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Some Properties of Vitamin E Concentrates

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IOWA ACADEMY OF SCIENCE

The influence of whole liver does not reside in its protein or fat content since growth and lactation were not aided by supplementing the extracted liver diet of a like number of animals with fat free liver or liver fat equivalent to 0.5 g. of whole dried liver.

A water-alcohol soluble ether insoluble fraction of the liver led to no improvement of the basal diet. A water insoluble ether insoluble fraction fed in amounts equivalent to two grams of raw liver (12.5 mg. daily) is giving conclusive results. Material prepared according to the method described by Mapson ² has been tested, and found to be somewhat active.

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SOME PROPERTIES OF VITAMIN E CONCENTRATES

H. S. OLCOTT

Preparations of vitamin E were obtained from lettuce and from wheat germ oil by fractional crystallizations of the unsaponifiable lipids. Still further concentrated fractions were obtained from the lettuce unsaponifiable lipids by fractional distillation in vacuo. The fraction collected from 190-220° (0.1 mm.) was the most active. After the removal of traces of sterols and other solid alcohols by crystallization from acetone, 10 mg. were sufficient, when fed to a female rat deficient in vitamin E, to allow the birth of a normal litter. Concentrates so obtained were resin-like material which would not crystallize. Some of the physical and chemical properties were determined. The vitamin is not destroyed by acetylation, benzoylation, or mild hydrogenation but is destroyed by bromination.

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THE AVAILABILITY OF INDOLE DERIVATIVES FOR SUPPLEMENTING DIETS DEFICIENT IN TRYPTOPHANE

Lyle C. Bauguess and Clarence P. Berg

Interest in the possibility of replacing essential amino acids in ² Mapson, L. W., Biochem. J. 26, 970 (1932).