WellSolve® Well-Gel® calorie addition

WELL-GEL® ENERGY CONTENT

1 lb Well-Gel® = 1.3 Mcal

If horse requires 100% enteral feeding for an extended period of time (>5 days), additional calorie supplementation may be warranted. Recommended feeding rate is 0.3% BW per day, but can safely be increased up to 0.6% BW per day if desired.

BASAL AND RESTING ENERGY REQUIREMENTS

*BER (kcal/day) = 70(BW in kg)$^{0.75}$

For example, the 1100 lb (500 kg) horse has a BER of 7400 kcal (_7.4 Mcal_) per day.

**RER (kcal/day) = (21 kcal × kg BW) + 975 kcal

For example, the 1100 lb (500 kg) horse has a RER of 11475 kcal (_11.5 Mcal_) per day.

NRC*** DE Requirement for 1100 lbs (500 kg) horse at maintenance = _16.65 MCal_ **per day**

*Merck Veterinary Manual

**Pagan JD, Hintz HF. 1986. Equine energetics. I. Relationship between body weight

and energy requirements in horses. J Anim Sci 63:815–821

***National Research Council. Nutrient requirements of horses. 6th revised ed. Washington, DC: The National Academies Press; 2007.

SUPPLEMENTING ADDITIONAL CALORIES TO WELL-GEL®*

Vegetable Oil

- **Recommended amount is 1 – 2 cups oil per day**
- Corn, canola, or soybean oil may be used. Canola and soybean oil (sometimes labeled as "vegetable oil" in the grocery store) contain both omega-3 and omega-6 fatty acids
- Begin with 1/4 cup oil and increase to desired amount over 4 – 8 days. Monitor for diarrhea, steatorrhea, or lipemia.
- Do not administer to hyperlipidemic horses or horses with liver failure
- **1 cup oil = 2 Mcal**

Dextrose

- **May supplement 300 – 900 grams dextrose per day**
- Begin with 300 grams and increase by 100 g/day up to 900 g
- May benefit horses in liver failure
- Do not administer to insulin resistant horses
- **100 g dextrose = 0.34 Mcal**
- **1 L 50% dextrose solution = 1.7 Mcal (500 g dextrose)**

Molasses

- **May supplement up 500 ml per day**
- **500 ml molasses = 2.4 Mcal**

*Amounts recommended for the 1100 lb (500 kg) horse

EXAMPLE – 500 KG HORSE

(BER) – (Energy content of 3.3 lbs Well-Gel®) = Energy to supplement

7.4 Mcal – 4.29 Mcal = 3.1 Mcal

(RER) – (Energy content of 3.3 lbs Well-Gel®) = Energy to supplement

11.5 Mcal – 4.29 Mcal = 7.2 Mcal

3.1 Mcal can be supplied by:

- Additional 2.3 lbs Well-Gel®
- 1.6 cups oil
- ¾ cup oil + 500 ml molasses
- 900 g dextrose (1.8 L 50% dextrose soln.)

7.2 Mcal can be supplied by:

- Additional 3.3 lbs Well-Gel® + 1 ½ cups oil
- Additional 3.3 lbs Well-Gel® + 500 ml molasses + 150 g dextrose (300 ml 50% dextrose soln.)
- 2 ½ cups oil + 500 ml molasses
- 2 cups oil + 900 g dextrose (1.8 L 50% dextrose soln.)