

Science News

from research organizations

Vitamin A supplements for children could save 600,000 lives a year, experts predict

Date: August 25, 2011

Source: BMJ-British Medical Journal

Summary: Children in low and middle income countries should be given vitamin A supplements to prevent death and illness, a new study concludes.

FULL STORY

Children in low and middle income countries should be given vitamin A supplements to prevent death and illness, concludes a study published online in the British Medical Journal.

The researchers argue that the effectiveness of vitamin A supplementation is now so well-established that further trials would be unethical, and they urge policymakers to provide supplements for all children at risk of deficiency.

Vitamin A is an essential nutrient that must be obtained through diet. Vitamin A deficiency in children increases vulnerability to infections like diarrhea and measles and may also lead to blindness. Globally, the World Health Organisation estimates that 190 million children under the age of 5 may be vitamin A deficient. But, despite widespread efforts, vitamin A programmes do not reach all children who could benefit.

So a team of researchers based in the UK and Pakistan analysed the results of 43 trials of vitamin A supplementation involving over 200,000 children aged 6 months to 5 years. Differences in study design and quality were taken into account to minimise bias.

They found vitamin A supplements reduced child mortality by 24% in low and middle income countries. It may also reduce mortality and disability by preventing measles, diarrhea and vision problems, including night blindness.

The authors say that, if the risk of death for 190 million vitamin A deficient children were reduced by 24%, over 600,000 lives would be saved each year and 20 million disability-adjusted life years (a measure of quantity and quality of life) would be gained.

Based on these results, the authors strongly recommend supplementation for children under 5 in areas at risk of vitamin A deficiency. They conclude: "The evidence for vitamin A is compelling and clear. Further trials comparing vitamin A with placebo would be unethical."

This view is supported in an accompanying editorial by two experts at Harvard School of Public Health, who say "effort should now focus on finding ways to sustain this important child survival initiative and fine tune it to maximise the number of lives saved."

Story Source:

Materials provided by **BMJ-British Medical Journal**. Note: Content may be edited for style and length.

Journal References:

1. E. Mayo-Wilson, A. Imdad, K. Herzer, M. Y. Yakoob, Z. A. Bhutta. **Vitamin A supplements for preventing mortality, illness, and blindness in children aged under 5: systematic review and meta-analysis**. BMJ, 2011; 343 (aug25 1): d5094 DOI: 10.1136/bmj.d5094
2. A. Thorne-Lyman, W. W. Fawzi. **Improving child survival through vitamin A supplementation**. BMJ, 2011; 343 (aug25 1): d5294 DOI: 10.1136/bmj.d5294