

Many factors influence this increase in mortality. Poor housing, inadequate sanitation and rigours of climate probably all play their part. Also studies conducted in many parts of the world have demonstrated that poor nutrition is accompanied by excessively high morbidity and mortality rates.

The articles of food most commonly purchased by the Bush Indians are white flour, lard, sugar, tea and a small amount of oatmeal. The Indians living in the remote areas only visit the trading posts once or twice a year to trade their furs for food and other articles. They usually stay in the neighbourhood of the post for three or four weeks before they depart again in their canoes for another year's hunting. The difficulties of preservation and transportation severely restrict both the amount and the kind of food purchased. As a result of this these Indians of necessity live on what flour, lard and sugar they can transport and the berries, game and fish that they obtain. The Indians living in the neighbourhood of the trading posts depend to a much greater extent on "store food" than on food obtained from the country. While these Indians purchase a somewhat greater variety of food, their chief purchases are still flour, lard, sugar and tea (Table II). In some sections a limited amount of potatoes is grown. It would seem to be difficult under these circumstances for the diet of the Indian to be other than deficient in many respects.

The diet of the Bush Indian has deteriorated in the past 40 years. Records kindly furnished by the Hudson's Bay Company, through Mr. D. H. Learmonth, the present factor at one of the Company's posts in Northern Manitoba, who was also associated with the Company in the same area nearly 40 years ago, bears this out. At that time an Indian family consisting of the man, his wife and 2 or 3 children, would set out in October for a period of 7 months with about 100 pounds of flour, a small amount of lard and beef suet, and a few pounds of tea and sugar which were considered luxuries. The main portion of the food was obtained "off the land", caribou, moose, beaver, muskrat, rabbit and fish. Today a typical example from the records is that of an Indian trapper of a better type than average who set off in October with his wife and no children taking with him, no less than 600 pounds of white flour, 130 pounds of lard, 50 pounds of sugar and 25 pounds of tea. To-day too the Indian "cleans" his fish and animals and discards highly nutritious organs that were formerly eaten.

It can be stated that without exception in those areas where the dietary habits of the Indian have changed from the consumption of foods from the country itself to "store food", which is largely white flour, lard and sugar, the physical condition of the Indian has markedly deteriorated in recent years.

The Medical Division of the Indian Affairs Branch has long been aware of the poor dietary habits of the Indian and their probable relation to his poor physical condition and high susceptibility to infection. Accordingly it appeared highly desirable to obtain further information on the part that malnutrition plays in the health of the Bush Indian.

#### SCOPE OF SURVEY

In March, 1942, a survey was organized by the Medical Division of the Indian Affairs Branch with the assistance of the Hudson's Bay Company, the Milbank Memorial Fund of New York City, and the Medical Branch of the Royal Canadian Air Force. The area chosen was in Northern Manitoba, approximately 350 miles north of Winnipeg. The area is readily accessible by air. The places visited were God's Lake, Cross Lake, Norway House and The Pas. The Indians in this area are representative of the Bush Indians across Canada. The total Indian population of the area is 2,449.