**DESCRIPTION**

This book discusses experimental designs which are very useful in sensory and consumer testing. As an added feature this coverage is fully illustrated with real-life examples. In addition, the importance of fractional factorial designs are explained more fully than in books now available.

The heart of this book is product optimization which covers in great detail designs and analysis of optimization studies with consumers. A rundown of this chapter includes: preliminaries, test for adequacy of statistical model and least squares estimation of regression parameters; why use optimization technique; types of optimization experiments; Plackett and Burman design; Box and Behnken design, mixture designs; search for optimum areas in response surfaces; use of contour maps in product reformulation augmentation of fractional factorial design; optimization with discrete variables, dangers of fractional factorial designs, and optimization for robustness.

This book will be valuable for a wide audience of professionals in the areas of sensory, marketing, advertising, statistics, quality assurance, food, beverage, personal care, pharmaceutical, household products, and cosmetic industries. The book could also serve as a text in applied statistics.
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