

# Early Weaning



Early weaning (EW) is a management strategy that can alleviate grazing pressure on pastures. EW can be the necessary decision to keep from feeding cows all summer or having to liquidate cows due to lack of forage. Feed is better utilized to achieve gain on calves than sustain lactation of a cow.

Maddox (1965) suggested that by the time a calf reaches 120 days of age, more than half of the calf's energy requirement comes from sources other than milk. This means that calves are consuming forage if no other supplement is provided. Boggs et al. (1980) showed that milk intake of calves declined 93% from April to August. This results in calves eating forage to compensate for the gap in nutrition, which can take available forage away from the cow.

Removing the calf will not only eliminate their forage intake, but also eliminate the nutritional demand of lactation on the cow. Cow intakes have been shown to decrease by as much as 40% when calves are early weaned. This intake reduction could be the needed decrease to deal with lower forage availability of a drought or overgrazed pastures.

## Advantages of Early Weaning

- Lower Cow Nutrient Requirements
- Reduced Cow Dry Matter Intake
- Improved Cow Condition
- Improved Calf Performance
- Improved Calf Carcass Quality
- Increased Conception Rates (If EW before breeding)

## Disadvantages of Early Weaning

- Increased Management Requirement
- Need for Facilities or Good Fences
- Increased Labor
- Increased Feed Costs
- Earlier Finishing Weights



Fig. 1. A calf bawling after being weaned

## Improved Carcass Quality

University of Illinois research (Myer et al, 1999; Shike et al, 2005, Meteer et al. 2013) has shown that early weaned calves have higher marbling scores when compared to creep-fed and calves aside the cow own pasture. According to Shike et al (2005), EW calves had higher marbling scores (663 vs. 598) and a higher percentage of cattle that graded Average Choice or better (72% vs. 39%). The summary of the research conducted at the University of Illinois shows a higher percentage of EW calves to grade average choice or better, as well as a higher percentage prime.

Producers targeting premium choice marketing programs may need to consider early weaning calves onto a starch or high-fat co-product diet as a management strategy to increase the percentage of their cattle that push higher into premium quality grades

## Reduction in Cow Forage Intake

The table below results from a trial (Adcock 2011) conducted at the University of Illinois in 2010 and 2011. The research suggests a 25% increase in forage availability due to calf removal. The cows that had calves early weaned were also heavier and had improved BCS. As a result, early weaning can increase forage availability to the cow and allow her to gain weight and condition.



Fig 2. Cows grazing

**Table 1. Effects of weaning beef calves on cow and pair intakes**

Item	Treatments		P value 1 vs. 2
	Calf aside cow (1)	Calf weaned (2)	
<b>Cow</b>			
Hip Ht., in.	53.1	53.3	0.47
BCS <sup>a</sup>	5.66	5.95	<0.01
Bf, in.	0.22	0.23	0.26
Milk, lbs./d	13.7	NA	
BW, lb.	1270	1312	0.06
DMI, lb./d	38.6	35.9	0.03
<b>Calf</b>			
BW, lb	425.0	NA	
DMI, lb./d	9.9	NA	
<b>Pair</b>			
DMI, lb./d	48.5	35.9	<0.01

## Summary

Early weaning calves from first calf heifers and young cows can improve weight and BCS along with decreasing intake. Young cows are still devoting energy to growth and thus negative energy balance occurs more frequently. EW the calf decreases the energy requirement of the cow. Young cows are good candidates for EW.

Although not the ideal scenario for most cattlemen, EW can be a management decision that aids situations with low forage availability, poor first-calf cow breed-back, and premiums for higher quality grading carcasses.

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## Acknowledgments

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