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Effect of Nocuous Stimulation on Blood Fat.

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Cannon¹ showed that the liberation of adrenalin into the blood stream is increased by nocuous stimulation. Since injections of adrenalin² and emotional excitement, *i. e.*, fear and rage³ produce lipemia, it was logical to determine whether nocuous stimulation applied to the pads of the feet of cats would have the same effect.

Blood was drawn from the jugular vein of cats before and after a period of electrical stimulation of short duration (less than 2 minutes), and the samples were analyzed for fat and glucose. The results presented in Table I indicate that nocuous stimuli produce a reflex lipemia.

TABLE I.
Effect of nocuous stimulation on blood fat—mg. %.

Experiment	Fat		Glucose	
	before	after stimulation	before	after stimulation
1	678	862	114	154
2	644	662	148	161
3	574	735 ($\frac{1}{2}$ hr.)		204 ($\frac{1}{2}$ hr.)
		681	144	184
4	825	1040	192	280

¹ Cannon, W. B., "Bodily changes in pain, hunger, fear and rage," New York, D. Appleton and Company, 1929.

² Himwich, H. E., and Spiers, M. A., *Am. J. Physiol.*, 1931, **97**, 648.

³ Himwich, H. E., and Fulton, J. F., *Am. J. Physiol.*, 1931, **97**, 533.