



Improving milk production and cow health by focusing on time management

More resting and rumination time leads to increased productivity

The time budget of a lactating dairy cow is the daily time devoted to six activities: eating, lying/resting, social interactions, ruminating, drinking, and management activities (such as milking or pregnancy checks), some of which overlap.

Studies demonstrate that when a cow has more time for lying/resting and rumination, her milk productivity and overall health improve:

- Each hour increase in resting time results in a gain of 1.7 kg (3.7 lbs.) of milk production.¹
- **Minimizing time outside the pen is the key.** Meeting the time budget requirement for resting may result in greater milk yield (5-8 lbs. per day more) and less lameness.²
- **Increased lying time has potential benefit for fetal growth.** Significantly more blood flowed to the gravid uterine horn when cows were lying, relative to when they were standing.³

Table 1. Daily time budget for the lactating dairy cow¹

Activity	Time per day
Eating	3 to 5 h
Lying/resting	12 to 14 h
Social interactions	2 to 3 h
Ruminating	7 to 10 h
Drinking	30 min
Management activities	2.5 to 3.5 h

Extended lockup times demonstrate wide-ranging negative effects

Lockup times greater than 4 hours negatively affect cows in all these respects:⁴



- Animal stress
- Frustration and discomfort
- Lameness



- Lying time
- Milk yield
- Reproduction
- Milk components



Tips for ensuring adequate resting and rumination time

- **Reduce daily lockup times.**⁵
- **Shorten pregnancy checks with more efficient pregnancy test methods.** Conventional ultrasound or palpation requires cows to remain in headlocks for an hour or more. But pregnancy tests based on milk or blood samples require only a few minutes for each cow before she's released back to the pen.
- **Improve cow comfort.** Be on the alert for:
 - **Overcrowding/excessive competition.** Use the Cow Comfort Index (or CCI) to assess density.⁶

$$CCI = \frac{\text{number of cows lying down and touching a stall}}{\text{total number of cows touching a stall}}$$

- **Rough handling.** Gentle treatment of cows, especially while in the parlor, results in 3.5 to 13 percent greater milk yield and is associated with up to about 2,000 pounds per year greater milk production.²
- **Other factors:** Mixed-parity pens, short pen stays during transition periods (leading to "social turmoil"), inadequate exercise, uncomfortable stalls, and inadequate feed availability.²



The Alertys Milk Pregnancy Test reduces pregnancy check times

Requiring a milk or blood sample that can be drawn in the parlor or after milking, the Alertys test ensures cows can return to the pen quickly. **Testimonials from Alertys users affirm improved milk production** after switching to the Alertys test. For more information visit idexx.com/bls.

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