

INTRODUCTION

AND

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Introduction:

Selenium is an essential dietary trace element of several animal species (Combs and Combs, 1986)

It exists naturally in food, mainly as organic compounds such as amino acids, e.g. selenomethionine, selenocystine and selenocysteine.

The milk content of selenium is of particular interest in infant nutrition, because human milk serves as a single food source of nutrients during the most rapid period of growth. Low dietary intakes of this trace element are linked with several abnormal conditions in humans (Van et al., 1979).

Funk et al. (1990) found that the length of the period of lactation alone has little impact. Milk selenium secretion in human milk is influenced by both maternal nutritional adequacy and parity (Funk et al., 1990).

The safe and adequate intake from 0-6 years varies with age within the range of 10-120 µg/day (Diplock et al., 1987).

Selenium is an essential component of enzyme glutathione peroxidase, which functions as a part of an antioxidant system to protect membranes and other essential proteins from the potentially damaging effects of reactive oxygen and lipid peroxides. Therefore, the intake of this element is of particular importance when considering therapeutic diets and parenteral nutrition (Lloyd et al., 1989).

Aim of the work:

The aim of this work is to determine the selenium status in malnourished children by detecting its level in their blood, as well as in the breast milk of their mothers.