COMMERCIAL LIQUID DIET FOR ANIMALS IN BEHAVIORAL STUDIES

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Herndon *et al* (1958) had devised a liquid diet for the maintenance of experimental squirrel monkeys in behavioral studies. After 3 years of testing this diet in our laboratories, we now have a superior modified formula available commercially which is known as Special Monkey Diet, SK&F.¹

The composition of the dry mix used in the preparation of the liquid diet consists of the following: casein (purified), 33.3%; sucrose, 51.1%; cellulose (Alphacel), 5.6%; salts mixture (U.S.P. XIV), 5.6%; and vitamin diet fortification mixture,² 4.4%. The multivitamin mixture contains these vitamins (milligrams per pound diet): Vitamin A (200,000 units per gram), 90; Vitamin D (400,000 units per gram), 5; alpha tocopherol, 100; ascorbic acid, 900; inositol, 100; choline chloride, 1500; menadione, 45; para-aminobenzoic acid, 100; niacin, 90; riboflavin, 20; pyridoxine hydrochloride, 20; thiamine hydrochloride, 20; calcium pantothenate, 60; biotin, 0.40; folic acid, 1.80; and Vitamin B₁₂, 0.027. The vitamins were tri-

turated in dextrose, to a total of 2 kilograms (sufficient for 100 pounds diet).

In preparing the liquid diet, add 10 grams of vegetable oil (cottonseed)³ and 50 milliliters of water (can be adjusted to desired consistency) to each 90 grams of the dry mix. Stir for several minutes in a Waring Blendor or by hand. This liquid diet should be stored in a refrigerator no longer than 24 hours.

Forty to fifty milliliters of this liquid diet daily has maintained squirrel monkeys ranging in weight from 500 to 900 grams in good health and vigor for 2 years. Of particular importance was the necessity of maintaining a high intake of Vitamin C in monkeys on a restricted synthetic diet. Experimental animals were maintained at 70-80% of their normal body weights for behavioral studies.

³Wesson Oil.

REFERENCE

- Herndon, J. F., Greenberg, S. M., Van Loon, E. J., Kelleher, R. T., Cook, L., and Davidson, A. A liquid diet for animals in behavioral studies. *J. exp. Anal. Behav.*, 1958, **1**, 291-292.

¹Available from Nutritional Biochemical Corp., Cleveland, Ohio.

²Vitamin Diet Fortification Mixture: Nutritional Biochemical Corp., Cleveland, Ohio.