

APPENDIX C.

THE DENTAL CONDITION AND DIET OF THE MAORIS OF MAUNGAPOHATU VILLAGE.

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The information here presented was obtained by the writers during a visit to Maungapohatu in May, 1936.

The village of Maungapohatu in the Urewera country is on a hillside at an altitude of 2,500 ft., and lies on the slopes of Mount Maungapohatu (5,000 ft.) which is part of the Huiarau Range. The village was formerly the stronghold of Rua, the Maori prophet. It is situated in a very large clearing, and many acres are covered with a good growth of bracken fern (*Pteridium esculentum*), but little use is made of this inexhaustible supply of a nutritious and one-time staple food.*

These Maori folk prefer to obtain the white flour of the European, even though it has to be carried by packhorse over twelve miles of rough hills from the road.

Most of the men of the village are now employed by the Public Works Department at road-making camps in the district. When returning to the village for a "week-end" they generally take some stores in the form of flour or sugar.

The population of the village comprises thirty to forty children and about the same number of adults. Information in regard to the European foods bought was supplied by Miss I. Paulger, who has lived in the village for twelve years. Miss Paulger combines the offices of missionary, school-teacher, postmistress, nurse, and general adviser to the villagers, and all ordering of stores is done through her.

1. DENTAL CONDITION.

Thirty-six Maori children were examined, of whom 18 were males and 18 females. Their ages varied from four years six months to fourteen years six months.

Arches.—These were broad and well-formed, except in one case, where the arches were somewhat narrowed.

<i>Articulation.</i> —								Cases.
Normal in	..	..	..	..	..	..	..	24
Angles Class I in	..	..	..	..	..	..	..	6
Angles Class II in	..	..	..	..	..	..	..	1
Angles Class III in	..	..	..	..	..	..	..	3
Close bite in	..	..	..	..	..	..	..	1
Lingual occlusion right molars in	..	..	..	..	..	..	..	1
								36

Calculus was present in 22 cases. With two exceptions, those showing no calculus were under eight years of age. No child under seven exhibited calculus.

Gingivitis was found to be present in all except 2 cases, a boy of thirteen and a girl of eleven. In the younger children the condition was more a mild hyperæmia of the gingival tissues, but definitely abnormal.

B. Mesentericus Stain was present in all but 4 cases.

Dental Caries.—All teeth were carefully examined with mirror and probe. Only one perfect set was found—in a boy aged eleven years and five months. The total number of teeth examined was 887, of which 223, or 25·14 per cent., exhibited active caries to a greater or less extent. The distribution of caries can be studied to better advantage if the cases are divided into groups as under :—

Group A : Children whose permanent dentition (up to second molar) is complete, and all deciduous teeth have been shed.

Group B : Children whose dentition is in the transition stage from deciduous to permanent. This forms the largest group (18), and ages vary from six years four months to eleven years four months.

Group C : Children whose deciduous dentition is still complete, or nearly so. There are 7 children in this group, 2 of whom have four first permanent molars in addition to twenty deciduous teeth.

Analysis by groups : The teeth in Group A are all permanent teeth of comparatively recent eruption, and the incidence of caries is lower than in the other two groups. Only 9·90 per cent. of teeth are effected, as against 25·14 per cent. for the three groups. One child only has teeth entirely free from caries, and three children have only one cavity each.

In Group B, the percentage of carious teeth in the comparatively recently erupted permanent teeth is low—7·45 per cent.—but the percentage in deciduous teeth is very high—60·11. The average for the group for both permanent and deciduous teeth is 29·09 per cent.

Group C shows a remarkably high percentage of carious teeth, taking into consideration the fact that the oldest child in the group is aged only six years four months. The group shows 44·89 per cent. of carious teeth.

* The methods of preparation of fern-root and of other old Maori foods have been described in the *N.Z. Dental Journal* as follows: Buck, P. H., "The Pre-European Diet of the Maori," *N.Z.D.J.*, Vol. XX, No. 90, May, 1925; Taylor, R. M. S., "Maori Foods and Methods of Preparation," *N.Z.D.J.*, Vol. XXX, No. 147, November, 1934.