Introduction

Introduction to Myths & Methodologies series

We have moved away from the era where scientists made their own equipment, and thus knew its limits, to a time where complex, often impenetrable machines magically produce numbers. With this change has come a need to understand exactly what is being measured and the limitations associated with that measurement. We therefore thought it timely to run a series of mini reviews under the heading “Myths and Methodologies” (M&M) in which invited authors describe a methodology, its underlying principles of action, validity, reliability and variability, appropriate and inappropriate applications, and provide tips on effective use and the avoidance (or at least minimisation) of error. If the reviewers of an M&M manuscript offer interesting or even alternative views, we will also publish these; the overall aim being to give the reader a thorough understanding of a methodology, its appropriate application, and importantly the potential limitations of the data it provides.

It is recognised that any one of these reviews may only be of interest to a relatively small range of readers, but one of the strengths of a journal such as Experimental Physiology, and its position as a journal of the The Physiological Society, is that it can have “education” rather than just “citation” as one of its primary objectives. Having said this, it is hoped that across the series many readers will find the M&M reviews of interest and of use, and that they will contribute to even better publications.

We start with what, on the surface, may seem a simple measure: “exercise mass and water balance” (Cheuvront & Montain, 2017), we urge you to read on . . . . . . !

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Reference