

Amount of fat formed	9730 grammes.
Possible amount of fat from fat and protein 6872	"

Fat from carbohydrates	2858 grammes.
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The experiment which sets the question at rest, however, is that undertaken by Lawes and Gilbert, at Rothamstead, with pigs. Without giving all the details of the experiment which were scrupulously attended to by these most reliable experimenters, I may only say that they fattened the pigs during 8 to 10 weeks, keeping a record of their composition at the outset and at the finish and of the food consumed, all of which was of accurately known composition. On examining the results obtained they discovered that 29 per cent. of the fat produced must necessarily have had its origin from carbohydrates.

Another experiment, deserving of special notice proving the same fact, has recently been made by Jordan and Jenter, at the New York Agricultural Station.

The experiment was made with a young and vigorous Jersey cow. The cow was fed during 95 days with food from which the fat had been extracted :

Quantity of fat fed during the 95 days	11.6 lbs.
" " not digested	5.9 "
" " digested	5.7 "
Quantity of fat in the milk	62.9 lbs.
" " consumed	5.7 "
	57.2 lbs.

Therefore 57.2 lbs. of fat have to be accounted for otherwise than by the fat contained in the food. Moreover at the end of the experiment the cow weighed 47 lbs. more and was much fatter than at the start.

The increase in flesh could certainly not have been large for during 59 days of this period an accurate record of the nitrogen income and outgo showed that the nitrogen income was represented by 124.3 lbs. of protein and the nitrogen outgo by 125.7 lbs.