Vorwort – Foreword

The area of body composition research – methods of measuring the dimensions of the human body, subdividing it into various compartments and dividing its weight into components – has experienced an upswing through the development of important new methods. Thus we are better able to evaluate the state of a patient and to determine the effect of therapy and are increasingly able to answer the difficult questions which arise, for example, such as those concerning the important relationship between body composition and metabolism or energy requirements. We present here the proceedings of the international workshop ‘Body Composition – Research Techniques and Nutritional Assessment’, held in Kaiserslautern, FRG on August 21st and 22nd, 1988. At this workshop colleagues had the opportunity to exchange their experiences with international experts and to discuss critically results and methods from the standpoint of relevance for the daily care of the patient. Unfortunately, we can only reproduce the wide-ranging discussions in the form of summaries of the main contributions. The complicated scientific methods – only available and feasible in a few centres – provide basic insights, with which the more simple, more widely available and workable techniques are validated. These must be considered critically from the point of view of accuracy and precision, as the area of changes often provides for methodical error, and these are the areas we wish to cover here. Among the new methods, in vivo multinuclear MR spectros-copy will present promising possibilities of gaining knowledge noninvasively of cellular metabolism and body composition. Ultrasonic measurement for the qualitative and quantitative determination of tissue, and bioelectrical impedance analysis will be more widely used in the future than more simple procedures.

The main attention in the consideration of body composition will be drawn to the body cell mass and processes in the cell, the compartment in which the decisive life processes take place. Among other procedures, two interesting theoretical models were presented at this workshop. Our thanks go to the participants whose contributions made the workshop a success, to those persons and institutions who made it possible, and to the S. Karger publishing company for their cooperation.

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