Annotated Bibliography

Name

Institution

Date

**Key terms and phrases**: carotene, vision, night vision, vitamin A, β-carotene, night blindness, eye sight

**Annotated Bibliography**

Christian, P. (2000). Night blindness during pregnancy and subsequent mortality among women in Nepal: Effects of vitamin A and beta-carotene supplementation. *American Journal of Epidemiology*, *152*(6), 542-547. doi:10.1093/aje/152.6.542

In his double-masked, placebo controlled trial, researcher Christian (2000), recruited married women aged between 13 and 45 years. He investigated the effectiveness of vitamin A and trans β-carotene on night blindness. 11,476 pregnant women were recruited in this study. Each pregnant woman was followed up for at least six weeks after being declared pregnant. The researchers found that pregnant women with night blindness at a high risk of death. Vitamin A supplementation helps in reducing the risk of night blindness though not sufficiently. The researchers did not report any incident where Vitamin A eliminated night blindness. Besides, Vitamin A was found to have little effect on nonnight-blind women implying that it is only applicable for night blind women.

Christian, P., West, K. P., Khatry, S. K., Katz, J., LeCerq, S., Pradhan, E. K., & Shrestha, S. R. (1998). Vitamin A or β-carotene supplementation reduces but does not eliminate maternal night blindness in Nepal. *The Journal of Nutrition*, *128*(9), 1458-1463. doi:10.1093/jn/128.9.1458

Christian et al. (1998) investigated the effects of Vitamin A or β-carotene on the incidence of night blindness. The researchers examined women during the pregnancy and postpartum period. 29,000 pregnant women were recruited from 171 wards. In this randomized, controlled placebo trial, Vitamin A supplement reduced night blindness by 50%. However, other nutrients were found to be required for efficiency in reduction of night blindness. Similar to Chritian (2000), Vitamin A supplement was not found to eliminate night blindness.

Congdon, N. G., Dreyfuss, M. L., Christian, P., Navitsky, R. C., Sanchez, A. M., Wu, L. S., … Khatry, S. K. (2000). Responsiveness of dark-adaptation threshold to vitamin A and β-carotene supplementation in pregnant and lactating women in Nepal. *The American Journal of Clinical Nutrition*, *72*(4), 1004-1009. doi:10.1093/ajcn/72.4.1004

In their study, researchers Congdon et al. (2000) examined the effectiveness of Vitamin A and β-carotene supplementation on dark-adaptation threshold among 298 pregnant women. They conducted a placebo-controlled trial where the results were compared with those of 100 non-pregnant women. The research participants were subjected to dark adaptation and bleaching. The findings of this study indicated that Vitamin A improved dark adaptation threshold. However, it hand little impact on the participants who received the placebo. For the pregnant women, pupillary dark adaptation improved significantly following vitamin A supplementation. However, similar to Christian (2000), Congdon et al. (2000) did not report any incident where Vitamin A supplementation was highly effective among the participants who received the placebo.