

failure to feed the beestings to new-born calves, confining them in insanitary buildings or dirty pasture enclosures, overfeeding (which is to a great extent the result of not feeding sufficiently often), sudden complete changes of diet, the use of dirty utensils for storing milk or whey and feeding the calves, feeding unsuitable artificial foods or overfeeding with artificial foods that would be suitable in proper quantities, feeding any food which has been permitted to ferment, or feeding any food at an unsuitable temperature. The prevention of indigestion and scouring naturally consists of guarding against the causes, but the addition of lime-water or carbonate of soda (baking-soda) to the food, in the proportion of a cupful of the former or a teaspoonful of the latter to the milk of every five calves, will also be found very beneficial.

Calves require whole milk until they are at least two weeks old, and, as all sudden complete changes of diet are injurious, the method of changing from whole milk to skim or whey should be by substituting daily a pint of the latter, in conjunction with a minimum ration of artificial food, for a pint of the former, at the same time gradually increasing the ration of artificial food so as to reach the maximum ration when the calf is seven or eight weeks old. The quantity of artificial food which it is desirable to feed to calves at the different periods of their age will depend on the food material used and the varying quantities which the different animals can profitably utilize, but the maximum ration of any food which could be safely consumed and profitably utilized by a calf seven or eight weeks old would be injurious and likely to cause indigestion and scour in a calf two or three weeks old.

The materials commonly used as substitutes for the ingredients taken from the milk for commercial purposes are pure linseed, oatmeal, ground maize, and pollard. Linseed is one of the most valuable of these, as the oil it contains, besides being of great nutritive value, promotes a healthy condition of the organs of digestion, and for this reason it should form part of all mixed foods. It is also particularly valuable for feeding pure in the form of linseed-jelly in small rations when starting young calves on artificial foods. The proportions for this purpose are 1 lb. of seed to 1 gallon of water, and the jelly is made either by boiling the seed until the capsules burst and a jelly forms, or by pouring the boiling water on the seed and allowing it to stand overnight. A small tablespoonful of the jelly should be given in the milk to young calves, and the quantity gradually increased so that