

The relationship of goitre incidence to low iodine content of soil is thus strikingly demonstrated. (The iodine content of soils was estimated in the Otago Medical School, Dunedin, as a part of the research work being carried out under the supervision of Professor Hercus.)

As regards relative incidence in the sexes, Dr. Baker-McLaglan found in the primer classes little difference in the incidence between boys and girls. At adolescence, however, the percentage of boys decreased, the incidence in the girls being at least twice as great.

The School Medical Service has extended the preventive and curative work in schools which began some four years ago. At present there are approximately some twelve thousand children receiving treatment, facilities being now provided by which the pupils in all schools in endemic areas may obtain treatment, the written consent of their parents being first obtained. The usual routine treatment consists in the administration of 1 grain of potassium iodide weekly for ten weeks in the school term, the total amount given to the children annually being thus 30 grains. Advice is also given that the diet should contain a plentiful supply of fresh fruit and vegetables, and that health habits should be observed. In view of the possibility that iodine may do harm when given in unsuitable cases, no school treatment for the prevention or cure of goitre is carried out except with the recommendation of the family medical practitioner or the School Medical Officer. It is interesting to note, however, that not one case of iodism or hyperthyroidism has been observed during the whole period treatment has been in vogue. Whatever may be the danger of such procedure at a later age, this fact indicates the safety of the administration of small doses of iodine to children in the primary schools whether they have thyroid enlargement or not.

Dr. Baker-McLaglan has summarized and tabulated the results of a goitre experiment now running for the fifth consecutive year. The results are striking, and show clearly both the prophylactic and therapeutic powers of iodine. The sum total of observations on 1,152 children under observation or treatment respectively for all classes of goitre are as follows :—

—		Actual Number.		Per Cent. stationary.		Per Cent. increased.		Per Cent. decreased.	
		B	G.	B.	G.	B.	G.	B.	G.
Not treated	..	249	231	60.2	53.6	22.1	34.2	17.6	12.1
Treated	..	329	343	49.5	43.4	0.9	4.9	49.5	51.6

The results are even more striking when one comes to consider the very marked changes. Thus of the children who were not treated, fourteen boys and twelve girls showed marked increase, six boys and two girls showing marked decrease; whereas, of the children who were treated, no boys and only one girl showed marked increase, but fifty-two boys and fifty-seven girls showed marked decrease.

Dr. Baker-McLaglan noted that a thyroid which suddenly begins to enlarge will, if treated promptly, subside with almost equal rapidity; also that in a number of cases the initial result of treatment is a very slight temporary increase. In handling many cases it becomes obvious that if a child takes treatment, say, for one year and then leaves it off, the improvement often continues for some indefinite time afterwards. Take for example this case :—

Date of Examination.	Standard.	Lobes.			Measure in Centimetres.	Remarks.
		Middle.	Right.	Left.		
8/5/22	P. 1	Small ..	Medium..	Medium	26.2	Received between 5.22 and 4.23 a total of 30 grains of sodium iodide, then left off treatment.
10/4/23	P. 3	Incipient	Small ..	Incipient	25.6	Improvement evidently the result of a year's treatment.
—/2/24	P. 4	Incipient	Nil ..	Nil ..	25.8	This continued improvement I think fair to attribute to iodine stored as a result of a year's treatment.
—/5/25	S. II	Incipient	Bordering on small	Incipient	26.3	Store of iodine exhausted, and goitre begins to enlarge again.

Owing to the “peripatetic habits of the average New-Zealander” and the consequent frequent transfer of children from one school to another, though these observations originally concerned 7,000 children, only a total of 1,152 could be utilized for statistics. Reports from other School Medical Officers, however, confirm the general conclusions outlined.

SECTION 5.—TREATMENT RETURNS.

Results.—Owing to the short school-year and the congestion of work resulting therefrom it was found impossible in many districts for the school nurses to follow up cases notified of physical defects