

The Importance of Magnesium in the Human Body: A Systematic Literature Review - DTU Orbit (08/11/2017)

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Magnesium, the second and fourth most abundant cation in the intracellular compartment and whole body, respectively, is of great physiologic importance. Magnesium exists as bound and free ionized forms depending on temperature, pH, ionic strength, and competing ions. Free magnesium participates in many biochemical processes and is most commonly measured by ion-selective electrode. This analytical approach is problematic because complete selectivity is not possible due to competition with other ions, i.e., calcium, and pH interference. Unfortunately, many studies have focused on measurement of total magnesium rather than its free bioactive form making it difficult to correlate to disease states. This systematic literature review presents current analytical challenges in obtaining accurate and reproducible test results for magnesium.

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These platforms are well-suited for both standard clinical settings and point-of-care applications. The unique features of microfluidics-based platforms make them attractive for early disease diagnosis and real-time monitoring of the disease and therapeutic efficacy. In this cha more. 3 Citations. Source. Cite. Save. Clotting factors: Clinical biochemistry and their roles as plasma enzymes. Publication Information. Title. Current Advances in Clinical Chemistry [English]. ISSNs. Print: 0885-1980. URL. <http://www.elsevier.com/journals/current-advances-in-clinical-chemistry/0885-1980/>. Publishers. Elsevier [Commercial Publisher]. Sherpa Romeo information is accurate to the best of our knowledge but should not be relied upon for legal advice. Suggest an update for this record. Services. See Advances in Clinical Chemistry journal impact factor, SJR, SNIP, CiteScore, H-index metrics. Find the right academic journal to publish your paper. Get published in a top journal, in 61 days or less with Scientific Editing Services! Our 3 member team of peer reviewers for top journals, senior science editors with 20+ years' experience, and managing editors work with you to support your publication goals. Know More. Editage helped 500+ authors get published in top journals like Elsevier, Wiley and Nature, in the last 1 year.