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**Field JW, Niven JC, Hodgkin EP (1937).** The prevention of malaria in the field by the use of quinine and atebrine. Bulletin of the Health Organisation of the League of Nations 6:236-290.

**Key passages**

## THE PREVENTION OF MALARIA IN THE FIELD BY THE USE OF QUININE AND ATEBRIN

*Experiments in Clinical Prophylaxis*<sup>1</sup>

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### WORKING METHODS.

The plan of the experiments followed that defined by the Commission with minor deviations to suit local circumstances. The general outline was as follows :

(a) *Experimental Grouping of Population.*—The entire labour force of Estates T and Y was arbitrarily divided into three groups selected only to ensure an even distribution of children and adults. So far as is known, the three groups on each estate were entirely comparable. They lived in the same “ lines ”, ate the same food and were exposed to the same mosquitoes. New arrivals to the estates were placed in even proportions in the three groups without selection.

(b) *Prophylactic Dosage of Atebrin and Quinine.*—Quinine and atebrin were administered as follows :

(i) To one group on each estate, 0.4 gramme of atebrin weekly given in two doses of 0.2 gramme on successive days. The dosage for children was proportionate to age.<sup>1</sup>

(ii) To a second group on each estate, 0.4 gramme of quinine bihydrochloride daily given as sugar-coated tablets each containing 0.2 gramme. The dosage for children was proportionate to age.<sup>2</sup> Children of 4 years and under received chocolate tablets containing 0.1 gramme of aristoquine (diquinine ethyl-carbonate) instead of quinine bihydrochloride. Aristoquine is an insoluble salt of quinine and is tasteless.

(iii) To a third group on each estate, two tablets of an inert substance so dyed with tartrazine as to resemble atebrin in appearance. These groups served for control. The inert tablets were given for psychological reasons.

(c) *Treatment of Malarial Attacks.*—Malarial attacks were treated with atebrin if they occurred in the “atebrin” groups or with quinine if in the “quinine” or “control” groups.

The therapeutic dosage of atebrin and quinine was as follows :

Atebrin : 0.3 gramme daily for 7 days.

Quinine bihydrochloride : 1.0 gramme daily for 7 days.