of the α-2 and β-1 peaks in hyperlipemia were caused by a lipoprotein with the solubility characteristics of β-1 lipoprotein. There are two possible reasons for the increase in the speed of electrophoretic migration of the β-1 lipoprotein after the intravenous injection of heparin: either combination with heparin (which has a high negative charge) increases the negative net charge of the β-1 lipoprotein molecules, or heparin by its lipolytic action (*3*) causes a decrease in the size of the β-1 lipoprotein molecules (*4*).

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The Metabolism of Niacin in Insects[1]

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A number of studies have demonstrated species differences in the metabolism of niacin. In carnivorous mammals the principal end product, as evidenced by urinary excretion, is N^1-methyl nicotinamide (NMN). In contrast, species of herbivora do not excrete appreciable amounts of NMN (*1*).

The present author has reported that the urinary excretion of NMN could not be detected following the subcutaneous injection of nicotinamide in the herbivorous insect, *Bombyx mori* (*2*). The urine analyses were done by the author's method (*3*, *4*). The methylation of nicotinamide has not yet been demonstrated in other insects.

Hence the methylation of nicotinamide was looked for in the carnivorous insect, *Lucilia caesar*, L. which had been fed with fish protein in the larval stage. The urine of the last pupal stage before emergence was examined for NMN by paper chromatography (*4*), using a urea butyl alcohol solvent (*5*) and Dragendroff's reagent (*6*). No NMN was found in the urine. Control experiments indicated that 10 μg of NMN added/ml of Lucilia urine could be detected by the method used. The failure to find N-methyl nicotinamide in the urines of either a carnivorous insect or an herbivorous insect (*2*) suggests that the metabolism of nicotinamide in insects is different from that in carnivorous mammals.

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A Discontinuous Paper Drive

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A discontinuous paper drive for use with paper ionophoresis strips containing radioactive samples has been designed and built similar to that shown in Fig. 1. The apparatus pulls 3.5-cm-wide strips of paper

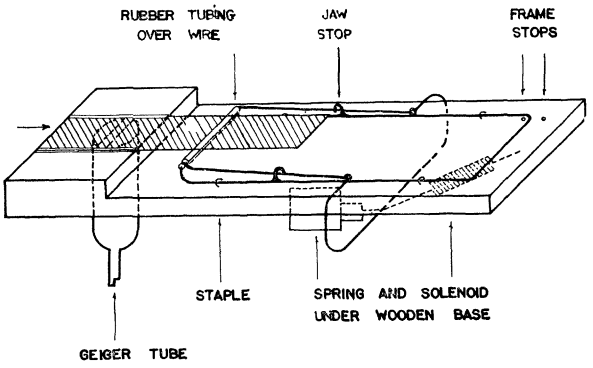

FIG. 1. Drawing of discontinuous paper drive.

over a thin window Geiger tube but could be used on various widths of paper. Construction of the paper drive was from clothes hanger wire, rubber tubing, nails, one solenoid, one spring, and ½-in. plywood. The wire jaw runs through loops in the wire frame and connects to the solenoid. The solenoid opens the jaws against the jaw stops and moves the frame backward. Then, the spring closes the jaws on the paper and moves the frame and paper any desired distance up to 1.5 cm, depending on where the frame stops are placed.

In use the solenoid is connected to a scaler such that any predetermined count will activate the solenoid. A pen, which makes a mark on a constant speed paper tape so that the exact cross section containing activity can be determined, is also connected in parallel.

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Survival of Irradiated Rats in Parabiosis with Hypophysectomized Partners[1]

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Brecher and Cronkite (*1*) first demonstrated that postirradiation parabiosis is a means of altering the effect of a lethal dose of x-irradiation to rats. Their results have been confirmed and extended during the

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