20 other rats using doses of from 50-200 mg/kg of the cystine compound. In Fig. 2 are shown the results obtained in 9 Wistar rats after injection of 3.5 g/kg of glucose (10% solution) intraperitoneally and it is to be noted that the glucose tolerance curve of the rats receiving the cystine compound is similar in all respects to that of the control animals.

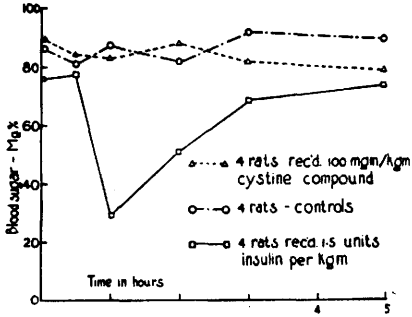

FIG. 1.

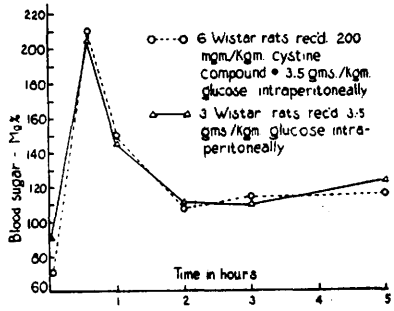

FIG. 2.

FIG. 1. Comparative effectiveness of bis-p-aminobenzoyl-l-cystine and insulin on blood sugar of rats.

FIG. 2. Glucose tolerance studies on Wistar rats.

Summary. Bis-p-aminobenzoyl-l-cystine was found to be devoid of hypoglycemic properties in normal rats. This compound also did not affect the glucose tolerance curves of Wistar rats.

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Increase in Blood Lipids of Fasted Mice.

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The observations of Entenman, Changus, Gibbs and Chaikoff[1] on adult dogs fail to confirm the claim that fasting produces a lipemia. Since fasting mice promptly show a marked degree of fatty infiltration into the liver[2] it was considered of interest to determine whether a lipemia accompanies fasting in this species.

1 Entenman, C., Changus, G. W., Gibbs, G. E., and Chaikoff, I. L., *J. Biol. Chem.*, 1940, **134**, 59.

2 Hodge, H. C., MacLachlan, P. L., Bloor, W. R., Stoneburg, C. A., Oleson, M. C., and Whitehead, R., *J. Biol. Chem.*, 1941, **139**, 897.

TABLE I.
Data on Blood Lipids of Fasted Mice.

No. of mice	Body wt loss, %	Phospholipid, mg %	Neutral fat cholesterol, mg %	Total lipid, mg %
		Normals.		
13	—	256 (200-286)*	275 (203-384)	531 (403-637)
		1 day fasted.		
10	16	323 (302-365) (+26)†	291 (271-328) (+6)	614 (573-661) (+16)
		2 days fasted.		
10	21	349 (291-442) (+36)	301 (231-402) (+9)	651 (525-844) (+23)
		3 days fasted.		
5	25	321 (237-393) (+25)	418 (322-575) (+52)	739 (559-968) (+39)

*Figures represent range of values.
†Figures represent percentage changes from normal.

Three-months-old, male, albino mice, previously maintained on a diet of oats and Purina Dog Chow were fasted (water *ad libitum)* in individual wire cages so that coprophagy was minimal, for 1-, 2-, and 3-day periods. Blood samples were drawn by heart puncture and the whole blood analyzed by standard methods for phospholipid[3] and acetone soluble lipid (neutral fat and cholesterol).[4]

The increasing loss in body weight as fasting progressed is in agreement with earlier findings.[2] Of particular interest is the rise in the phospholipid content of the blood as a result of fasting; maximum values were found on the second day of starvation. This increase in blood phospholipid can be explained on the assumption that phospholipid serves as a transport mechanism in the intermediate metabolism of fat. It is also noteworthy that there is a gradual rise in the total blood lipid content as fasting progressed. This is mostly accounted for, on the first and second days of fasting, by the increased phospholipid values. However, on the third day of fasting, although the phospholipid decreased slightly, the average total lipid value reached its maximum, due in part to very high values for acetone soluble lipid (>500 mg %) for 2 of 5 animals. Further work is in progress.

Summary. On fasting, 3-months-old, male, albino mice show increased blood phospholipid and total lipid values.

[3] Bloor, W. R., *J. Biol. Chem.*, 1929, **82**, 273.
[4] Bloor, W. R., *J. Biol. Chem.*, 1928, **77**, 53.