



Don't Order Routine Screening for Zinc Deficiency in Asymptomatic Individuals

Plasma zinc testing is often employed to assess zinc status in individuals, aiding in the diagnosis and management of various health conditions. However, the indiscriminate use of plasma zinc test can lead to unnecessary testing, misinterpretation of results, and potentially inappropriate interventions.

In a clinical practice, plasma zinc test is used to assess zinc toxicity, or zinc deficiency in high-risk patients like (malnutrition or gastrointestinal disease). Despite that, zinc plasma test is not very reliable in case of mild or low-level deficiency, because zinc is available in small amounts intracellularly. The limitations of plasma zinc testing include the change in the dynamic nature of zinc level, poor correlation with zinc status. Also, because plasma zinc levels can remain within the normal range despite underlying zinc deficiency in tissues. In addition to this, zinc level can be falsely decreased during acute inflammation.

For such limitations, routine screening for zinc deficiency in asymptomatic individuals is not recommended. Clinicians should have judicious clinical decision-making when ordering plasma zinc tests, considering the limitations of this biomarker, and integrating it within the context of a comprehensive clinical assessment.

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