

HUMAN.			Cows.		
F.....	4	per cent.	F.....	4	per cent.
S.....	7	"	S.....	4.5	"
P.....	1.5	{ Cas. .6 Lact. 1.4 or 2 at most.	P.....	4	{ Cas. 3.25 Lact. .75

According to Still, of Great-Ormond St. Hospital, caseinogen means, strictly speaking, the potential curd, the curd-forming proteid before it is coagulated. Casein refers, of course, to the actual curd, the curd which has been formed.

Experience has taught us that one great difficulty in the digestion of cow's milk is the large quantity of curd which is formed when it enters the stomach. A glance at the percentage of caseinogen, which it contains, explains this very largely. This caseinogen forms a curd when mixed with an acid, or with rennet, while the other portions of the proteid, lactalbumen, is only coagulated by heating above 160 degrees F.

Glancing above, one sees that in mother's milk the caseinogen is about one-half the proteid, while in cow's milk it is more than four times the percentage of lactalbumen. In other words, the lactalbumen, which is so easy of digestion, constitutes more than one-half the proteids in mother's milk, while in cow's it is less than one-fourth.

In this relatively large percentage of caseinogen in cow's milk lies the main difference between it and human milk.

Is there a method of correcting this? Yes. How? By converting the caseinogen into casein and utilizing the residuc (whev).

With the exception of caseinogen and fat, whey contains all the ingredients originally present in milk, and practically in the same proportions. The fat globules save .25 per cent. to 1 per cent., become entangled in the contracting curds, and are removed from the whey at the same time as the casein is.

The formula of whey then would be:

F.....	.25 per cent. to 1 per cent.
(The less the curd is broken up, the less the fat.)	
S.....	4.5 per cent.
P.....	Caseinogen, 0
	Lactalbumen, .75

Next to the caseinogen the greatest change is in the fat.

Still was the first to note that the higher percentage cream we use the less proteid does it contain. He is able to get a 48 per cent. cream in London, and the amount of proteid contained in that is so small as to be, for practical purposes, a negligible quantity, and may safely be omitted from our calculations. Another advantage in the use of high percentage cream is the very small proportion necessary to be added to any milk mixture.