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An improved procedure for metabolism experiments.

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The literature concerning metabolism contains many accounts of failures of experiments due to refusal of the animals—usually dogs—to eat the diets offered.¹ Investigations into the physiology of vitamin-B as carried out at this laboratory have shown this accessory food substance to be a factor essential for the maintenance of the appetite. This fact is of peculiar interest to students of metabolism.

We are now able to give quantitative expression to this fact in terms of the source of vitamin-B which we have tested, and have utilized this relationship to make dogs eat during the periods of metabolism experiments.

A dog receiving a synthetic diet adequate in all respects except vitamin-B, and containing only enough calories to maintain a fairly constant body weight, requires for the maintenance of appetite approximately 50 milligrams of "Yeast Vitamine (Harris) Powder" per kilogram of body weight per day. Our procedure in metabolism experiments has been to weigh out the daily doses, place them in gelatin capsules, and to give one capsule to the animal each day.

This method has been tested by workers at our laboratory with entirely satisfactory results. Dogs have been maintained on purely synthetic diets with remarkably constant daily output of nitrogen over unusually long periods.

Experiments designed to determine the minimum daily dose of a wheat embryo preparation containing vitamin-B are now in progress.

¹ Many might be cited. More striking instances are: Forster, J., *Zeitsch. f. Biol.*, 1873, ix, 297; Steinitz, F., *Pflüger's Archiv.*, 1898, lxxii, 75; Abderhalden, E., and Oppler, B., *Zeitschr. f. Physiol. Chem.*, 1907, li, 226.