

# Huge Doses of Vitamin A Improves Growth of Sick Children

**The following gives the lie to those who are nutritionally challenged among the medical profession health reporters at the Daily Mail. Vitamin A is alleged to be the most toxic of vitamins, hence the maximum available dose without a prescription in Canada is 10,000 International Units and in the United States it is 25,000 I.U.'s.**

**Somehow, north of the U. S. border vitamin A becomes more dangerous. Since a 3.5 to 4.5 ounce serving of Beef Liver contains 35,000 to 45,000 international units of Vitamin A one should require a prescription in order to purchase liver at a butcher shop or meat counter at the super market..**

## Vitamin A Improves Growth of Sick Children

Children in developing countries who have HIV, malaria or diarrhea-causing ailments can end up with stunted growth. But according to new research, supplementing the diets of these children with high doses of vitamin A every 4 months can help them grow properly.

The findings point to a low-cost way to improve the health of HIV-infected children in nations where antiviral medication may be unavailable or prohibitively expensive.

Although the ideal way to prevent vitamin A or any other nutrient deficiency is guaranteeing that all the population have sustained access to a complete diet, supplementation is a useful public health intervention in many cases.

The study included 554 Tanzanian children aged 6 months to 5 years who were hospitalized with pneumonia. Patients received 200,000 international units (IU) of vitamin A if they were older than 1 year or 100,000 IU if they were under 1 year, or an inactive pill (placebo) on the day they checked into the hospital. The following day, children received a second dose, followed by a third and fourth dose 4 and 8 months after leaving the hospital.

While the levels of vitamin A given to sick children in the study are extremely high, a single dose is unlikely to cause the headache, vomiting, skin and bone abnormalities or liver damage associated with sustained intake of such doses.

The researchers recorded the children's height, weight and arm circumference, a measure of body fat, at the beginning of the study and at monthly intervals over a year.

HIV-infected children younger than 18 months who received vitamin A grew significantly more in height, compared with their peers who took the placebo. After 4 months, vitamin-supplemented infants had grown an average of nearly 3 centimeters (cm) more than infants who had taken the placebo.

Similarly, vitamin A-supplemented infants with malaria younger than 12 months gained significantly more weight than their peers who did not receive vitamin A.

The vitamin supplements had no discernible effects on children without malaria, however. Additionally, vitamin A nearly eliminated the risk of stunting associated with persistent diarrhea lasting at least 14 days.

Vitamin A supplementation every 4 months to children younger than 5 years of age is likely to improve the pattern of growth in populations with high incidence of infectious diseases including HIV, malaria, persistent diarrhea, and dysentery.

Requirements for vitamin A in infants and children may vary according to underlying medical conditions and nutrient deficiencies. Among healthy infants, the recommended dietary allowance is about 375 micrograms or 1250 IUs.

The administration of a single dose at 4 monthly intervals is very well tolerated in children and is within the safety range recommended by international agencies for supplementation programs.

**Pediatrics Online January 2002;109:e6**