

US EPA ARCHIVE DOCUMENT

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Examination of Rats Fed Sevin for 75 Days

Eight test and seven control rats were killed and autopsied at the end of a 75-day test period during which the test rats had been fed a laboratory chow diet containing 10,000 ppm of Sevin. Food intake was not measured; however, there was marked depression of growth in test rats.

Average Final Body Weights, Grams

	<u>Test</u>	<u>Control</u>
Males	223	391.6
Females	146.5	256
Number pregnant per number bred	0/4	2/2

After approximately 45 days on test diet, four pairs of treated rats were mated without any resulting pregnancies, while mating of two pairs of control rats resulted in pregnancy of both females.

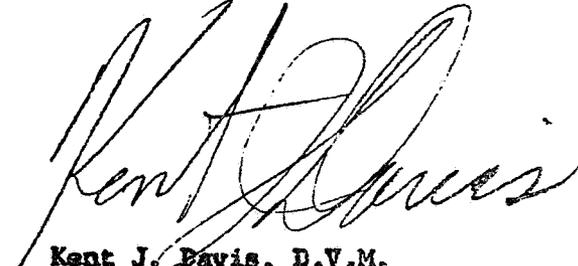
Hematoxylin-eosin stained paraffin sections of formalin fixed heart, lung, liver, kidney, urinary bladder, spleen, pancreas, stomach, intestine (3 levels), thyroid (except 4), adrenal (except 1), brain (except 4), bone, testis and prostate or ovary and uterus (except 1) from these four test and three control males, and four test and four control females were examined microscopically. In addition myeloid-erythroid cell ratio approximations were made on Wright-Giemsa stained bone marrow smears from each of these fifteen rats.

Other than gross size differences consistent with the observed body weight averages, no gross or microscopic changes attributable to treatment were noted in the eight test rats examined. Since neither testicular nor ovarian abnormalities were seen, breeding failures in the test group were apparently due to physiological infertility; however, the possibility of slightly delayed sexual development in the growth retarded animals cannot be excluded.

Pathology noted in control rats was limited to thrombosis and inflammation of the uterine vessels in one of the females which had been pregnant.

SUMMARY

Feeding young rats laboratory chow containing 10,000 ppm of Sevin for 75 days resulted in marked growth retardation and in breeding failures but did not cause any microscopic pathology in the breeding animals. The pups from the control animals were not examined, since there were no pups from the test animals.



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