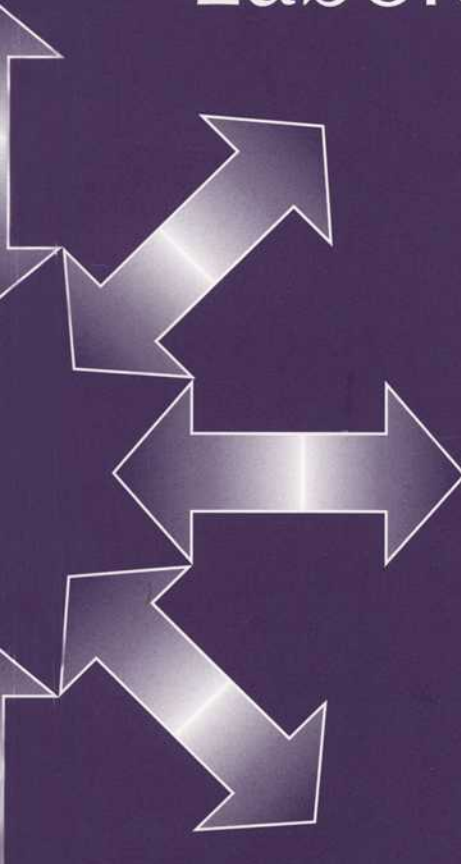


# Relating Consumer, Descriptive, and Laboratory Data



To Better  
Understand  
Consumer  
Responses

Alejandra M. Muñoz, editor



**Manual 30**

# **Relating Consumer, Descriptive, and Laboratory Data to Better Understand Consumer Responses**

*Alejandra M. Muñoz, editor*

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# Foreword

This manual, *Relating Consumer, Descriptive, and Laboratory Data to Better Understand Consumer Responses*, was approved by Committee E-18 on Sensory-Evaluation of Materials and Products and developed by Task Group E.18.08.05. The editor was Alejandra M. Muñoz, Sensory Spectrum, Inc., 24 Washington Avenue, Chatham, NJ 07928.

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# Preface

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This publication covers the techniques and applications of consumer data relationships and was developed by members of Task Group E.18.08.05, which is part of the ASTM Committee E-18 on Sensory Evaluation. The manual is intended for sensory and market research professionals responsible for consumer testing and the interpretation of consumer data.

This document illustrates how consumer data can be further explored and interpreted through data relationships, that is, how other relevant product (e.g., descriptive, instrumental data) or consumer information (e.g., demographic, employee consumer data) may be related to consumer test data to more fully understand and interpret consumer responses. The scope of the task group was to develop a practical document that discusses the importance, the requirements, the techniques, and the applications of relating consumer data to other product or consumer information.

Chapter 1 presents a discussion of the importance, the types, and the applications of consumer data relationships and presents an overview of the sensory projects in which data relationships are useful.

Chapter 2 describes the requirements needed to complete these projects, which are samples, sensory and analytical methodology, and data entry/analysis capabilities.

Chapter 3 covers issues related to the validity of data relationships, and Chapter 4 presents the statistical techniques used for data relationships.

The methodology described in the first four chapters is illustrated through various case studies in Chapters 5–8. These case studies present the most common and important projects/cases in which consumer data are analyzed, fully interpreted, and sometimes predicted through analytical/laboratory or other consumer information (e.g., descriptive/attribute, instrumental, consumer/market factors, and employee consumer data).

Special acknowledgment is given to B. Thomas Carr, who provided advice on the statistical methodology used in this manual, and to Morten Meilgaard for his review comments. An appreciation is extended to Judy Heylman, Doris Aldridge, and Mary Jenkins for the data sets provided and used in some of the case studies.

*Alejandra Muñoz*  
Sensory Spectrum,  
Chatham, NJ; editor

## About the Editor



Alejandra M. Muñoz, Technical Director of Sensory Spectrum, is a consultant in the field of sensory evaluation and works with consumer products companies in the areas of food, beverages, paper, household, and personal and health care products both nationally and internationally. One of her main areas of expertise and involvement is the design and administration of complex sensory projects, and the analysis and interpretation of their resulting data through advanced statistical techniques. These projects involve the use of qualitative and quantitative consumer and descriptive techniques to address research and development, quality control, and marketing objectives. Her experience is noteworthy in the management and data analysis of

multifaceted category reviews and consumer data relationships projects. Other areas of expertise and involvement include the review, development, and implementation of sensory programs and methods at both R & D and manufacturing facilities, and the training of descriptive panels.

Ms. Muñoz has published extensively and is the main author of the book *Sensory Evaluation in Quality Control*. She is also a peer reviewer for several journals. Through her publications, lectures in many public and in-house short courses, and presentations at conferences, she is involved in the continuing education of professionals in the area of sensory evaluation.

Ms. Muñoz is an active member of ASTM Committee E-18 on Sensory Evaluation, has been a chairperson of several ASTM E-18 task groups, and is a United States delegate of ISO (International Standards Organization). She is also a member of the Institute of Food Technologists.

Previously, she worked as a sensory professional for CPC International Best Foods and McKesson Contract Research Center.

Ms. Muñoz has a M.Sc. degree in Food Science with an emphasis in sensory science from the University of California, Davis, and a B.Sc. in Food Engineering from the Universidad de las Americas, Mexico.

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