

Composite Bread Flour

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What is Composite Bread Flour Definition

A flour made by blending varying amounts of non-wheat flour with or without wheat flour and used for the production of leavened bread and other baked products that are traditionally made from wheat flour

Why do we need CBF

- To reduce cost of end products
- To save valuable foreign exchange
- To promote indigenous crops
- To develop local agribusiness
- To enhance nutritional value
- To produce breads for gluten intolerant

How did it start

History..

- ▣ Initially it was introduced as an emergency measure in the developed countries during the two world wars when wheat supplies were limited
- ▣ In 1964, FAO established the Composite Flour Programme to identify those non-wheat materials that could be used in developing countries to extend wheat flour for bread making
- ▣ In 1970's at the instigation of FAO, several tests were conducted at what was then the TNO Institute for cereals, Flour and Bread in Wageningen, Netherlands and at Tropical Products Institute in London and at Kansas State University, Manhattan, USA.

- ▣ Joint projects were carried out by the FAO and UNDP in Brazil, Peru, Nigeria and Senegal to examine possibility of using home-grown in conjunction with wheat flour.
- ▣ Several countries viz India, Peru, Ghana, Nigeria, West Indies and Philippines took the initiative themselves and started to develop ways of using local products
- ▣ International Association for Cereal Science and Technology (ICC) in Vienna set up a study group that promoted the investigation and use of composite flours by organising symposia, seminars and discussion meetings and through numerous publications in specialist periodicals.

Why is it still not popular

- ▣ Lack of commercial approach
- ▣ Too academic and research oriented
- ▣ Insignificant involvement of key stake holders
- ▣ Lack of efforts to market the concept and/or technology

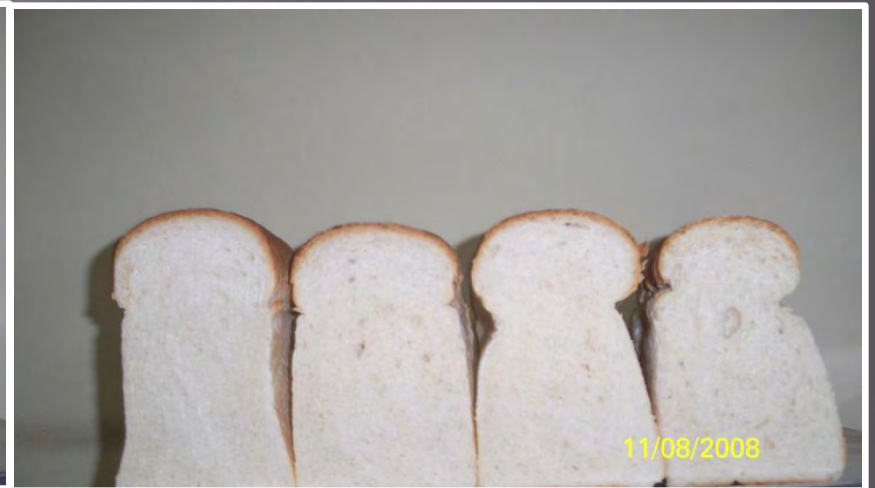
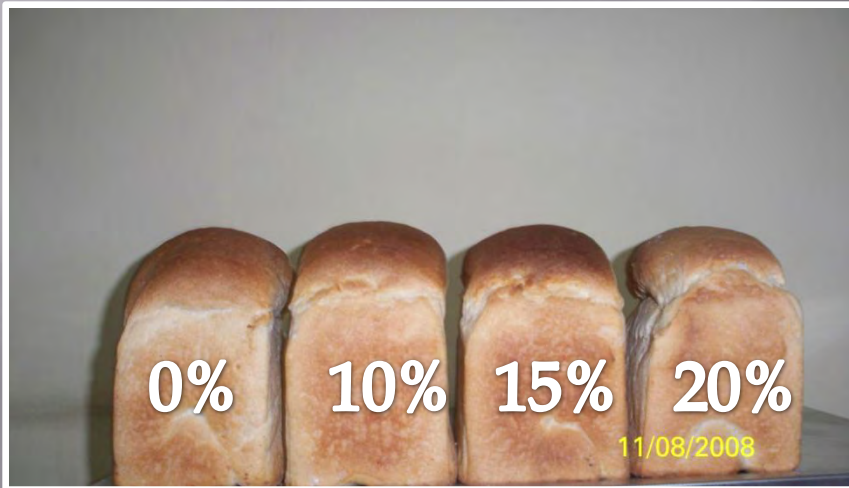
Steps Involved

- ▣ Milling of wheat into flour
 - Gluten
 - Extraction
- ▣ Processing of non-wheat flour
 - Suitability for end use
 - Cost at point of use
 - Availability
 - Consistency
- ▣ Blending
- ▣ Additives/Improvers

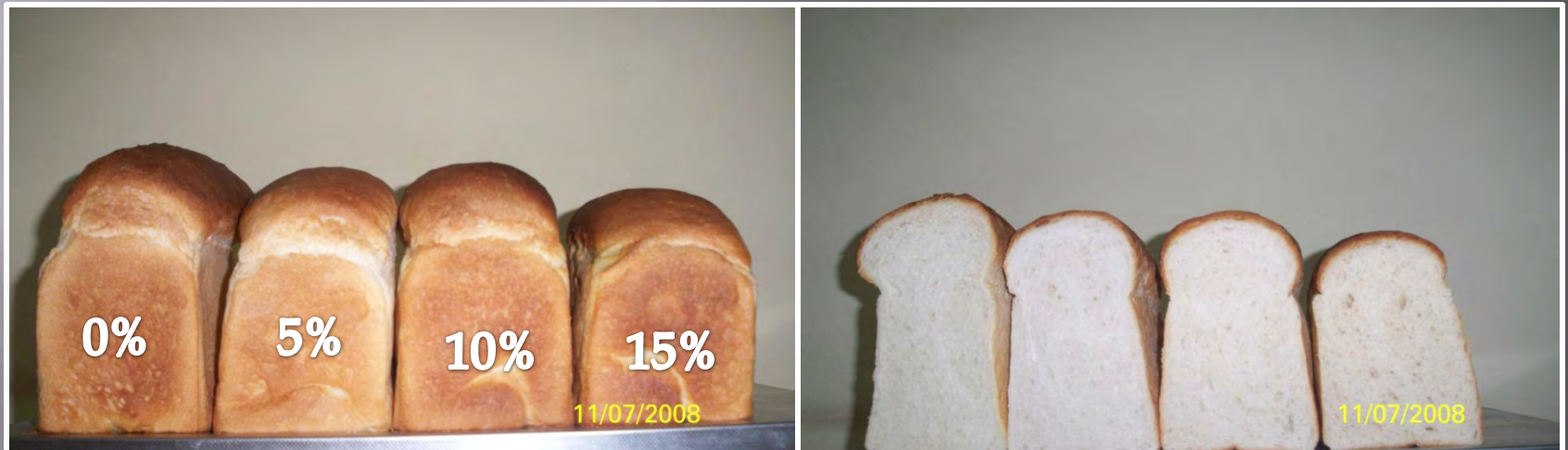
Bread Making

- ▣ Methods of making Bread
 - Traditional Vs MDD
- ▣ Key Differences
 - Water absorption
 - Yeast
 - Dough development
 - Fermentation and Proofing
 - Baking time & temperature

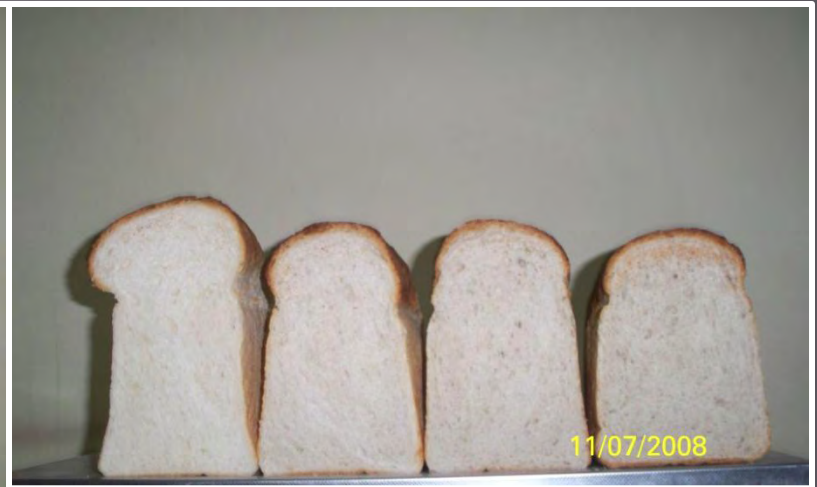
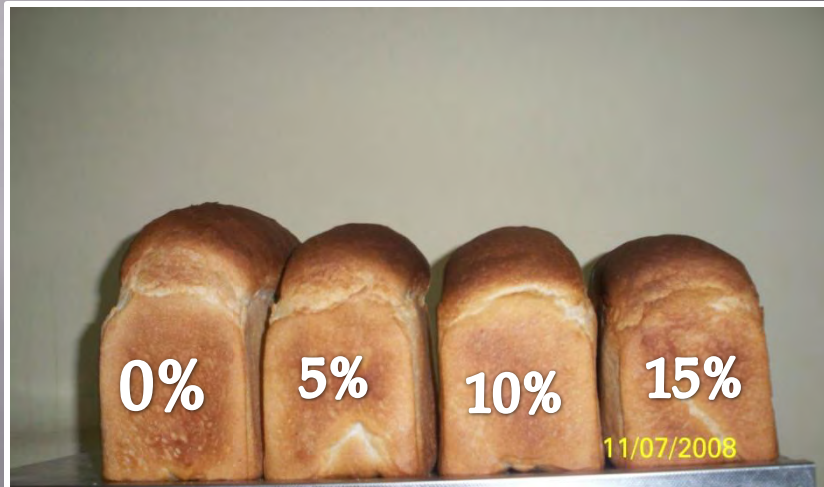
With Maize Flour



With Soya Flour



With Sorghum Flour



Consumer Acceptability

- ▣ Appearance
 - Volume
 - Shape
 - Crust colour
- ▣ Aroma
- ▣ Crumb
 - Colour
 - Texture
- ▣ Taste

Thank You