

Species	Equations, $y$ : water intake ( $\text{L day}^{-1}$ )	Authors
Dairy cows (Lactation)	$y = 15.3 + 2.52 \times \text{milk yield } (\text{kg day}^{-1}) + 0.45 \times \text{DM}^a \text{ content of ration } (\%)$	Castle and Thomas (1975)
	$y = 15.99 + 1.58 \times \text{DM intake } (\text{kg day}^{-1}) + 0.9 \times \text{milk yield } (\text{kg day}^{-1}) + 0.05 \times \text{Na intake } (\text{g day}^{-1}) + 1.2 \times \text{minimal night temperature } (\text{°C})$	Murphy et al. (1983); NRC (2001)
	$y = 14.3 + 1.28 \times \text{milk yield } (\text{kg day}^{-1}) + 0.32 \times \text{DM content of ration } (\%)$	Dahlborn et al. (1998)
	$y = -26.12 + 1.516 \times \text{average of environment temperature } (\text{°C}) + 1.299 \times \text{milk yield } (\text{kg day}^{-1}) + 0.058 \times \text{body weight } (\text{kg}) + 0.406 \times \text{Na}^b \text{ intake } (\text{g day}^{-1})$	Meyer et al. (2004)
Dairy cows (dry)	$y = -10.34 + 0.2296 \times \text{DM content of ration } (\%) + 2.212 \times \text{DM intake } (\text{kg day}^{-1}) + 0.03944 \times \text{CP}^c \text{ content of ration } (\% \text{ of DM})$	Holter and Urban (1992)
	$y = 1.16 \times \text{DM intake} + 0.23 \times \text{DM content} + 0.44 \times \text{current temperature} + 0.061 \times (\text{current temperature} - 16.4)^2$	Tedeschi and Fox (2016)
	$y = 0.01 \times \text{body weight} + 0.32 \times \text{DM content} + 0.52 \times \text{current temperature} + 0.053 \times (\text{current temperature} - 16.4)^2$	Tedeschi and Fox (2016)
Beef cattle	$y = -3.85 + 0.507 \times \text{average of environmental temperature } (\text{°C}) + 1.494 \times \text{DM intake } (\text{kg day}^{-1}) - 0.141 \times \text{roughage of ration } (\% \text{ of DM}) + 0.248 \times \text{DM content of roughage } (\%) + 0.014 \times \text{body weight } (\text{kg})$	Meyer et al. (2006)
Heifers	$y = -5.206 + 0.038 \times \text{body weight } (\text{kg}) + 0.610 \times \text{average of environmental temperature } (\text{°C}) + 0.098 \times \text{roughage of ration } (\% \text{ of DM}) - 0.086 \times \text{relative air moisture } (\%) + 0.530 \times \text{DM intake } (\text{kg day}^{-1})$	Grabow et al. (2009)
Sheep	$y = 3.86 \times \text{DM intake} - 0.99$	NRC (2007); Forbes (1986)

<sup>a</sup> Dry matter. <sup>b</sup> Sodium. <sup>c</sup> Crude protein.