



# NATIONAL ORGANIC PROGRAM

## Dry Matter Demand Tables

### For Classes of Beef Cattle



Photo courtesy of USDA-NRCS

Adapted from: "Nutrient Requirement Tables," from Nutrient Requirements of Beef Cattle: Seventh Revised Edition: Update 2000, by Subcommittee on Beef Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 1996, Washington, D.C.: National Academies Press. Copyright 1996 by National Academy of Sciences.

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**Table 2-1. Daily Dry Matter Demand Requirements  
in Pounds and Percent of Body Weight**

**Beef Cows**

**1,000 - 1,400 lb Mature Body Weights and 10 - 30 lb of Milk Production/Day**

|  | Months Since Calving |       |       |       |       |       |       |       |       |       |       |       | Average            |
|--|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|  | 1                    | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    |                    |
| <b>1,000 lb Mature Weight, 10 lb/d Peak Milk</b> |                      |       |       |       |       |       |       |       |       |       |       |       |                    |
| DMD, lb  | 21.60                | 22.10 | 23.00 | 22.50 | 22.10 | 21.70 | 21.10 | 21.00 | 20.90 | 20.80 | 21.00 | 21.40 | 21.60 lb           |
| DMD as % Body Weight                             | 2.16                 | 2.21  | 2.30  | 2.25  | 2.21  | 2.17  | 2.11  | 2.10  | 2.09  | 2.08  | 2.10  | 2.14  | 2.16 % Body Weight |
| <b>1,000 lb Mature Weight, 20 lb/d Peak Milk</b> |                      |       |       |       |       |       |       |       |       |       |       |       |                    |
| DMD, lb  | 24.00                | 25.00 | 25.40 | 24.40 | 23.50 | 22.70 | 21.10 | 21.00 | 20.90 | 20.80 | 21.00 | 21.40 | 22.60 lb           |
| DMD as % Body Weight                             | 2.40                 | 2.50  | 2.54  | 2.44  | 2.35  | 2.27  | 2.11  | 2.10  | 2.09  | 2.08  | 2.10  | 2.14  | 2.26 % Body Weight |
| <b>1,000 lb Mature Weight, 30 lb/d Peak Milk</b> |                      |       |       |       |       |       |       |       |       |       |       |       |                    |
| DMD, lb  | 26.40                | 27.80 | 27.80 | 26.40 | 24.90 | 23.70 | 21.10 | 21.00 | 20.90 | 20.80 | 21.00 | 21.40 | 23.60 lb           |
| DMD as % Body Weight                             | 2.64                 | 2.78  | 2.78  | 2.64  | 2.49  | 2.37  | 2.11  | 2.10  | 2.09  | 2.08  | 2.10  | 2.14  | 2.36 % Body Weight |
| <b>1,200 lb Mature Weight, 10 lb/d Peak Milk</b> |                      |       |       |       |       |       |       |       |       |       |       |       |                    |
| DMD, lb  | 24.40                | 24.90 | 26.00 | 25.60 | 25.10 | 24.80 | 24.20 | 24.10 | 24.00 | 23.90 | 24.10 | 24.60 | 24.64 lb           |
| DMD as % Body Weight                             | 2.03                 | 2.08  | 2.17  | 2.13  | 2.09  | 2.07  | 2.02  | 2.01  | 2.00  | 1.99  | 2.01  | 2.05  | 2.05 % Body Weight |
| <b>1,200 lb Mature Weight, 20 lb/d Peak Milk</b> |                      |       |       |       |       |       |       |       |       |       |       |       |                    |
| DMD, lb  | 26.80                | 27.80 | 28.40 | 27.40 | 26.50 | 25.70 | 24.20 | 24.10 | 24.00 | 23.90 | 24.10 | 24.60 | 25.63 lb           |
| DMD as % Body Weight                             | 2.23                 | 2.32  | 2.37  | 2.28  | 2.21  | 2.14  | 2.02  | 2.01  | 2.00  | 1.99  | 2.01  | 2.05  | 2.14 % Body Weight |
| <b>1,200 lb Mature Weight, 30 lb/d Peak Milk</b> |                      |       |       |       |       |       |       |       |       |       |       |       |                    |
| DMD, lb  | 29.20                | 30.60 | 30.80 | 29.40 | 27.90 | 26.70 | 24.20 | 24.10 | 24.00 | 23.90 | 24.10 | 24.60 | 26.63 lb           |
| DMD as % Body Weight                             | 2.43                 | 2.55  | 2.57  | 2.45  | 2.33  | 2.23  | 2.02  | 2.01  | 2.00  | 1.99  | 2.01  | 2.05  | 2.22 % Body Weight |
| <b>1,400 lb Mature Weight, 10 lb/d Peak Milk</b> |                      |       |       |       |       |       |       |       |       |       |       |       |                    |
| DMD, lb  | 27.10                | 27.60 | 28.90 | 28.50 | 28.00 | 27.70 | 27.20 | 27.00 | 26.90 | 26.80 | 27.00 | 27.60 | 27.53 lb           |
| DMD as % Body Weight                             | 1.94                 | 1.97  | 2.06  | 2.04  | 2.00  | 1.98  | 1.94  | 1.93  | 1.92  | 1.91  | 1.93  | 1.97  | 1.97 % Body Weight |
| <b>1,400 lb Mature Weight, 20 lb/d Peak Milk</b> |                      |       |       |       |       |       |       |       |       |       |       |       |                    |
| DMD, lb  | 29.50                | 30.50 | 31.30 | 30.30 | 29.40 | 28.60 | 27.20 | 27.00 | 26.90 | 26.80 | 27.00 | 27.60 | 28.51 lb           |
| DMD as % Body Weight                             | 2.11                 | 2.18  | 2.24  | 2.16  | 2.10  | 2.04  | 1.94  | 1.93  | 1.92  | 1.91  | 1.93  | 1.97  | 2.04 % Body Weight |
| <b>1,400 lb Mature Weight, 30 lb/d Peak Milk</b> |                      |       |       |       |       |       |       |       |       |       |       |       |                    |
| DMD, lb  | 31.90                | 33.30 | 33.70 | 32.30 | 30.80 | 29.60 | 27.20 | 27.00 | 26.90 | 26.80 | 27.00 | 27.60 | 29.51 lb           |
| DMD as % Body Weight                             | 2.28                 | 2.38  | 2.41  | 2.31  | 2.20  | 2.11  | 1.94  | 1.93  | 1.92  | 1.91  | 1.93  | 1.97  | 2.11 % Body Weight |

Abbreviations used in table: DMD = Dry Matter Demand, kg = Kilogram, lb = Pound, d = day

Adapted from: "Tables 21, 22, and 23," from Nutrient Requirements of Beef Cattle: Seventh Revised Edition: Update 2000, by Subcommittee on Beef Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 1996, Washington, D.C.: National Academies Press. Copyright 1996 by National Academy of Sciences.

**Table 2-2. Daily Dry Matter Demand Requirements  
in Pounds and Percent of Body Weight  
Pregnant Replacement Heifers  
1,000 - 1,400 lb Mature Body Weights**

|  | Months Since Conception |      |      |      |      |      |      |      |      |  | Average                   |
|--|-------------------------|------|------|------|------|------|------|------|------|--|---------------------------|
|  | 1                       | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |  |                           |
| <b>1,000 lb Mature Weight</b>                                    |                         |      |      |      |      |      |      |      |      |  |                           |
| DMD, lb  | 16.7                    | 17.2 | 17.7 | 18.2 | 18.7 | 19.4 | 20.0 | 20.7 | 21.3 |  | <b>18.88 lb</b>           |
| DMD as % Body Weight   | 1.67                    | 1.72 | 1.77 | 1.82 | 1.87 | 1.94 | 2.00 | 2.07 | 2.13 |  | <b>1.89 % Body Weight</b> |
| <b>1,100 lb Mature Weight</b>                                    |                         |      |      |      |      |      |      |      |      |  |                           |
| DMD, lb  | 18.0                    | 18.5 | 19.0 | 19.5 | 20.1 | 20.8 | 21.5 | 22.3 | 22.9 |  | <b>20.29 lb</b>           |
| DMD as % Body Weight   | 1.64                    | 1.68 | 1.73 | 1.77 | 1.83 | 1.89 | 1.95 | 2.03 | 2.08 |  | <b>1.84 % Body Weight</b> |
| <b>1,200 lb Mature Weight</b>                                    |                         |      |      |      |      |      |      |      |      |  |                           |
| DMD, lb  | 19.3                    | 19.8 | 20.3 | 20.9 | 21.5 | 22.2 | 23.0 | 23.7 | 24.4 |  | <b>21.68 lb</b>           |
| DMD as % Body Weight   | 1.61                    | 1.65 | 1.69 | 1.74 | 1.79 | 1.85 | 1.92 | 1.98 | 2.03 |  | <b>1.81 % Body Weight</b> |
| <b>1,300 lb Mature Weight</b>                                    |                         |      |      |      |      |      |      |      |      |  |                           |
| DMD, lb  | 20.5                    | 21.0 | 21.6 | 22.2 | 22.9 | 23.6 | 24.4 | 25.2 | 25.9 |  | <b>23.03 lb</b>           |
| DMD as % Body Weight   | 1.58                    | 1.62 | 1.66 | 1.71 | 1.76 | 1.82 | 1.88 | 1.94 | 1.99 |  | <b>1.77 % Body Weight</b> |
| <b>1,400 lb Mature Weight</b>                                    |                         |      |      |      |      |      |      |      |      |  |                           |
| DMD, lb  | 21.7                    | 22.3 | 22.9 | 23.5 | 24.2 | 24.9 | 25.8 | 26.6 | 27.4 |  | <b>24.37 lb</b>           |
| DMD as % Body Weight   | 1.55                    | 1.59 | 1.64 | 1.68 | 1.73 | 1.78 | 1.84 | 1.90 | 1.96 |  | <b>1.74 % Body Weight</b> |
| Abbreviations used in table: DMD = Dry Matter Demand, lb = Pound |                         |      |      |      |      |      |      |      |      |  |                           |

Adapted from: "Table 20," from Nutrient Requirements of Beef Cattle: Seventh Revised Edition: Update 2000, by Subcommittee on Beef Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 1996, Washington, D.C.: National Academies Press. Copyright 1996 by National Academy of Sciences.

| <b>Table 2-3. Daily Dry Matter Demand Requirements<br/>in Pounds and Percent of Body Weight<br/>Growing and Finishing Beef Cattle<br/>1,000 - 1,400 lb at Finishing (Slaughter Stock)<br/>or Maturity (Replacement Heifers)</b> |           |               |
|---|-----------|---------------|
| Current Body Weight, lb   | Daily DMD |               |
|   | lb        | % Body Weight |
| 300   | 10.1      | 3.35          |
| 350   | 11.3      | 3.23          |
| 400   | 12.5      | 3.12          |
| 450   | 13.6      | 3.03          |
| 500   | 14.8      | 2.95          |
| 550   | 15.9      | 2.89          |
| 600   | 16.9      | 2.82          |
| 650   | 17.9      | 2.76          |
| 700   | 18.0      | 2.58          |
| 750   | 18.9      | 2.53          |
| 800   | 20.2      | 2.51          |
| 850   | 21.0      | 2.47          |
| 900   | 21.8      | 2.44          |
| 950   | 22.6      | 2.39          |
| 1,050   | 24.5      | 2.33          |
| 1,150   | 26.1      | 2.27          |

Abbreviations used in table: DMD = Dry Matter Demand, lb = Pound

Adapted from: "Tables 15, 16, 17, 18, and 19," from Nutrient Requirements of Beef Cattle: Seventh Revised Edition: Update 2000, by Subcommittee on Beef Cattle Nutrition, Committee on Animal Nutrition, National Research Council, 1996, Washington, D.C.: National Academies Press. Copyright 1996 by National Academy of Sciences.