NUTRITION

Mineral levels in natural foods are declining, partly because soil is losing its mineral content, but also because the minerals returned to the land as fertilisers [principally artificial forms of nitrogen, phosphate and potassium] encourage rapid growth and can, as in the case of phosphates, bond onto trace minerals such as zinc, making them harder for the plant to metabolise. There is no incentive for farmers to add to the soil those minerals so essential for our health which do not immediately improve the quantitative growth of crops. Plants are subjected to a vicious spiral of abuse, beginning with inadequate fertility which then necessitates the use of biocides to protect vulnerable crops. Analyses of soil samples are highlighting mineral -deficient soils which are having a concomitant effect on mineral levels in fresh produce and in our own tissues.

The following list illustrates the mean percentage increases in nutritional factors in organic produce as compared to non-organic equivalents: **Dry mass +26% , Potassium +13% , Calcium +56% , Magnesium +49% , Iron +290%, Copper +34% , Manganese +28% , Protein +12% , Essential fats +35%**. Also there were found to be **69% less nitrates and 6% less phosphates** in the organic produce. [Source: Biological Husbandry: A Scientific Approach to Organic Farming. Editor: B. Stonehouse: Butterworths 1981]

In addition, minerals are often refined out of food. For instance, **white flour contains 22% of the zinc, 15% of the magnesium and only 2% of the chromium present in wholemeal flour**. Refined cereals and processed foodstuffs may even require extra vitamins and some minerals, such as calcium and iron, to be added just to meet minimum nutritional requirements. However, these additives are rarely in the most absorbable forms and the trace elements which are so vital to bodily functions are almost never included.

Finally, our mineral needs are in fact increasing all the time. Dr S. Davies from London's Biolab Medical Unit has analysed 65,000 samples of blood, hair and sweat over the past 15 years and these show that relative to the ages of patients, levels of toxic minerals such as lead, cadmium, mercury and aluminium are irrefutably increasing, whilst those of beneficial elements such as magnesium, zinc, chromium, manganese and selenium are decreasing. As we age, toxic elements accumulate in our bodies, whilst our needs for nutritionally essential minerals, with which they compete for absorption, also increase.