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Further studies on the constitution of inosinic acid.

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In a former article[1] on the constitution of the inosinic acid obtained from beef extract, we have demonstrated that by acid hydrolysis there is formed an intermediate product, a pentose phosphoric acid, which we isolated as a well crystallized barium salt. From the fact that this body showed strong reducing properties, it is evident that the aldehyde group is free, and the phosphoric acid is bound, ester-like, on one of the hydroxyl groups of the pentose. As the inosinic acid itself does not reduce Fehling's solution, it is at once obvious that the hypoxanthin contained in its molecule must be bound as in a glucoside on the aldehyde group. We also mentioned that upon alkaline hydrolysis we were able to isolate a small quantity of a silver compound of a purin-pentose complex which gave all the qualitative tests for such a body.

Meanwhile it came to our notice that Haiser and Wenzel[2] had obtained a compound of hypoxanthin and a pentose from karnin to which they gave the name *inosin.* We have succeeded, by heating the barium salt of inosinic acid in water solution in a sealed tube at 125°–130°, in obtaining a mixture from which we have isolated a substance which in all respects corresponds with Haiser and Wenzel's inosin.

From this substance we obtained a levorotatory pentosazone. Furfurol distillation yielded the phloroglucid required by a pentose.

[1] Levene and Jacobs: *Berichte d. deut. chem. Gesell.*, 41, 2703 (1908).

[2] Haiser and Wenzel: *Monatshefte für Chemie*, 29, 157 (1908).