

Referring to our composition table we find :-

	Protein.	Carbo- hydrates.	Fat.	Organic matter.
1 lb. barley contains				
Therefore	.095	.661	.012	.867
2 lb. barley contain	.190	1.322	.024	1.734
5 lb. ensilage contain	.065	.700	.085	1.210
Trial ration contained	1.918	11.222	.608	21.182
Total	2.173	13.244	.667	24.126

As it now stands, the ration is intermediate between the German and American standards, and may be accounted approximately correct.

If we wish to find the nutritive ratio of the above ration, we first multiply the fat by 2.2 and add the result to the carbohydrates, thus: $(.667 \times 2.2) + 13.244 = 14.711$. Therefore nutritive ratio is 2.173 to 14.711, or 1 to 6.75.

The above is only an example of how the standard may be used in formulating a ration, and, from what has been said, it will be seen that a great variety of rations may be compounded which are practically the same in composition, and which will give equally good results. In every case the feeder must be guided by the kinds of food which he has at his disposal.

The digestibility and nutritive value of a food may vary very much, and the feeder must take this into consideration. Especially is this true of coarse fodders, such as hay, straw, ensilage, etc., the grain being more constant. For example, hay that is well cured is more nutritious than that which has become very ripe, or that has been too much exposed to the weather.

Then again, animals vary with regard to the amount of food which they are able to assimilate, making it necessary for the feeder to study the individual animals under his care, and to modify his methods according to results.

It will therefore be understood that while a feeding standard is valuable as a general guide, it cannot be blindly followed, and a great deal must be left to the intelligence of the feeder.

Discussion of Some Rations Furnished in Report.

For the purpose of comparing some of the rations used by Ontario dairymen, with the German and American standards, a few of the more definite ones have been selected, and their digestible nutrients ascertained. Too much importance must not be attached to the composition of these rations, since, in some cases, the quantities of feed given are simply approximations. However, the rations are sufficiently definite to be of interest and value to the careful student.

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