

Lesson 2 Quiz

Effects of Nutrition On Reproduction

- Probably the single most important nutritional factor related to reproductive function in beef cows is?
 - Crude Protein
 - Crude Fat
 - B. ENERGY**
 - Minerals

- Define the four stages of a cow's productive cycle and what functions occur during each.
 - First MID GESTATION
 - Second 60 – 90 DAYS PRECALVING
 - Third CALVING TO REBREEDING
 - Fourth BREEDING TO WEANING
- Of the four stages of a cow's productive cycle, which one requires the least amount of nutrients (it is the one where producers can manipulate condition more readily)?

SHORTLY AFTER WEANING, BEEF COWS SHOULD BE IN MID-GESTATION. THIS IS THE PERIOD AT WHICH PRODUCERS CAN MANIPULATE THE DIET TO EITHER INCREASE OR DECREASE A COW'S BODY CONDITION.

- What percentage of cows is cycling at the beginning of the breeding season?

THIS WOULD VARY FROM HERD TO HERD BUT THE RESEARCH PROJECT WITH 1702 COW SHOWED THAT 47.2% OF ALL THE COWS WERE CYCLING AT THE ONSET OF THE BREEDING SEASON. HOWEVER, 50 % OR MORE COWS WITH BCS 5 OR GREATER WERE CYCLING WHILE ONLY 33.9% OF THE COWS WITH BCS LESS THAN 4 RESUMED THEIR ESTROUS CYCLES BY THE ONSET OF THE BREEDING SEASON.

- What factor helps a greater percentage of cows to be cycling at the beginning of the breeding season?

BODY CONDITION SCORE (NUTRITION) AT PARTURITION AND BREEDING ARE THE DOMINANT FACTORS INFLUENCING PREGNANCY SUCCESS.

- From the discussion in this lesson, what would be an optimal body condition score for cows to calve in?

BODY CONDITION SCORE OF 5-6

7. From the following list, rank the priorities (from 1, highest, to 9, lowest) for energy use in a cow:

Energy use	Priority
a) Energy reserves	<u>4</u>
b) Pregnancy	<u>5</u>
c) Basal metabolism	<u>1</u>
d) Additional energy reserves	<u>7</u>
e) Estrous cycles and initiation of pregnancy	<u>8</u>
f) Growth	<u>3</u>
g) Lactation	<u>6</u>
h) Excess energy reserves	<u>9</u>
i) Activity	<u>2</u>

8. What is a reasonable target weight (expressed as percentage of mature weight) for replacement heifers to reach at the beginning of their first breeding season?

60-65% OF THEIR MATURE BODY WEIGHT

9. If a cow has a BCS of 3 at calving, and she needs to have a BCS 5 (80 days later) at breeding, how many total pounds and average daily gain (pounds) does she need to gain to reach BCS 5?

THE COW WOULD NEED TO GAIN 160 POUNDS AND HAVE AN AVERAGE DAILY GAIN OF 2.0 POUNDS.

10. What should be the lowest BCS cows may be permitted to drop to (when substantial nutritional or other hardships are present) before they may not have a chance to re-breed?

BODY CONDITION SCORE OF 4 OR GREATER. IT APPEARS THAT AT A BODY CONDITION SCORE OF 3 THE BOVINE FEMALE STOPS CYCLING.