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Nota di contenuto	Preface.-I Continuous Outcome Data -- Data Spread, Standard Deviations -- Data Summaries: Histograms, Wide and Narrow Gaussian Curves -- Null-Hypothesis Testing with Graphs -- Null-Hypothesis Testing with the T-table -- One-Sample Continuous Data (One-Sample T-Test, One-Sample Wilcoxon -- Paired Continuous Data (Paired T-Test, Two-Sample Wilcoxon Signed Rank Test) -- Unpaired Continuous Data (Unpaired T-Test, Mann-Whitney) -- Linear Regression (Regression Coefficients, Correlation Coefficients, and their Standard Errors) -- Kendall-Tau Regression for Ordinal Data -- Paired Continuous Data, Analysis with Help of Correlation Coefficients -- Power Equations -- Sample Size Calculations -- Confidence Intervals -- Equivalence Testing instead of Null-Hypothesis Testing -- Noninferiority Testing instead of Null-Hypothesis Testing -- Superiority Testing instead of Null-Hypothesis Testing -- Missing Data Imputation -- Bonferroni Adjustments -- Unpaired Analysis of Variance (ANOVA) -- Paired Analysis of Variance (ANOVA).-Variability Analysis for One or

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Sommario/riassunto

In everyone's life the day comes that medical and health care has the highest priority. It is unbelievable, that a field, so important, uses the scientific method so little. The current book is helpful for implementation of the scientific method in the daily life of medical and health care workers. From readers' comments to the first editions of this work, the authors came to realize that statistical software programs is experienced by professionals in the field as black box programs producing lots of p-values, but little answers to scientific questions, and many readers had not been happy with that situation. The pocket calculator analyses appeared to be, particularly, appreciated, because they enabled readers for the first time to understand the scientific methods of statistical reasoning and hypothesis testing. So much so, that it started something like a new dimension in their professional world. We should add a number of statistical methods can be performed more easily on a pocket calculator, than using a software program. Also, there are some specific advantages of the pocket calculator method. You better understand what you are doing. The pocket calculator works faster, because far less steps have to be taken, averages can be used. With statistical software all individual data have to be included separately, a time-consuming activity in case of large data files. Some analytical methods, for example, power calculations and required sample size calculations are difficult on a statistical software program, and easy on a pocket calculator. The reason for a rewrite was to give updated and upgraded versions of the forty chapters from the first editions, including the valuable comments of readers. Like in the textbook complementary to the current work, entitled "SPSS for Starters and 2nd Levelers" (Springer Heidelberg 2015, from the same authors), an improved structure of the chapters was produced, including background, main purpose, scientific question, schematic overview of data files, and reference sections. In addition, for the analysis of more complex data twenty novel chapters were written. We showed that, also here, a pocket calculator can be

very helpful. For the readers' convenience the chapters have been reclassified according to the most basic difference in data characteristics: continuous outcome data (34 chapters), binary outcome data (26 chapters). Both hypothesized and real data examples are used to explain the sixty pocket calculator methods described. The arithmetic is of a no-more-than high-school level. .