

the place of the fat which has been removed. It is usually best to feed the young calf whole milk until it can be taught to eat a little grain, such as oats, corn, or a mixture of these with bran. As soon as the calf learns to eat, skim milk may be gradually substituted for whole milk.

Skim milk is highly valued for young pigs. It is easily digested and very palatable, two important considerations. Danish authorities estimate six pounds skim milk equal to one pound mixed meal, while American authorities usually give skim milk a somewhat higher rating. When everything is considered, however, a person would be safer in using the Danish standard than he would if he allowed a higher value for skim milk. It is true that sometimes as low as four pounds of skim milk will prove equal to one pound meal, but this is exceptional and it would not be safe to purchase skim milk on this basis. For pigs, sour milk seems to give just as good results as sweet milk, and, in fact, better results in most cases.

Buttermilk.—May be counted equal to skim milk, and whey about one-half the value of skim milk. This is probably a rather low valuation of whey, but it is better to keep on the safe side.

SLAUGHTER HOUSE BY-PRODUCTS.

Dried Blood.—This is an extremely concentrated feed as the analysis shows. It contains no fibre and over eighty per cent. protein. Of course a feed such as this can only be used in very small proportions, possibly less than ten per cent. of the total ration. It would be very easy to lose a good deal of the value of such a product unless it could be handled with extreme care.

Tankage.—Tankage is a prepared by-product from the large abattoirs and is coming rapidly into prominence, especially as a feed for hogs. It shows to best advantage when fed with other feeds which are poor in protein, such as corn, and it also plays an important part in supplying young pigs with a liberal amount of protein, especially when skim milk is not available. As a substitute for skim milk for young pigs it has given pretty satisfactory results, and possibly comes nearer to taking the place of skim milk than any other product on the market. Owing to the high percentage of protein in tankage, it is necessary to feed it with care or there will be waste of protein. When feeding tankage to young pigs it is seldom advisable to feed more than one pound tankage to nine pounds meal. It will be noticed that tankage varies in its percentage of protein and the value varies accordingly. When older pigs are fed on mixed grain, tankage may not prove profitable, but it will show up to best advantage with young pigs or with pigs of any kind which are being fed on corn. In certain tests at this College tankage at \$50.00 per ton proved more economical for pigs than skim milk at 10c. per cwt.

MISCELLANEOUS CONCENTRATES.

Beet Pulp.—Wet beet pulp belongs to the same class of foods as roots though it is scarcely equal in value to either mangels or turnips. It approaches these feeds very closely, however, in value and is well worth consideration when available.

Dried beet pulp, however, is more similar to some of our cereal grains in com-