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Method and results of a study of the distribution of iodine between cells and colloid of thyroid glands.

By **ARTHUR L. TATUM** (by invitation).

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Method.—Use was made of the fact that from frozen sections, as prepared for histological study of fresh unfixed tissues, the colloid of the thyroid gland completely disappears out of the acini when the sections are floated in physiological salt solution. The sections were picked out by means of a needle, washed in another solution of salt solution, dried at 105° C., weighed and analysed for iodine by the technique of Kendall. The iodine in the colloid portion was sometimes determined by evaporation of the salt solution containing the colloid, and at other times differentially by analysis of the whole dried gland.

Results.—In a series of about thirty experiments on dogs' thyroids the thyroid iodine was found in the majority of instances to be wholly in the colloid as the cell portion was free from iodine. In a smaller percentage of cases the cell mass gave only qualitative tests for iodine, which at the present stage of this investigation might be considered due to unopened small acini.

The physiological significance of these findings is being investigated.

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On the certain dietary factors to be considered in the treatment of cases of hyperthyroidism.

By **JACOB ROSENBLOOM**.

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The writer has obtained clinical evidence that in formulating a diet for patients suffering from hyperthyroidism, two important factors must be considered; first, the diet should contain the minimum amount of protein and second, foods low in iodine content should be selected.