

Understanding Dry Matter Consumption by Dairy Cows¹

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Many factors influence the dry matter (DM) intake of high producers. Those commonly observed are body weight, health of cows, level of milk production, climate, frequency of feeding, ration balance and palatability of the ration.

The dry matter intake for high producers varies according to type of ration and can range from 2.5 to 5 lb of dry matter per 100 pounds body weight.

Forages vary considerably in protein and energy. Where stored forages are used in abundance, a forage test should be conducted periodically.

Table 1 contains information on DM intake for cows on various rations. Table 2 contains information on DM intake for cows of various sizes producing different levels of milk.

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Table 1. Dry matter intake on various rations in Florida.

Treatment	DM intake (% body wt)	Milk (lb)	Milk fat (%)	Daily wt. gain (lb)
Ensiled complete ration	3.1	41.1	4.8	0.99
Ration blended at feeding	3.2	41.6	4.8	0.79
Silage and concentrate fed separately	3.1	42.5	5.0	1.30
Complete (bagasse) feed	3.9	47.8	4.1	1.10
Complete (CS hulls) feed	4.1	50.2	3.8	0.75

Table 2. Estimated DM intake at various levels of production and body weight (4% FCM).

FCM (lb/day)	Body weight of cows (lb)			
	900	1100	1300	1400
20	2.6	2.3	2.1	2.1
40	3.4	3.1	2.8	2.7
60	4.1	3.7	3.4	3.2
70	4.6	4.0	3.6	3.5
80	5.1	4.3	3.8	3.7
90	5.5	4.7	4.1	3.9
100	--	5.0	4.4	4.2

*NRC 1988; FCM = fat correct milk