ABSTRACT

The present pilot study was designed to determine the prevalence of diabetes among the Amerindians of Guyana and to compare the prevalence among Amerindians receiving an indigenous or traditional diet, with those Amerindians receiving a diet which more closely approximated the type of diet usually consumed by the majority of Guyanese. The study also sought information on obesity and its relation to diabetes and diet, anthropometry, parity, family history of diabetes, local bush cures for diabetes, and the problems to be encountered in carrying out such a study.

The problems encountered were many and varied but getting the Amerindians to participate in the study, lack of adequate transportation and accommodation were the main ones. The prevalence rate was 1.1% which was low when compared with other racial groups. The prevalence in Area "B", the more westernized of the two areas, was 1.7%,; no diabetics were found in Area "A" and no male diabetic was found in either area. Diabetic prevalence and hyperglycemic frequency were higher for women than for men and were higher in Area "B" than in Area "A". Excess weight among Amerindians, especially women, seemed to be a risk factor in the development of hyperglycemia and diabetes, and the results of this study tend to support the general association between adiposity and diabetic prevalence. Amerindians appeared to be nutritionally stunted but the anthropometric differences between them and the Negroes and East Indians of Guyana may be of

a genetic origin. Weights decreased with increasing age thus implicating diet as a possible explanation for the rarity of overt diabetes among Amerindians.

The dietary intake in Area "A" was low compared to Area "B" and to standard requirements and this possibly protected against the development of diabetes and hyperglycemia by its effect on weight reduction. Too, the carbohydrate ingested was mainly unrefined with a probable high fibre content and this may have protected also, as suggested by Trowell (1975).[42] The dietary intake in Area "B" [illegible] high intake increased the chances of becoming overweight which in turn caused an increased susceptibility to diabetes and hyperglycemia, especially among women. High parity may have also contributed to this end since parity was significantly correlated with triceps skinfold and blood glucose concentration among diabetic women. Too, refined carbohydrate was eaten more frequently and this may have in some way induced the development of hyperglycemia and diabetes as suggested by Cleave and Campbell (1969).[43]