Advances in Baking Technology

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Preface

Fundamentally, baking may seem to be a rather static topic: mix flour, water, leavening and various flavoring materials, and heat the mixture to gelatinize starch and denature the protein. However, this millenia-old process has been undergoing rapid change during this century, and even more during the last two decades. Numerous new ingredients have been developed for improving the nature of the finished baked product. New methods for heating the mixture are being used. In addition the demands of the consumer for decreased calories, increased fiber levels, decreased fat and sodium content, and more convenient products, have engendered numerous product development projects.

We have selected topics that address many of these developments in baking technology. The authors have been drawn from both Europe and North America, to reflect the fact that technology applications today are relevant on an international basis. The ingredients covered range from the most basic (wheat and rye flour) to the latest fads (dietary fiber, fat replacers). Processes include basic bread production (but with recent innovations in the plant), as well as newer methods, such as microwave baking, extrusion, and freezing of doughs and products. Those tests more useful in product development, such as rheological measurements of dough and finished baked goods, as well as sensory evaluation, are also discussed in some detail.

The topics should be of interest to anyone involved in developing baked products, in translating laboratory developments to practical production, or in ensuring the quality of ingredients purchased and the products made for sale. In short, we address the concerns of those people involved with technical and technological aspects of the bakery industry.

B.S.K.
C.E.S.

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