

acceptable for studies of intraindividual variations in healthy individuals and patients with eating disorders (3,4). Moreover, the precision of both assays was adequate based on the findings of the recovery experiments. Interassay CV were evaluated only for the Phoenix assay (12% at a concentrations of 500 ng/L; n = 12), which has been used in both laboratories for a longer period.

Despite a good correlation, the measured values obtained with the two assays differed by a factor of 10 (range, 3–38; median, 11). Exchanging the calibrators between the assays dramatically reduced the difference between results obtained with both assays. We therefore interpret the discrepancy in h-GHS measurements between the assays as a faulty determination of the calibrator concentration by one (or both) manufacturer(s). Standardization of peptide analysis is often hampered by the noncommutability of calibration materials (5). To overcome this problem and to give unambiguous confirmation of true h-GHS concentrations in the assays, it would be desirable to ascertain the true concentrations in the calibrators by a reference method, e.g., mass spectrometry, as has been done for other peptides (6,7). Although it appears likely that the difference in values obtained with the two RIAs of exactly 10-fold is based on the omission of a mathematical adjustment, our findings are certainly not based on mistakes in recalculating the pg/tube data of the Phoenix assay into ng/L as the accepted measuring unit.

Overall, both assays appear analytically acceptable, although an adjustment to one reference standard is required. As long as such an adjustment is not performed, users must consider which specific assay has been used for published data. Moreover, switching between the two manufacturers within one study is not recommended.

Recently, Linco introduced an

additional system for analyzing the so-called "active" h-GHS (cat. no. GHRA-88HK). This antibody was raised against a h-GHS epitope carrying an octanoyl group on the serine-3 position, which determines the biological function of the hormone by enabling binding to the receptor. To enable this analysis, however, special precautions must be taken, such as acidification of the sample to stabilize the labile side chain. Because a majority of studies performed at present refer to samples that have been collected and stored without fulfilling these requirements, we focused on comparison of those assays designed for the analysis of total GHS in human serum. It is likely, however, that measurement of the physiologically active GHS portion may, in the long term, be more relevant.

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Beckman Coulter Access Creatine Kinase MB Assay

To the Editor:

A recent article by Apple et al. (1) presents plasma 99th percentile reference limits and analytical characteristics for the leading cardiac troponin and creatine kinase MB (CKMB) mass assays. It is important for the readers to understand that the CKMB assay used on the Access Immunoassay System for this study will no longer be available as of December 2003. In March 2003, Beckman Coulter released a new, reformulated assay with technical characteristics different from those reported by Apple et al.

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