

Technology of Indian Flat Bread

# Chapatti

— Dr. S.K. Berry —





# TECHNOLOGY OF INDIAN FLAT BREAD

## “*CHAPATTI*”

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## **DEDICATION**

*Dedicated in the memory of  
my loving **Parents** and Son **Aman***

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## PREFACE

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Wheat has sustained mankind in meeting the need for protein and energy since time immemorial. Wheat flour, whole or refined has been used variously to prepare a variety of baked products both leavened and unleavened. Chapatti is one of the unleavened products. It is flat, circular, single layered product made by rolling a ball of stiff dough of whole-wheat flour with or without the addition of salt and fat, and baked on both sides on a hot iron griddle popularly called *tawa*. It has been categorized among the flat breads both leavened and unleavened (Faridi, 1988), and has been the staple food of the millions world over, especially the Indian subcontinent for millennia. So far, the preparation of chapatti and chapatti-related products has been manual and confined to households, *dhaabas* (roadside eateries), hotels, restaurants, other catering establishments, institutions providing meals, etc. Recently, like bread, chapatti-making has been mechanized and a wide range of chapatti-making machines of different capacities have been developed and have become popular. Wheat has different species and varieties. Different wheat varieties are cultivated, and new varieties are continuously being developed for selection. Austin and Ram (1971), in an Indian Council of Agricultural Research Institute Technical Bulletin, had put together the results of their research conducted on different wheat varieties for their suitability to make bread, chapatti, biscuits, pasta products, etc. Since then a lot of research work on the development of new varieties of wheat and their quality traits amenable to make chapatti of desirable quality has been done and is continuing. The present book is an attempt to consolidate the scientific information published in Journals in Food Science and Technology, Agriculture, Biochemistry and Biotechnology, and Nutrition; technical bulletins, proceedings, reports and commercial literature on the new developments and findings related to new wheat varieties, chapatti and chapatti-related products. Chapter 1 introduces to a brief history on the cultivation and use of wheat for making of bread and flat breads like chapatti, and projects the research needs to improve the quality of wheat and chapatti. Chapter 2 discusses the physicochemical, rheological and chapatti making characteristics of different varieties of *aestivum* (bread) wheat and whole wheat flour. Chapter 3 describes developments in composite flours for chapatti. Chapter 4 describes the traditional method, test baking methods and mechanization of chapatti preparation / making. Chapter 5 covers the composition and nutritive value of whole wheat flour and chapatti, and factors affecting the nutritive value of chapatti with methods to improve the nutritive value. Chapter 6 discusses the quality aspects of chapatti, and factors influencing the chapatti quality. Chapter 7 deals with the staling aspects and extension of shelf life of chapatti. Chapter 8 presents highlights on the chapatti-related products. Chapter 9 provides the consolidated alphabetically arranged literature consulted.

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