

## RIBOFLAVIN REQUIREMENTS OF KITTENS

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Weight gains of kittens deprived of riboflavin for the first 4 weeks were poor but immediately increased with addition of riboflavin. After a 28-day depletion period on a basal diet of low riboflavin content, groups of 6 kittens, then 10 to 12 weeks old, were given daily supplements of 0, 25, 50, 100, or 200 ug riboflavin for 28 days. Another group was given 200 ug daily through the experiment. The 100-ug group outgained the 200-ug group, so there appears little advantage in giving more than 100 ug daily to kittens depleted of this vitamin. These groups outgained the 50- and 25 ug groups, which in turn greatly outgained the group receiving no riboflavin.

No other clinical signs besides lack of weight gain were observed in any of the groups. The gums and mouth remained healthy and, contrary to previous reports, no corneal or lens lesions or sciatic nerve demyelination occurred. Blood values, serum protein and enzyme levels, bone marrow smears, gross pathology, and body tissue levels of riboflavin all remained similar to control values. Even the kittens that received no riboflavin maintained comparable tissue levels of the vitamin. High-carbohydrate diets favor intestinal synthesis of riboflavin and might account for the absence of typical clinical deficiency signs in this study.