

Human leucocytes and staphylococcus aureus were used and the time of incubation was thirty minutes, at 37°C. An alkalinity of the fluid exceeding 1/20 normal KOH prevented the occurrence of opsonization. An acidity of 1/30 normal HCl was sufficient to stop the opsonic function of the serum. Neutralization of the excessive alkalinity or acidity caused reappearance of opsonic activity. On the other hand, an alkalinity or an acidity approaching that of the normal alkali or acid produced a condition of irreversibility of the inactivation. The opsonic index estimated in the usual alkaline reaction of normal serum is far lower than that in a neutral medium.

The high stability of opsonins against desiccation and the high thermostability of dried opsonins are very striking. Almost no reduction of opsonic strength is experienced after a serum is completely dried at 23°C. within a few hours. In dry state opsonins are well preserved even after two years. Dried serums of crotalus, ox and horse gave positive results in this regard. The temperatures of 100°, 120°, 135° and 150°C. do not destroy opsonins in the dry state. At 150°C. the serum becomes difficult to dissolve, but opsonins may still be detected in it.

Complements withstand desiccation and dry heat in a manner similar to the resistance of opsonins.

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#### **On decomposition of uric acid by animal tissues.**

**By P. A. LEVENE and W. A. BEATTY.**

*[From the Rockefeller Institute for Medical Research.]*

About two years ago in a communication before this society we indicated the most favorable conditions for the decomposition of uric acid by tissues.

Several papers on the same subject have recently been published in which it was demonstrated that uric acid may suffer decomposition through the action of tissue extracts in the presence of dilute sodium bicarbonate.

This confirms the results in our previous paper. In our recent work uric acid was subjected to the action of splenic pulp in the presence of 2 per cent. ammonium hydroxide and 2 per cent. acetic acid.

Under both conditions uric acid was decomposed to the amount of 50 per cent. of that present. Allantoin was one of the decomposition products. In the first communication mention was made of the fact that basic substances were formed in the process of dissolution.

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**On the diuretic action of thymin.**

By **P. A. LEVENE.**

*[From the Rockefeller Institute for Medical Research.]*

In work done by Sweet and the writer the observation was made that the administration of thymin to a dog with an Eck fistula caused marked diuresis. The experiments were continued this year on a dog with an Eck fistula prepared by Dr. Carrel. The dog had been kept on a purin free diet many weeks before the experiment was begun. For three weeks preceding the experiment the water consumed by the dog and the urine eliminated were carefully measured. It was noted that administration of thymin was followed by marked diuresis.

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**On lysinglycyl obtained in the tryptic digestion of egg albumen.**

By **P. A. LEVENE** and **W. A. BEATTY.**

*[From the Rockefeller Institute for Medical Research.]*

In the process employed by the writers a year ago for preparing the peptid prolinglycyl, a substance was produced from egg albumen, which on further cleavage yielded only lysin and glycoll. The substance could not be crystallized. It is a noteworthy fact that peptids of the hexon bases obtained by Fischer and Suzuki synthetically also failed to crystallize.