

A simple method to assess the oxidative susceptibility of low density lipoproteins

ABSTRACT

A straightforward and practical approach is provided for the routine assessment of LDL susceptibility to peroxidation in a clinical laboratory.

INTRODUCTION

Peri-operative parental nutrition is frequently carried out, even when packages containing different nutrients are present. It is essential to have an understanding of the stability of these mixtures, as the infusion of unstable compounds can be dangerous. Since Fujita's animal studies in 1971, it has been accepted that there is a relationship between toxicity and particle size. emulsion particle size appears to be primarily determined by pH, electrolyte concentration, amino acid composition, and the composition of the mixtures with low zeta potential; otherwise, stability is reduced (as indicated by a low value of "energy released by the reaction site") in order to prevent aggregate formation and coalescence of lipid droplets. The objective of this research was to determine the stability of particle size in six parenteral nutrition mixtures that were suitable for different diseases (Table 1). Standard packages with and without medium chain triglycerides (MCT), low volume packages for renal or cardiac insufficiency, with MCT, low lipid, high protein content with the MCT for mechanical ventilation weaning or stress situations, and high calorie, High protein mixtures with both MCATs were tested. The stability of all the formulae in the tested experiments was maintained for 28 days at room temperature and 4°C, plus 24 h.

CONCLUSION

Measuring fertilization-induced calcium transients provides a novel experimental technique for studying *C. elegans*. Researchers can now use this technique to detect potential calcium defect in many mutants with known fertilizer defects using forward genetic and gene knockout and RNAi methods. It is recommended that *elegans* permit the identification of proteins that may be involved in this crucial step of embryonic development.