

Physical Fitness, Growth And Appetite Of Kenyan School Boys With Hookworm, Trichuris Trichiura And Ascaris Lumbricoides Infections Are Improved Four Months After A Single Dose Of Albendazole.

Abstract:

We studied physical fitness with the Harvard Step Test, growth, and appetite in primary school boys infected with hookworm (96% baseline prevalence), *Trichuris trichiura* (98% prevalence) and *Ascaris lumbricoides* (41% prevalence) who received a single 600-mg dose of albendazole or an identical placebo. Boys were examined, allocated at random within pairs by descending hookworm egg count to placebo (n = 26) or albendazole (n = 27) groups, treated, and re-examined 4 mo later. Four months after treatment, the albendazole group showed highly significant improvements in fitness score, resting heart rate, and heart rates at 1, 2, 3 and 4 min after the Harvard Step Test, whereas the placebo group had not changed significantly. The albendazole group also exhibited significantly more rapid growth judged by weight gain (1.0 kg greater than the placebo group, $P < 0.0002$), height increment (0.6 cm more, $P < 0.003$), arm circumference (0.3 cm more, $P < 0.0002$), and triceps and subscapular skinfolds (1.0 mm more, $P < 0.0002$), and showed improved appetite with objective and subjective measures. We conclude that single-dose treatment with albendazole can allow improved physical fitness, growth, and appetite in school-age children in areas where these helminths and poor growth are highly prevalent.