5514

Composition of Human Fat.

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(Introduced by L. B. Mendel.)

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Inasmuch as there are comparatively few records of analyses of human fat, it seemed desirable to publish the following data on the fat, obtained at necropsy, from the abdominal wall of a rather obese 3-year-old female child, whose death was thought to be due to pituitary disturbance.

The fatty tissue† upon removal from the body was kept under 95% alcohol in an ice box, until an extraction of the fat was made by means of hot alcohol and ether. The pale yellow fat yielded an iodine number of 60.8 (Hanus method). The unsaponifiable material was determined by the modified Kerr-Sorber method.[1] A separation of the fatty acids into saturated and unsaturated fractions was accomplished by means of the lead salt-ether method[2]; and corrections were made for the small quantity of unsaturated fatty acids that contaminated the saturated fraction. No quantitative separation of the component fatty acids was made, but upon brominating a sample of the unsaturated fatty acids, a slight precipitate insoluble in ether formed, suggesting the presence of fatty acids more unsaturated than linoleic acid.

The analytical data obtained are included in the following table:

	% of fat	
Unsaponifiable matter	0.4	
Fatty Acids	93.0	
Saturated fatty acids	31.0	
Unsaturated fatty acids	60.0	(Iodine Number 102)

These results are in fair agreement with the more extensive analyses reported by Eckstein[3] for the subcutaneous fat obtained at biopsy from an obese adult.

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[1] Hertwig, R., Jamieson, G. S., Baughman, W. F., and Bailey, L. H., *J. Oil and Fat Ind.*, 1926, **3**, 64.

[2] Jamieson, G. S., *J. Assoc. Official Agr. Chem.*, 1928, **11**, 303.

[3] Eckstein, H. C., *J. Biol. Chem.*, 1925, **64**, 797.