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Nota di contenuto	Cover; title; Copyright; Dedication; Preface; Acknowledgments; 1: Molecular Genetics; 1.1 WHAT IS THE NATURE OF GENETIC INFORMATION?; 1.2 HOW IS GENETIC INFORMATION TRANSMITTED FROM GENERATION TO GENERATION?; 1.3 WHAT IS INDIVIDUAL VARIATION IN GENETIC INFORMATION?; 1.4 PROBLEMS; URLs; 2: Formal Genetics; 2.1 WHAT ARE MENDEL'S LAWS?; 2.2 HOW ARE PHENOTYPES TRANSMITTED IN FAMILIES?; 2.3 WHICH COMPLICATIONS TO THE GENERAL INHERITANCE PATTERNS EXIST?; 2.4 WHAT IS THE LAW DETECTED BY HARDY AND WEINBERG?; 2.5 PROBLEMS; URLs; 3: Genetic Markers; 3.1 WHAT IS A GENETIC MARKER? 3.2 WHAT TYPES OF GENETIC MARKERS ARE THERE?3.3 WHAT ARE GENOTYPING METHODS FOR SINGLE NUCLEOTIDE POLYMORPHISMS?; 3.4 PROBLEMS; URLs; 4: Data Quality; 4.1 HOW CAN PEDIGREE ERRORS BE DETECTED?; 4.2 HOW CAN GENOTYPING ERRORS BE DETECTED IN FAMILY-BASED STUDIES?; 4.3 HOW SHOULD GENOTYPING ERRORS BE

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Sommario/riassunto

This is the second edition of the successful textbook written by the prize-winning scientist Andreas Ziegler, former President of the German Chapter of the International Biometric Society, and Inke König, who has been teaching the subject over many years. The book gives a comprehensive introduction into the relevant statistical methods in genetic epidemiology. The second edition is thoroughly revised, partly rewritten and includes now chapters on segregation analysis, twin studies and estimation of heritability. The book is ideally suited for advanced students in epidemiology, genet