

In cows' milk the caseinogen is enormously in excess of whey proteins, about $2\frac{1}{2}$ per cent., and this reduces the whey proteins in proportion. One of the characteristic properties of milk is that it alone of all foods contains all the elements necessary for structural growth.

For instance: wheat contains carbo-hydrates but no fat, therefore with bread butter is required to be added to make it a typical diet. It must be remembered in the administration of cream that fat is a powerful inhibitor of the gastric secretion, more powerful than any known drug, and it should always be seen in ordering cream for an invalid that the patient is not receiving protein at the same time, as the combination tends to upset digestion.

The function of fat is two-fold: to maintain normal bodily heat, which is no mean task, and to build up special structures. It is shown to have a close relation to the brain and epiphyses, and unless the full amount of fat is administered to infants, development of these structures will be retarded. The worst forms of rickets are never seen unless there has been some deprivation of fat.

The standard cream of the hospital was 45.00. Cream, Dr. Vincent pointed out, might mean anything from 8.00 to 50.00 of fat.

He demonstrated this by showing a burning candle made of pure cream from the hospital sample.

He also showed a specimen of lactose prepared directly from milk.

Bearing on this he went on to insist on the all importance of the presence of lactose in the milk, as lactic acid, which is of vital necessity to the infant, can only be manufactured if it is present.

Caseinogen presented one of the greatest difficulties in infant feeding, and even where an infant can digest it it is only after a great strain on its digestive organs.

The lecturer gave some interesting demonstrations with hydrogen peroxide, showing how the unboiled milk threw down a deep red precipitate, while the boiled specimen did not react.

One of the peculiar properties of freshly drawn milk was that it gave both the acid and alkaline reaction; the only other fluid capable of this is the blood.

The presence of acidity in the milk is its preventive from putrefaction; this is entirely destroyed by boiling.

Dr. Vincent concluded by showing on the epidiascope some interesting charts, demonstrating the difference in purchased samples of milk and those produced at their own farm.

H. H.

OUR PRIZE COMPETITION.

We have pleasure in awarding the prize this week to Miss Fanny Williams, Associate, Royal Sanitary Institute, 4, Midland Road, Gloucester, for her article on the question:—

WHAT ACCIDENTS MAY OCCUR TO THE CHILD DURING DELIVERY.

If the child be full term, and the labour normal, accidents likely to occur are few. The cord may be round the neck and the child asphyxiated, and the eyes may be infected by some vaginal discharge during delivery.

Where the labour is abnormal in any way the child usually runs the risk of some injury. A precipitate labour might cause the child to be born while the mother was in a standing position, or while she was at stool, and the child in that case might sustain an injury to the head through falling against a hard surface, or the cord might be dragged upon or even broken off. In precipitate labours the child is usually premature, or very small, and therefore injuries are much more likely to be fatal.

The limbs of the child may be injured (bones broken or dislocated) when the hand and arm presents with the vertex, or in some transverse presentations, and when the foot and leg are pulled down in a breech presentation. The eyes may be injured by the examining finger in face presentations.

In lingering labours a cephalhæmatoma (a tumour containing blood) may be formed, owing to prolonged pressure; the peculiarity of a cephalhæmatoma is that it never crosses a suture, in this it differs from the caput succedaneum; the child may die of suspended animation after the head is born because the pains are not strong enough to drive out the shoulders.

In face and occipito-posterior presentations, and in instrumental labours generally, the child's head, face and neck are often injured, the head and face being moulded by the pressure into a very ugly shape, and sometimes cut or scratched by the forceps. The neck may be so pressed upon or twisted that death results.

The child may be stillborn when there is a prolapse of the cord, causing its compression between the bones of the pelvis and the skull or, when the breech presents, owing to pressure on the cord during the birth of the after-coming head.

In plural births the children may get in each other's way and cause injury to one or the other.

The various operative measures necessary to delivery at times may be the cause of injuries to

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