

AGUIRRE, F. and N. S. SCRIMSHAW, Institute of Nutrition of Central America and Panama (INCAP), Guatemala, C. A.: Ability of representative groups of Guatemalan Indians to taste phenylthiourea¹

With the assistance of the Instituto Indigenista 385 adults of Mayan Indian origin in 22 widely scattered localities in Guatemala were tested for ability to taste phenylthiourea at concentrations of 1:100,000, 1:40,000 and 1:8,000. One to two drops of the most dilute solution were placed on the tongue. If no taste was reported the mouth was rinsed with water and the next dilution tested in the same manner. In combined results of tests at the three concentrations, 332 persons stated the taste to be bitter, 32 acid, 16 sweet, 2 salty and only 3 (0.8%) were unable to taste the compound. At the 1:100,000 concentration 38.4% of the total group was able to taste it. At 1:40,000 an additional 47.3% could do so and 13.5% did not detect the taste until a concentration of 1:8,000 was employed. It would appear that surveys employing phenylthiourea concentrations of less than 1:8,000 will miss a significant proportion of tasters. In comparison with European populations the percentage of non-tasters in the Indian groups was exceedingly low, but similar to that reported for African Negroes. Of 44 non-Indian persons living in Guatemala City, 9 were able to detect the phenylthiourea at 1:100,000, 15 at 1:40,000, 12 at 1:8,000 and 8 (18.2%) were unable to taste it.

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