tried so far, has been one made up with a three per cent pure lead amalgam and $PbCl_2$ in 0.05 to 0.01 molecular. The copper leads are dipped into copper amalgam instead of mercury. The drift in potential with time and at constant temperature was found to be sufficiently slow, and small enough to permit measurements of 1.0 to 0.05 millevolts with an error of about 0.01 millevolt under good conditions of experiment.

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Iodine metabolism on normal diet in relation to prevention of goitre.

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Since it would require 2,000 years to drink enough Lake Superior water to accumulate 20 mg. of iodine, and since the normal adult thyroid contains about this quantity and at least 50 per cent of persons drinking this or similar water escape goitre, there must be iodine in foods. We found that a man twenty-three years of age, living in a moderately goiterous region (Minneapolis), consumed 0.057 mg. of iodine in three days on a normal diet, and excreted 0.021 mg. of iodine during the same period, having retained 0.036 mg. of iodine in three days. At this rate, it would require about five years to accumulate 20 mg. of iodine.

The question arises why in a goiterous region some persons have goitre and some do not. From the following data it may be seen that persons eating much roughage and drinking much milk of herbivorous animals would be immune to goitre.

Food from Goiterous Region	mg. iodine per ton of dehydrated food
Wheat	1
Peeled and Cored apples	2.5
Oats (+ husk)	10
Skim milk	12
Spinach	18
String beans	29

The following table shows the cause for immunity in non-goiterous regions (figures denote mg. iodine per ton).

	Goiterous	Non-goiterous	
	Minnesota	Connecticut	Maine
Wheat	1	3.5	8
Oats (+ husk)	10	20	150