

NATIONAL ORGANIC PROGRAM Dry Matter Demand Tables For Classes of Dairy Cattle





Adapted from: "Nutrient Requirement Tables," from Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

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Date Issued: March 17, 2010

Table 1 - 1: Daily Dry Matter Demand Requirements in Kilograms and Pounds

Early Lactation *Small Breed Dairy Cows

15 - 30 Kilograms or 33 - 67 Pounds Daily Milk Production 78% Total Digestible Nutrients Diet

Daily Milk	Milk		Daily Milk	Milk	
Production (kg)	Fat (%)	DMD (kg)	Production (lb)	Fat (%)	DMD (lb)
15	4.0	9.4	33.07	4.0	20.72
15	4.5	9.7	33.07	4.5	21.38
15	5.0	9.9	33.07	5.0	21.83
30	4.0	12.9	66.14	4.0	28.44
30	4.5	13.5	66.14	4.5	29.76
30	5.0	14	66.14	5.0	30.86
Abbreviations used in table DMD = Dry Matter Demand			*Small Breed Live Weight = Pounds	454 Kilograms o	or 1,001

Adapted from: "Table 14-1," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Table 1 - 2: Daily Dry Matter Demand Requirements in Kilograms and Pounds

Mid Lactation *Small Breed Dairy Cows

20 - 40 Kilograms or 44 - 88 Pounds Daily Milk Production

78% Total Digestible Nutrients Diet

Daily Milk	Milk		Daily Milk	Milk	
Production (kg)	Fat (%)	DMD (kg)	Production (lb)	Fat (%)	DMD (lb)
20	3.0	16	44.09	3.0	35.27
20	3.5	16.5	44.09	3.5	36.38
20	4.0	17	44.09	4.0	37.48
30	3.0	19.5	66.14	3.0	42.99
30	3.5	20.3	66.14	3.5	44.75
30	4.0	21.1	66.14	4.0	46.52
40	3.0	23.1	88.18	3.0	50.93
40	3.5	24.2	88.18	3.5	53.35
40	4.0	25.2	88.18	4.0	55.56

Abbreviations used in table:

DMD = Dry Matter Demand, kg = Kilogram, lb = Pound

*Small Breed Live Weight = 454 Kilograms or 1,001 Pounds

Adapted from: "Table 14-2," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Table 1 - 3: Daily Dry Matter Demand Requirements in Kilograms and Pounds

Mid Lactation *Small Breed Dairy Cows

10 - 30 Kilograms or 22 - 66 Pounds Daily Milk Production 68% Total Digestible Nutrients Diet

Daily Milk	Milk			Milk	
Production (kg)	Fat (%)	DMD (kg)	Daily Milk Production (lb)	Fat (%)	DMD (lb)
10	4.0	12.4	22.05	4.0	27.34
10	4.5	12.7	22.05	4.5	28.00
10	5.0	12.9	22.05	5.0	28.44
20	4.0	16	44.09	4.0	35.27
20	4.5	16.5	44.09	4.5	36.38
20	5.0	17	44.09	5.0	37.48
30	4.0	19.5	66.14	4.0	42.99
30	4.5	20.3	66.14	4.5	44.75
30	5.0	21.1	66.14	5.0	46.52
Abbreviations used in tab DMD = Dry Matter Demar	_	n, lb = Pound	*Small Breed Live Weight = 454 Kilog	rams or 1,001 P	ounds

Adapted from: "Table 14-3," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Table 1 - 4: Daily Dry Matter Demand Requirements in Kilograms and Pounds

Early Lactation *Large Breed Dairy Cows

20 - 40 Kilograms or 44 - 89 Pounds Daily Milk Production 78% Total Digestible Nutrients Diet

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Daily Milk	Milk		Daily Milk	Milk	
Production (kg)	Fat (%)	DMD (kg)	Production (lb)	Fat (%)	DMD (lb)
20	3.0	12	44.09	3.0	26.46
20	3.5	12.4	44.09	3.5	27.34
20	4.0	12.7	44.09	4.0	28.00
30	3.0	14	66.14	3.0	30.86
30	3.5	14.5	66.14	3.5	31.97
30	4.0	15.1	66.14	4.0	33.29
40	3.0	16	88.18	3.0	35.27
40	3.5	16.7	88.18	3.5	36.82
40	4.0	17.4	88.18	4.0	38.36
Abbreviations used in tab Demand, kg = Kilogram, l	•	Matter	*Large Breed Live Weight Pounds	t = 680 Kilogram	s or 1,499

Adapted from: "Table 14-4," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Table 1 - 5: Daily Dry Matter Demand Requirements in Kilograms and Pounds

Mid Lactation *Large Breed Dairy Cows

35 - 55 Kilograms or 77 - 121 Pounds Daily Milk Production 78% Total Digestible Nutrients Diet

Daily Milk	Milk		Daily Milk	Milk	
Production (kg)	Fat (%)	DMD (kg)	Production (lb)	Fat (%)	DMD (lb)
35	3.0	22.7	77.16	3.0	50.04
35	3.5	23.6	77.16	3.5	52.03
35	4.0	24.5	77.16	4.0	54.01
45	3.0	25.7	99.21	3.0	56.66
45	3.5	26.9	99.21	3.5	59.30
45	4.0	28.1	99.21	4.0	61.95
55	3.0	28.7	121.25	3.0	63.27
55	3.5	30.2	121.25	3.5	66.58
55	4.0	31.7	121.25	4.0	69.89
Abbreviations used in tab	le: DMD = Dry N	/latter	*Large Breed Live Weight	t = 680 Kilogram	s or 1,499

Adapted from: "Table 14-5," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Pounds

Demand, kg = Kilogram, lb = Pound

Table 1 - 6: Daily Dry Matter Demand Requirements in Kilograms and Pounds

Mid Lactation *Large Breed Dairy Cows

25 - 45 Kilograms or 55 - 99 Pounds Daily Milk Production
68% Total Digestible Nutrients Diet

Daily Milk	Milk		Daily Milk	Milk	
Production (kg)	Fat (%)	DMD (kg)	Production (lb)	Fat (%)	DMD (lb)
25	3.0	19.6	55.12	3.0	43.21
25	3.5	20.3	55.12	3.5	44.75
25	4.0	21	55.12	4.0	46.30
35	3.0	22.7	77.16	3.0	50.04
35	3.5	23.6	77.16	3.5	52.03
35	4.0	24.5	77.16	4.0	54.01
45	3.0	25.7	99.21	3.0	56.66
45	3.5	26.9	99.21	3.5	59.30
45	4.0	28.1	99.21	4.0	61.95

Abbreviations used in table:

DMD = Dry Matter Demand, kg = Kilogram, lb = Pound

*Large Breed Live Weight = 680 Kilograms or 1,499 Pounds

Adapted from: "Table 14-6," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Table 1 - 7: Daily Dry Matter Demand Requirements in Kilograms and Pounds *Large Breed Dry Cows, 240 - 279 Days Pregnant Calf Weight 45 Kilograms or 99 Pounds

Average Daily Gain, .67 Kilogram or 1.48 Pounds

Current Dry Cow Body Weight with Conceptus (kg)	Days Pregnant	DMD (kg/day)	Current Dry Cow Body Weight with Conceptus (lb)	Days Pregnant	DMD (lb/day)
730	240	14.4	1609.4	240	31.7
751	270	13.7	1655.7	270	30.2
757	279	10.1	1668.9	279	22.3

Abbreviations used in table:

DMD = Dry Matter Demand, kg = Kilogram, lb = Pound

*Large Breed Mature Weight = 680 Kilograms or 1,499 Pounds without Conceptus

Adapted from: "Table 14-9," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Table 1 - 8: Daily Dry Matter Demand Requirements in Kilograms and Pounds Transitioning, Second or Greater Lactation *Large Breed Cows, 270 Days Pregnant Average Daily Gain, .3 Kilogram or .7 Pound Conceptus Average Daily Gain, .66 Kilogram or 1.45 Pounds Current Body Weight with Days DMD Current Body Weight with **Days** DMD Conceptus (kg) Pregnant (kg/day) Conceptus (lb) **Pregnant** (lb/day) 751 270 13.7 1,655.7 270 30.2 Abbreviations used in table: *Large Breed Mature Weight = 680 Kilograms or 1,499 Pounds DMD = Dry Matter Demand, kg = Kilogram, lb = Pound

Adapted from: "Table 14-11," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Ta	able 1 - 9: D	• •		nd Ranges in Kilograms a eed Non-Bred Heifers	nd Pounds		
	-	D Range (kg) g Daily Gain	DMD Daily Average			Daily DMD Range (lb) w/ .7-1.8 lb Daily Gain	
Small Breed Current Body Weight (kg)	DMD Minimum	DMD Maximum	(kg)	Small Breed Current Body Weight (lb)	DMD Minimum	DMD Maximum	Average (lb)
100	3.0	3.1	3.1	220.5	6.6	6.8	6.7
150	4.0	4.2	4.1	330.7	8.8	9.3	9.1
200	5.0	5.2	5.1	440.9	11.0	11.5	11.3
250	5.9	6.2	6.1	551.2	13.0	13.7	13.4
300	6.2	7.1	6.7	661.4	13.7	15.7	14.7
	Daily DMD Range (kg) w/ .5-1.1 kg Daily Gain						
			DMD Daily		-	D Range (lb) lb Daily Gain	DMD Daily
Large Breed Current Body Weight (kg)			Average (kg)	Large Breed Current Body Weight (lb)	-		Average (lb)
	w/ .5-1.1 k	kg Daily Gain	Average (kg)		w/ 1.1-2.4 DMD	lb Daily Gain	Average (lb)
Current Body Weight (kg)	w/ .5-1.1 k DMD Minimum	kg Daily Gain DMD Maximum	Average (kg)	Current Body Weight (lb)	w/ 1.1-2.4 DMD Minimum	lb Daily Gain DMD Maximum	Average (lb)
Current Body Weight (kg)	w/ .5-1.1 k DMD Minimum 4.1	DMD Maximum	Average (kg)	Current Body Weight (lb) 330.7	w/ 1.1-2.4 DMD Minimum 9.0	DMD Maximum 9.3	Average (lb)
Current Body Weight (kg) 150 200	w/ .5-1.1 k DMD Minimum 4.1 5.1	DMD Maximum 4.2 5.2	Average (kg) 4.2 5.2	Current Body Weight (lb) 330.7 440.9	w/ 1.1-2.4 DMD Minimum 9.0 11.2	DMD Maximum 9.3 11.5	Average (lb) 9.2 11.4
Current Body Weight (kg) 150 200 250	w/ .5-1.1 k DMD Minimum 4.1 5.1 6.0	DMD Maximum 4.2 5.2 6.2	Average (kg) 4.2 5.2 6.1	Current Body Weight (lb) 330.7 440.9 551.2	w/ 1.1-2.4 DMD Minimum 9.0 11.2 13.2	DMD Maximum 9.3 11.5 13.7	Average (lb) 9.2 11.4 13.5
150 200 250 300	w/ .5-1.1 k DMD Minimum 4.1 5.1 6.0 6.9	DMD Maximum 4.2 5.2 6.2 7.1	Average (kg) 4.2 5.2 6.1 7.0	Current Body Weight (lb) 330.7 440.9 551.2 661.4	w/ 1.1-2.4 DMD Minimum 9.0 11.2 13.2 15.2	DMD Maximum 9.3 11.5 13.7 15.7	9.2 11.4 13.5 15.5

Adapted from: "Tables 14-12 and 14-13," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

		*Small ar	nd *Large	Breed Bred Heifers			
	•	Range (kg) g Daily Gain	DMD Daily Average		-	Range (lb) b Daily Gain	DMD Daily Average
Small Breed Current Body Weight (kg)	DMD Minimum	DMD Maximum	(kg)	Small Breed Current Body Weight (lb)	DMD Minimum	DMD Maximum	(lb)
300	7.6	7.7	7.7	661.4	16.8	17.0	16.9
350	8.5	8.7	8.6	771.6	18.7	19.2	19.1
400	9.4	9.6	9.5	881.8	20.7	21.2	21.0
450	10.3	10.5	10.4	992.1	22.7	23.1	23.0
	-	Range (kg)	DMD Daily		-	Range (Ib)	DMD Daily
Large Breed Current Body Weight (kg)	-	Range (kg) g Daily Gain DMD Maximum	DMD Daily Average (kg)	Large Breed Current Body Weight (lb)	-	Range (lb) lb Daily Gain DMD Maximum	DMD Daily Average (lb)
	w/ .5 - 1.1 k	g Daily Gain	Average		w/ 1.1 - 2.4 DMD	lb Daily Gain	Average
Current Body Weight (kg)	w/ .5 - 1.1 k DMD Minimum	g Daily Gain DMD Maximum	Average (kg)	Current Body Weight (lb)	w/ 1.1 - 2.4 DMD Minimum	Ib Daily Gain DMD Maximum	Average (lb)
Current Body Weight (kg) 450	w/ .5 - 1.1 k DMD Minimum 10.3	DMD Maximum 10.5	Average (kg)	Current Body Weight (lb) 992.1	w/ 1.1 - 2.4 DMD Minimum 22.7	DMD Maximum 23.1	Average (lb)
Current Body Weight (kg) 450 500	w/ .5 - 1.1 k DMD Minimum 10.3 11.1	DMD Maximum 10.5 11.4	Average (kg) 10.4 11.3	Current Body Weight (lb) 992.1 1102.3	w/ 1.1 - 2.4 DMD Minimum 22.7 24.5	DMD Maximum 23.1 25.1	Average (lb) 23.0 24.9

Adapted from: "Tables 14-14 and 14-15," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Table 1 - 11: Daily Dry Matter Demand Requirements in Kilograms and Pounds Transitioning, Close-Up, First Lactation *Large Breed Heifers, Average Daily Gain, .3 Kilogram or .7 Pound Conceptus Average Daily Gain, .66 Kilogram or 1.45 Pounds

Current Body Weight with Conceptus (kg)	Days Pregnant	DMD (kg/day)	Current Body Weight with Conceptus (lb)	Days Pregnant	DMD (lb/day)
625	270	10.6	1377.9	270	23.4
Abbreviations used in table:			*Larga Draad Matura Waight - 690 Kil	ograms or 1 400 f) o un de

DMD = Dry Matter Demand, kg = Kilogram, lb = Pound

Large Breed Mature Weight = 680 Kilograms or 1,499 Pounds

Adapted from: "Table 14-10," from Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.

Table 1 - 12: Daily Dry Matter Demand Requirements in Kilograms or Grams and Pounds

Weaned Calves

50 0 0.70 110.2 0.0 1.5 50 400 1.13 110.2 0.9 2.5 50 500 1.27 110.2 1.1 2.8 50 600 1.86 110.2 1.3 4.1 60 0 0.80 132.3 0.0 1.8 60 400 1.26 132.3 0.9 2.8 60 500 1.41 132.3 1.1 3.1 60 500 1.41 132.3 1.3 3.4 60 600 1.56 132.3 1.3 3.4 60 700 1.71 132.3 1.3 3.4 60 800 1.87 132.3 1.8 4.1 70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.3 1.3	Current Body Weight (kg)	Average Daily Gain (g)	DMD (kg/day)	Current Body Weight (lb)	Average Daily Gain (lb)	DMD (lb/day)
50 500 1.27 110.2 1.1 2.8 50 600 1.86 110.2 1.3 4.1 60 0 0.80 132.3 0.0 1.8 60 400 1.26 132.3 0.9 2.8 60 500 1.41 132.3 1.1 3.1 60 600 1.56 132.3 1.3 3.4 60 700 1.71 132.3 1.5 3.8 60 800 1.87 132.3 1.8 4.1 70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 600 1.70 154.3 1.3 3.7 70 70 1.86 154.3 1.5 4.1	50	0	0.70	110.2	0.0	1.5
50 600 1.86 110.2 1.3 4.1 60 0 0.80 132.3 0.0 1.8 60 400 1.26 132.3 0.9 2.8 60 500 1.41 132.3 1.1 3.1 60 600 1.56 132.3 1.3 3.4 60 700 1.71 132.3 1.5 3.8 60 800 1.87 132.3 1.5 3.8 60 800 1.87 132.3 1.8 4.1 70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 500 1.54 154.3 1.3 3.7 70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5	50	400	1.13	110.2	0.9	2.5
60 0 0.80 132.3 0.0 1.8 60 400 1.26 132.3 0.9 2.8 60 500 1.41 132.3 1.1 3.1 60 600 1.56 132.3 1.3 3.4 60 700 1.71 132.3 1.5 3.8 60 800 1.87 132.3 1.8 4.1 70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 600 1.70 154.3 1.3 3.7 70 70 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3	50	500	1.27	110.2	1.1	2.8
60 400 1.26 132.3 0.9 2.8 60 500 1.41 132.3 1.1 3.1 60 600 1.56 132.3 1.3 3.4 60 700 1.71 132.3 1.5 3.8 60 800 1.87 132.3 1.8 4.1 70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 600 1.70 154.3 1.3 3.7 70 70 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7	50	600	1.86	110.2	1.3	4.1
60 500 1.41 132.3 1.1 3.1 60 600 1.56 132.3 1.3 3.4 60 700 1.71 132.3 1.5 3.8 60 800 1.87 132.3 1.8 4.1 70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 500 1.70 154.3 1.3 3.7 70 600 1.70 154.3 1.3 3.7 70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7	60	0	0.80	132.3	0.0	1.8
60 600 1.56 132.3 1.3 3.4 60 700 1.71 132.3 1.5 3.8 60 800 1.87 132.3 1.8 4.1 70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 600 1.70 154.3 1.3 3.7 70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4	60	400	1.26	132.3	0.9	2.8
60 700 1.71 132.3 1.5 3.8 60 800 1.87 132.3 1.8 4.1 70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 600 1.70 154.3 1.3 3.7 70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8	60	500	1.41	132.3	1.1	3.1
60 800 1.87 132.3 1.8 4.1 70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 600 1.70 154.3 1.3 3.7 70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8	60	600	1.56	132.3	1.3	3.4
70 0 0.90 154.3 0.0 2.0 70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 600 1.70 154.3 1.3 3.7 70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6	60	700	1.71	132.3	1.5	3.8
70 400 1.39 154.3 0.9 3.1 70 500 1.54 154.3 1.1 3.4 70 600 1.70 154.3 1.3 3.7 70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0	60	800	1.87	132.3	1.8	4.1
70 500 1.54 154.3 1.1 3.4 70 600 1.70 154.3 1.3 3.7 70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5	70	0	0.90	154.3	0.0	2.0
70 600 1.70 154.3 1.3 3.7 70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9	70	400	1.39	154.3	0.9	3.1
70 700 1.86 154.3 1.5 4.1 70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8	70	500	1.54	154.3	1.1	3.4
70 800 2.03 154.3 1.8 4.5 80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8	70	600	1.70	154.3	1.3	3.7
80 0 0.99 176.4 0.0 2.2 80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3	70	700	1.86	154.3	1.5	4.1
80 400 1.51 176.4 0.9 3.3 80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8 <td>70</td> <td>800</td> <td>2.03</td> <td>154.3</td> <td>1.8</td> <td>4.5</td>	70	800	2.03	154.3	1.8	4.5
80 500 1.66 176.4 1.1 3.7 80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	80	0	0.99	176.4	0.0	2.2
80 600 1.83 176.4 1.3 4.0 80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	80	400	1.51	176.4	0.9	3.3
80 700 2.00 176.4 1.5 4.4 80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	80	500	1.66	176.4	1.1	3.7
80 800 2.18 176.4 1.8 4.8 90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	80	600	1.83	176.4	1.3	4.0
90 0 1.16 198.4 0.0 2.6 90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	80	700	2.00	176.4	1.5	4.4
90 600 2.09 198.4 1.3 4.6 90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	80	800	2.18	176.4	1.8	4.8
90 700 2.28 198.4 1.5 5.0 90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	90	0	1.16	198.4	0.0	2.6
90 800 2.48 198.4 1.8 5.5 90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	90	600	2.09	198.4	1.3	4.6
90 900 2.68 198.4 2.0 5.9 100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	90	700	2.28	198.4	1.5	5.0
100 0 1.25 220.5 0.0 2.8 100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	90	800	2.48	198.4	1.8	5.5
100 600 2.22 220.5 1.3 4.9 100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	90	900	2.68	198.4	2.0	5.9
100 700 2.42 220.5 1.5 5.3 100 800 2.63 220.5 1.8 5.8	100	0	1.25	220.5	0.0	2.8
100 800 2.63 220.5 1.8 5.8	100	600	2.22	220.5	1.3	4.9
	100	700	2.42	220.5	1.5	5.3
100 900 2.84 220.5 2.0 6.3	100	800	2.63	220.5	1.8	5.8
	100	900	2.84	220.5	2.0	6.3

Abbreviations used in table:

DMD = Dry Matter Demand, kg = Kilogram, lb = Pound

Adapted from: "Table 10-4," from *Nutrient Requirements of Dairy Cattle: Seventh Revised Edition, 2001*, by Subcommittee on Dairy Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 2001, Washington, D.C.: National Academies Press. Copyright 2001 by National Academy of Sciences.