	- Composite flour based cookie with wheat
PV	- peroxide value
SLS	- Sri Lanka standard



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## **Development of Composite flour based cookie**

**By**

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### **ABSTRACT**

The study was an attempt to introduce composite flour based cookie (without wheat flour) to the people who have wheat allergies, and for those who need more fibre supplement. The cookie was further developed by adding germinated green gram and finger millet (“Kurakkan”) which is suitable for the children due to the high amount of simple sugars.

Rice, finger millet and green gram flour are main cereal ingredients and they were used as high nutritional, less costly local cereal flours. Jack fruit seed flour is used as protein source as well as a binder. Composite flour based two cookies were developed and another cookie was prepared by using wheat flour instead of rice flour for the comparison. The chemical compositions, physical properties, keeping quality of the three products were evaluated. Sensory properties (crispiness, mouth feel, taste, color and overall acceptability) were evaluated by using non trained panelists and the prepared samples showed better and agreeable sensory properties than the cookies prepared with wheat flour.

Priority was given for nutritional value, health benefit, cheap local ingredients and the use of minimum flavors and antioxidants. The prepared cookies could have a demand in the Sri Lankan market depending on the customer evaluation. Further research is possible for improvement of the quality and the sensory properties of the product.