

DAIRY MEALS

Dairy meals serve as a supplement for cows on available pastures. Dairy meals may be fed at any stage of the dairy cow's life. Dairy meals are normally fed in 2 portions per day, depending on the management programme. A dairy meal is a concentrated mixture that mixes easily, and as it contains no roughage, requires no processing (grinding) of roughage. A Dairy meal can vary in protein content between 9 and 23 %. The choice of the type of dairy meal and the quantity to be fed will depend on the quality of available roughage (natural and cultivated pastures), milk production and stage of lactation of the cows. Such a meal is usually used as follows.

% CP of dairy meal

9% } 12% }	Feed together with very good quality Lucerne hay and very good quality cultivated pastures.
15% } 17% }	Feed together with medium-quality pastures.
19% } 23% }	Feed together with poor quality roughage as well as high-quality silage.

Particle size of dairy meals

Dairy meals must be coarsely grounded and particle sizes of 1,6 mm and bigger is recommended. A 13 mm or bigger screen must be used to grind the raw materials as bigger particles will result in less dust and powder.

Intake guidelines

Roughage quality and production will determine how much dairy meal/cow/day is to be fed. A general guideline is:

Cows producing 25 l of milk	450 g/ litre
Cows producing 20 l of milk	400 g/ litre
Cows producing 15 l of milk	300 g/ litre

Maximum inclusion levels for some raw materials in dairy meals are

Fish meal	4 – 5%
Molasses	10%
Cotton seed oil cake meal	25%
Sweet lupine	25%
Urea	1,5%

Adaptation to urea-containing rations

A reduction in feed intake can be prevented in cows not used to feeds containing urea by gradually adapting the animals to these feeds. When changing from a urea-free dairy meal to a meal containing urea, it is advisable to feed a 50/50 mixture of the two types of dairy meals over a period of approximately 4–6 days.

Example of Dairy Meals

Raw materials	DAIRY 15	DAIRY 17	DAIRY 19
Maize-meal	800	750	720
Cotton-seed oilcake	100	125	150
Fish meal	-	25	50
Feed Grade Urea	12.5	12.5	12.5
Kimtrafos 12 Grandé/PhosSure 12	20	20	20
Feed lime	10	15	15
Kalori 3000	25	25	25
Feed Grade Sulphur	1	1	1
Salt	5	5	5
TOTAL	973.5	978.5	998.5
COMPOSITION			
Protein (%)	15.26	17.39	19.46
Urea (%)	1.25	1.49	1.75
ME (MJ/ kg)	11.3	11.1	11.1
Calcium (%)	0.9	1.02	1.01
Phosphorous (%)	0.53	0.62	0.62