

There are many methods for the modification of cow's milk for infant feeding. The more easily this can be done, in order that the resulting mixture will resemble human milk as nearly as possible, the better. As is seen by comparing analyses of cow's milk with human milk, the proteids and salts in the former are in too great proportion, the fat and sugar too low.

Human milk.				Cow's milk.			
Fat.	Proteid.	Sugar.	Ash.	Fat.	Proteid.	Sugar.	Ash.
4.13	1.3-1.5	7.	.2	3.75	3.76	4.42	.68

If nature intended that anything else should be given the infant than what is contained in milk, we have not been told of it, and if given in proper proportion these constituents are all that it is necessary or proper to use. In using cow's milk the chief difficulty is with the proteids, and these are the chief elements in the food, as they alone are able to replace the constant nitrogenous waste going on within the body. The fats are closely associated with them as they save nitrogenous waste, and the whole energy of the proteids is enabled to go towards building up the body. Fats are also necessary for the proper formation of bone and nerve cells and fibres, besides being stored up in the body as fat. Fat is necessary as the chief source of animal heat, being even more useful for this than the sugars. The sugar is also stored up in the body as fat. The salts are chiefly of use in the growth of bone, and as sodium chloride is deficient in cow's milk, it is in many cases advantageous to add some. How is it possible to modify cow's milk, easily, so that we will have all the constituents in their proper proportion? The method I find most useful in practice is as follows:

For example, take of

Whole milk	4 oz.
Water	12 oz.

and in the mixture we have practically

Fat.	Proteid.	Sugar.	Ash.
.94	.94	1.10	.18

Now, ordinary skimmed cream, from good average milk, contains 16 per cent. fat.

If we take

Whole milk	4 oz.
Cream	1 oz.
Water	11 oz.

we have

Fat.	Proteid.	Sugar.	Ash.
1.94	1.18	1.42	.22