

ed through a funnel containing sterile absorbent cotton, as recommended by Seibert, who claims that by this method the bacteria are reduced in numbers one-half.

Having a milk reasonably free from organisms, the other materials necessary are a clean glass vessel—a fruit jar will do—into which the milk is put, some milk sugar, some fresh lime water, and some clean drinking water which has been boiled for five minutes. The mouth of the jar is covered with a clean cloth to prevent contamination, and left open for a few minutes to dispose of animal heat. The jar is then sealed tightly and put upon ice or left in ice-water for from four to twelve hours. At the end of four hours, the cream which has risen from average milk will contain about 8 per cent. fat, and is spoken of as 8-per-cent. cream. After six hours, the cream will be 12-per-cent. cream—the same as gravity, or skimmed cream. Ordinary separator or centrifugal cream contains 20 per cent. fat.

The science of feeding infants artificially

is based on the general average chemical and physical properties of human milk, calculated from the milk of many healthy mothers at the same periods of lactation. The following table giving the result of recent analyses shows the differences to be overcome in modifying cows' milk for infant-feeding:

	Woman's milk average %	Cow's milk average %
Fat.....	4.00	3.50
Sugar.....	7.00	4.30
Proteids.....	1.50	4.00
Salts.....	0.20	0.70
Water.....	87.00	87.50
	100 00	100 00

The most important changes necessary in cow's milk are, therefore, a reduction of the proteids and salts, and an increase of sugar.

The following schedule for feeding an average healthy infant from birth upon modified cow's milk has been deduced by American Pediatricists:

No.	Age.	Fat per cent.	Sugar per cent.	Proteids per cent.	Daily quantity Ounces.
I.	First and second day.....	—	5.0	—	4-8
II.	Third to fourteenth day.....	2.0	6.0	0.60	10-15
III.	Two to four weeks.....	2.5	6.0	0.80	20-30
IV.	One to three months.....	3.0	6.0	1.00	22-36
V.	Three to five months.....	3.5	6.0	1.25	28-38
VI.	Five to six months.....	4.0	7.0	1.50	32-38
VII.	Six to nine months.....	4.0	7.0	2.00	34-42
VIII.	Nine to twelve months.....	4.0	6.0	2.50	38-45

The number of feedings during twenty-four hours should vary from ten the third day, given at intervals of two hours, to five at one year, given at intervals of three and a half hours. Semthin's rule, "The greater the weight the greater the gastric capacity," is of service in deciding the quantity of food and also the percentages that should be given an average healthy infant. For infants having feeble digestion the percent-

ages and quantity should be reduced, and, if necessary, the milk may be peptonized for a short time.

The following convenient table given by Holt will save the trouble of calculating the exact quantity of each of the ingredients required for the formulae most used, and also the amounts needed for the preparation of twenty-four, thirty-two, forty, and forty-eight ounce respectively, of food: