2832

The tolerance of normal and phlorhizinized dogs for acetoacetic acid.

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(Introduced by P. A. Shaffer).

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Intravenous injections of neutral freshly aerated sodium acetoacetate solutions, injected into dogs at a constant rate and over a long period of time, showed that the tolerance for acetoacetate is very great. Acetoacetate is almost completely tolerated (*i. e.,* disappears) in normal dogs when injected at a rate up to 5 or 6 millimols per kilo body weight per hour, the amount disposed of (or tolerated) being roughly proportional to the amount injected. A small portion of that injected is excreted as B-oxybutyric acid and acetoacetic acid in the urine, in the ration of from 1:1 to 2:1, and as acetone in exhaled air. Long continued phlorhizination and starvation does not abolish the tolerance, but does decrease it about 30 to 50 per cent below the normal. Injection of insulin into a phlorhizinized dog caused an immediate increase of tolerance which became normal in about three hours.

2833

The photochemistry of cod liver oil.

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Summary. The results of Kugelmass and McQuarrie reported in *Science,* Vol. 60, No. 1551, Sept. 19, 1924, in which cod liver oil and other antirachitic substances were found to radiate ultraviolet light upon oxidation with atmospheric oxygen in alkaline solution have not been confirmed. The positive results obtained by the authors were traced to faulty technique and presumably were due to black body radiation, since controls gave the same photographic results as the cod liver oil.