ASSOCIATION BETWEEN VITAMIN A STATUS AND LUNG FUNCTION IN CHILDREN AGED 6-9 YEARS IN NORTHERN ETHIOPIA

TARIK KASSAYE

School of Dietetics and Human Nutrition McGill University Montreal, Canada

November 2000

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements of the degree of Doctor of Philosophy (Ph.D.)

Randomized, double-blinded, placebo- controlled community based vitamin A intervention study.

Children aged 6-9 in 5 rural sites in Wukro wereda, Tigray administrative region, Northern Ethiopia from March 1997 to December 1997.

The impact of vitamin A supplementation on respiratory health was assessed by change in FEV₁ at 4 months.

The average change was 53.3 ml (n=496) and 53.8 ml (n=501) in the vitamin A and placebo groups respectively. After adjusting for baseline covariates, the difference between them was -3.6 ml (95%CI: -21.6, 14.4). In sub-analysis of the data, gender and vitamin A status subcategaries were found to be effect modifiers

Randomized, triple-blinded, placebo- controlled study.