

*Experiment No. 3.*

Infant 94 days old. The fat in the food was reduced to 0.176 per cent. (Table III), or from 11 grams to 1 gram in twenty-four hours. During the two days the child consumed 2.11 grams of fat, and the total fat appearing in the faeces, amounted to 57.48 per cent. of intake. By referring to Table VIII we see that the fats contributed 13.41 per cent. of this amount, the fatty acids 1.56 per cent., and the fatty acids present as soaps 42.51 per cent.

*Experiment No. 4.*

Infant 107 days old. Was a test made during the resting period between Experiments 5 and 6. The fat in the food was reduced to the same amount as in the previous experiment. The proportion of fat appearing in the faeces were 5.32 per cent., fatty acids 0.43 per cent., fatty acids present as soaps 16.54 per cent., or a total fat loss, as compared with intake, of 22.3 per cent.

*Experiment No. 5.*

Infant 101 days old. Olive oil was added to the food in this experiment, and the total fat intake increased thereby to 7.25 grams in the two days experiment. The relative proportion of the fat in the faeces increased to 5.25 per cent., the fatty acids to 6.82 per cent., and the fatty acids present as soaps were reduced from 42.5 per cent., to 3.65 per cent. (Tables IV and V). In two days the child gained 69 grams.

*Experiment No. 6.*

Infant 100 days old. Palmitin was added to the olive oil and the melting point raised to 35.5° C. The total quantity of fat taken was 11 grams. The total fat in the faeces amounted to 15.38 per cent. of the intake, slightly less than in the previous experiment.

Experiments 5 and 6 were not altogether satisfactory, on account of the difficulty of obtaining a perfect emulsion of the fats, with the result that the infant was placed at a disadvantage in digesting them.

*Experiment No. 7.*

This infant was 22 days old and weighed 3,189 grams at the beginning of the experiment. The child was fed on a whey mixture, a daily analysis of which is shown in Table VII. During the six days of the experiment the child was given 2,637 grams of milk, containing 63.1 grams of fat; he regurgitated 1,484 grams of fat, leaving a balance of 61.56 grams to be digested. In the six days the infant passed 21 green-