

	Liver				Skeletal muscle
	Glycogen (%)	In-organic P. (mgm. %)	Total acid-soluble P. (mgm. %)	Organic P. (mgm. %)	Glycogen (%)
Normal animals:					
After 24 hr. fasting	0.136	31.70	94.70	63.00	0.328
1 hr. after 1 gm. glucose feeding	0.500	22.12	87.87	67.75	0.380
Diabetic animals:					
After 24 hr. fasting	0.913	28.40	95.00	66.60	0.247
1 hr. after 1 gm. glucose feeding	1.729	21.50	97.75	76.25	0.390
Diab.-adrenalectomized animals:					
After 24 hr. fasting	0.058	46.62	100.65	54.03	0.266
1 hr. after 1 gm. glucose feeding	0.296	33.10	93.30	60.20	0.259

skeletal muscle glycogen, rise more in diabetic animals than in normal ones. Alloxan-diabetic rats in which glycosuria and hyperglycaemia have been completely suppressed by adrenalectomy show, when young and when fed, a lower glycogen content of liver as well as of skeletal muscle than normal ones. Further, the organic phosphate in the liver was also higher in alloxan-diabetic rats than in normal rats.

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### Observations on the Moth *Plusia gamma* in Denmark in 1946

THIS year the noctuid *Plusia gamma* has been more abundant in Denmark than at any time since 1905. It is likely that the swarms arrived here in June; the first report of damage caused by the larvæ came from the southern part of Denmark, and was followed by similar reports from more northern parts, thus closely corresponding to the seasonal progression recorded in England<sup>1</sup>. The adults appeared about August 1.

The main results of the observations in the field, confirmed by experiments in the laboratory, are as follows. *Plusia gamma* has two different activity patterns, one for seeking food on plants, another one for migrating. The first is correlated with the temperature, maximum activity being found at temperatures between 25° and 30° C., with a lower limit at 18–20° C.; accordingly, the feeding takes place in the day-time, especially on bright and warm days.

We have only observed the migrating activity during the night. The temperature limit is much lower, about 12°–14° C. The moths were not found to feed during migration, except on a few very warm nights. Migratory individuals seem to be less attracted by light than other moths. The flight takes place at heights of 5–20 m. above the ground, and the direction of the flight is very nearly the same for all individuals observed during a certain period. But, unlike previous investigators<sup>2,3</sup>, we have found that the migrations are in the direction of the wind. This is not only the result of general observations, but out of 440 individuals actually counted during ten observations lasting for 10 minutes, 73 per cent moved exactly in the main direction of the wind and only 6 per cent deviated by more than 45° from this direction. The directions of the wind were north, north-west, west, south-east and east. These observations were made by means of a searchlight.

In Denmark, sunset in August is at about 8 p.m. (M.E.T., one hour after G.M.T.); the migrations start one or two hours later, and last for about three–four hours, with a maximum in the hour before midnight.

Towards the end of August, the number of individuals decreased. Copulation was never observed, and only about one per thousand of the females had developed eggs in the ovaries. As no evidence of a return flight has so far been recorded from Denmark, it is possible that this generation will die out entirely.

A detailed report of the observations and experiments will appear in the near future in *Entomologiske Meddelelser* (Copenhagen).

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### Segmentation of the Spinal Cord in the Human Embryo

VARYING statements regarding segmentation of human spinal cord have been made by different writers. They range from "No definite segmentation can, however, be effectively demonstrated. The obvious segmentation of the tube is through the nerve roots which arise in regular sequence from its walls"<sup>1</sup> of Paterson to that of Sir Arthur Keith, who states that "Dr. Watt observed in a human embryo in which there are 18 body somites that 11 segments were to be noted in the spinal cord"<sup>2</sup>.

In the course of study of "The Neuraxis in South Indian Foetuses and Neonati", clear segmentation of the spinal cord has been noted in some specimens. Actual photographs of two embryos are reproduced here. The first one is that of an embryo the C.R. length of which is 5.1 cm. Its age will be between