Perhaps Professor Herskovits's conception of a stock or racial difference is that it is an all-or-none affair. This need not be the case in order to be an important difference. Two stocks or races may be considered significantly different if they differ markedly with respect to the frequencies with which a variation occurs. In fact most of the anatomical differences which have been used by anthropologists for the differentiation of stocks and races are proportional differences rather than total ones. Certainly many of the characters used for the differentiation of accepted subdivisions of species among lower animals are not of the all-or-none kind.

What seems important to emphasize in this day and age is not that there are not stock and racial differences (even physiological and inherent psychological differences), for they will in all probability be found to be numerous, but that there is no reason for considering one racial group inherently superior or inferior to another. The racial dogma of inherent superiority of one racial group over another has no basis in fact.

Perhaps the author of the present note has misinterpreted Professor Herskovits. If so he is apologetic. He wishes only to see the question of racial differences weighed in the light of existing facts. It would be unfortunate if the current racial dogmas which have created so much trouble should cause the pendulum of opinion to swing unduly far in the other direction.

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INGESTED THIAMIN CHLORIDE AS A MOSQUITO REPELLENT[1]

THIAMIN chloride (vitamin B_1 hydrochloride) has been reported by Shannon[2] to relieve the itch of mosquito bites and to prevent further biting. A dose of 80 to 100 mgms on the first day and about 10 mgms per day thereafter was considered sufficient when taken by mouth. Military demands for a repellent taken orally justified further tests on this material at the Naval Medical Research Institute.

In preliminary experiments a subject ingested 505 mgms of thiamin chloride in three days. After taking 385 mgms he had a thiamin blood level of 6.9 gamma/100 cc. Mosquitoes (*Aedes aegypti*) were not repelled then or later when 505 mgms had been taken. In another test 100 mgms were ingested and the subject then exercised in an attempt to sweat the thiamin chloride to the surface of the skin. While the mosquitoes did not bite on his control arm (covered with indalone), his other arm was readily bitten.

In a second series of tests (Table 1), three subjects ingested 120 mgms of thiamin chloride per day for three days (30 mgms four times daily). Repellency tests were started on the second day of treatment. Neither the rate of biting by the mosquitoes nor the subject's reactions to the bites differed materially from the controls.

TABLE 1

BITES PER MINUTE (SECOND SERIES OF TESTS)

Test subjects	1st day	2nd day	3rd day	Average
1	3.2	61.5	16.2	26.9
2	55.0	72.6	39.8	55.8
3	21.6	91.0	49.2	53.9
Controls				
1	88.4	96.0	...	92.2
2	76.0	63.2	39.8	39.7
3	96.0	...	59.8	77.9

These results have been confirmed by subsequent tests undertaken by the U. S. Department of Agriculture and the National Institute of Health.

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PRUNE DWARF AND THE CHERRY VIRUS COMPLEX

STUDIES begun in 1935 and carried on for approximately nine years on the cherry virus complex now indicate that several viruses are present in the sour cherry—yellows, ringspot, green-ring yellows, rosette and (?) mottle—and two in the sweet cherry—ringspot or tatter leaf and chlorotic spot or mottle. In addition, strains seem to exist in some of the viruses. For example, two strains of the cherry yellows virus are readily distinguishable based on the symptoms produced on peach seedlings.[1]

As the result of cross-inoculation studies repeated on three successive years it now appears that strain 1 of the sour cherry yellows virus and one strain of the sweet cherry chlorotic spot or mottle virus are in reality strains of the prune dwarf virus.

Comparative studies with prune dwarf virus, 10 different cultures of sour cherry yellows and ringspot viruses alone or mixed, and 2 different cultures of sweet cherry chlorotic spot virus on 12 different varieties or species of stone fruits (including sour

[1] The material in this article should be construed only as the personal opinion of the writers and not as representing the opinion of the U. S. Navy Department.

[2] W. Ray Shannon, "Thiamin Chloride—an Aid in the Solution of the Mosquito Problem," *Minnesota Med.*, 26: 799, 1943.

[1] E. M. Hildebrand, *Phytopath.*, 33: 6, 1943.