

EXERCISE, THYROID SECRETION RATE AND LIPID METABOLISM
IN RATS

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The effects of exercise on the thyroid hormone secretion rate (TSR) and lipid metabolism on young (2 months) and old (9 months) Sprague-Dawley rats were measured. TSR was effectively increased by exercise in both young and old animals. In the young TSR was increased by exercise, and in the old exercise negated the normal decline in TSR observed with advancing age. Serum cholesterol and serum and liver triglycerides (TG) were significantly higher in the older rats. Exercise lowered serum and liver TG in both age groups and lowered serum and liver cholesterol in the old animals and liver cholesterol in the young. All lipid levels studied were inversely correlated with TSR.