Effect of taurocholic acid on the large intestine.—By the Magnus method, $\frac{1}{2}$ grain of taurocholic acid decreased peristalsis and the tonus of the large intestine. In the rabbit, $\frac{1}{4}$ to $\frac{1}{2}$ grain of taurocholic acid by the Magnus method greatly decreased the tonus and peristalsis.

There is no doubt that either with the excised intestine or with the balloon method, where the nerves of the intestine are attached, that bile from $\frac{1}{32}$ of a drop up to 4 c.c. primarily inhibits peritalsis and afterwards may or may not increase peristalsis. The taurocholic and glycocholic acids have the same action as the bile itself. The experiments upon the pulse-rate and arterial tension show that bile after a few doses reduces the tension and the heart beat. Taurocholic acid reduces the heart beat and the blood pressure. Glycocholic acid reduces the blood pressure, but did not materially alter the pulse-rate.

From an examination of our results it is apparent that bile has contradictory effects upon the small and large intestine. It is evident that with either the Magnus method or the balloon method results are antagonistic. Dr. Schüpbach believes that this may in part be explained by a psychic reaction on the intestine in his experiments. It will not, however, explain the contradictory effect in the case of the excised intestine. In 1884, in a paper on intestinal peristalsis, Ott called the ganglia in the intestine intestino-motor and intestino-inhibitory. It is probable that these ganglia have a varying antagonistic effect, and as one or the other is in the ascendant we have an increase or a decrease of peristalsis by the bile. It is evident that the circulatory changes did not have any part in the changes in intestinal persitalsis.

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The uric acid excretion of normal men.

By **PAUL J. HANZLIK** and **P. B. HAWK.**

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The purpose of the investigation was to observe the course of the excretion of uric acid in normal men living on an ordinary mixed diet. Each subject was allowed to select his own diet and

then was required to ingest the diet selected during the course of six periods of four days each. Ten university students served as subjects. Quarters were provided where the men could easily be observed as to certain regulations of sleep and diet. The body weights of the subjects ranged from 53.1 kg. to 76.7 kg. and their ages varied from 19 to 29 years. There were no athletes among the subjects so that no individual took excessive or violent exercise, but all lived the life of the average, normal university student. The Folin-Shaffer method for the determination of uric acid was employed.

CONCLUSIONS.

1. The average daily excretion of uric acid for ten men ranging in age from 19 to 29 years, and fed a normal mixed diet, was 0.597 gram, a value somewhat lower than the generally accepted average of 0.7 gram for such a period.

2. The average daily protein ingestion for these same subjects, when permitted to select their diet, was 91.2 grams or 1.33 gram per kilogram of body weight.

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Hemolysins in the sera of carcinoma and syphilis.

By **S. PESKIND.** (By invitation.)

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A few years ago the writer commenced a research, the object of which was to determine in what diseases hemolysins commonly occurred and whether or not they were specific for these diseases. The ultimate purpose was to obtain data that one could use in diagnosis.

A preliminary report was published.[1] The work had to be abandoned shortly thereafter. Since then, other investigators — notably Kelling — have taken up the study of hemolysins in connection with their use in diagnosis.

It occurred to the writer that it would be very desirable to determine the question as to the specific nature of the hemolysins found in various diseases. With this object in view, a study of

[1] Peskind: *American Medicine*, 1903, v, p. 918.