main dietary ingredients. It is difficult to believe that the purification has caused any impairment in the nutritive value, as ordinarily understood, of either the sugar or casein. A restitution can be effected from the above dwarfism when small amounts of 2 natural substances are added to the rigorously purified diet. Females receiving 800 milligrams of yeast plus 10 grams of fresh lettuce leaf, or 0.5 grams of fresh beef liver are equalling in growth the best animals on natural foods. The pure diet when supplemented by these amounts of lettuce or liver also allows gestation and the birth of good litters. Lactation is deficient but these data are still too scanty for summation of our experience here. The simplicity and purity of this basal ration makes its value for nutrition research evident. It perhaps approaches in purity the culture media used by plant physiologists who have recently made remarkable findings concerning the mineral requirements of plants.

[1] Taylor and Iddles, *J. Ind. and Eng. Chem.*, 1926, xviii, 713.
[2] Osborne and Mendell, *J. Biol. Chem.*, 1922, lix, 739.
[3] Smith, Cowgill and Crall, *J. Biol. Chem.*, 1925, lxvi, 15.

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Observations on the Filtrability of B. Tuberculosis.

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A series of 21 guinea pigs was inoculated with the Berkefeld filtrates of tuberculous material. Of 12 animals autopsied so far, acid-fast bacilli have been identified in the direct smears from the lung, inguinal and tracheo-bronchial glands of 3 of the animals. Prolonged search was necessary to demonstrate the organisms which, however, occurred usually in large clumps when found.

No definite evidence of tuberculosis was found by histological methods, except in the lungs of two of the positive animals. These showed small punctate areas of granulomatous, endotheloid hyperplasia, not specific for tuberculosis. The lesions did not differ materially from those found in the lungs of one out of twelve control animals examined.

Exhaustive search of the smears of the lymph glands and lungs of 12 uninoculated animals did not disclose the presence of any

acid-fast bacilli. Cultures and inoculation experiments from positive animals yielded negative results.

These results as a whole appear in accord with those of the French school, who believe they have demonstrated the filtrability of this organism. Lacking as they do cultivability, or the power of producing classical tuberculosis, we feel that the nature of the acid-fast organism in the smears is uncertain as yet.

On the other hand, one of the animals inoculated with the filtrate under different conditions than the rest died between the 6th and 7th month of classical tuberculosis. The lesions involving the abdominal lymph glands, lungs and liver were widespread and unmistakable. Acid-fast bacilli were readily found and on injection again produced classical tuberculosis. A control animal inoculated with the same filtrate as the test animal but under the usual conditions died in five weeks of pneumonia but showed no evidence of tuberculosis. Attempts to repeat this rather noteworthy result are under way.

This is a preliminary report.

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Peptone Hypoglycemia.

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The effect of peptone on blood sugar has been determined by several investigators, but the results obtained have been discordant. Henderson and Underhill[1] in 1911, and Kuriyama[2] in 1917 reported hyperglycemia after intravenous injection of peptone. On the other hand, McGuigan and Ross[3] in 1915 found marked hypoglycemia, while Menten and Manning[4] in 1927 observed hyperglycemia with three samples of Witte's peptone, hypoglycemia with one sample, and no change in blood sugar with another sample.

The experiments to be described were made some time ago, but are now reported in view of Menten and Manning's paper. Our results throw light on the possible cause of the variations in blood sugar obtained after administration of peptone. The experiments recorded differ from those of previous investigators. The diet of the test rabbits was noted and kept constant in view of the relation