

*NSA*

## Food and the Child

### **“We are what we eat”**

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Good nutrition continues to be the cornerstone for survival, health and appropriate development for current and succeeding generations. Well-nourished children perform better in school, grow into healthy adults and in turn give their children a better start in life.

When considering any aspect of nutrition it should be possible to examine both the macro and micronutrient implications. Over the past few years there has been significant advance made in the provision of macronutrients and hence energy in an attempt to improve infant mortality and reduce protein energy malnutrition. Yet the continued lack of food does still result in significant stunting and wasting in many parts of the world.

During the recent World Summit, both the World Health Organisation and UNICEF, have targeted micro nutrient deficiency, in particular, iodine deficiency, vitamin A deficiency and iron deficiency. They have set international goals to reduce and or eradicate these nutritional deficiencies. Each of these will be discussed in some detail in particular in their respective relationships with subsequent neurological development. Evidence will be shown to relate each of these areas to a common thread, namely, to myelin production and its effect on nerve conduction and subsequent development.

There has also been considerable interest over the past few years in the relationship between perinatal and infant nutrition and subsequent adult disease patterns. Studies by Barker & others have shown that small body size at birth and during infancy are associated with increased rates of coronary heart disease and its major biological risk factors:

- raised blood pressure,
- impaired glucose tolerance and
- abnormalities in lipid metabolism and
- Blood coagulation.

These findings led to the fetal origins hypothesis, which proposes that coronary heart disease originates through fetal adaptations to under nutrition.