



The Blueprint of a Productive Herd

An infographic guide to interpreting lactation
curves and driving on-farm performance

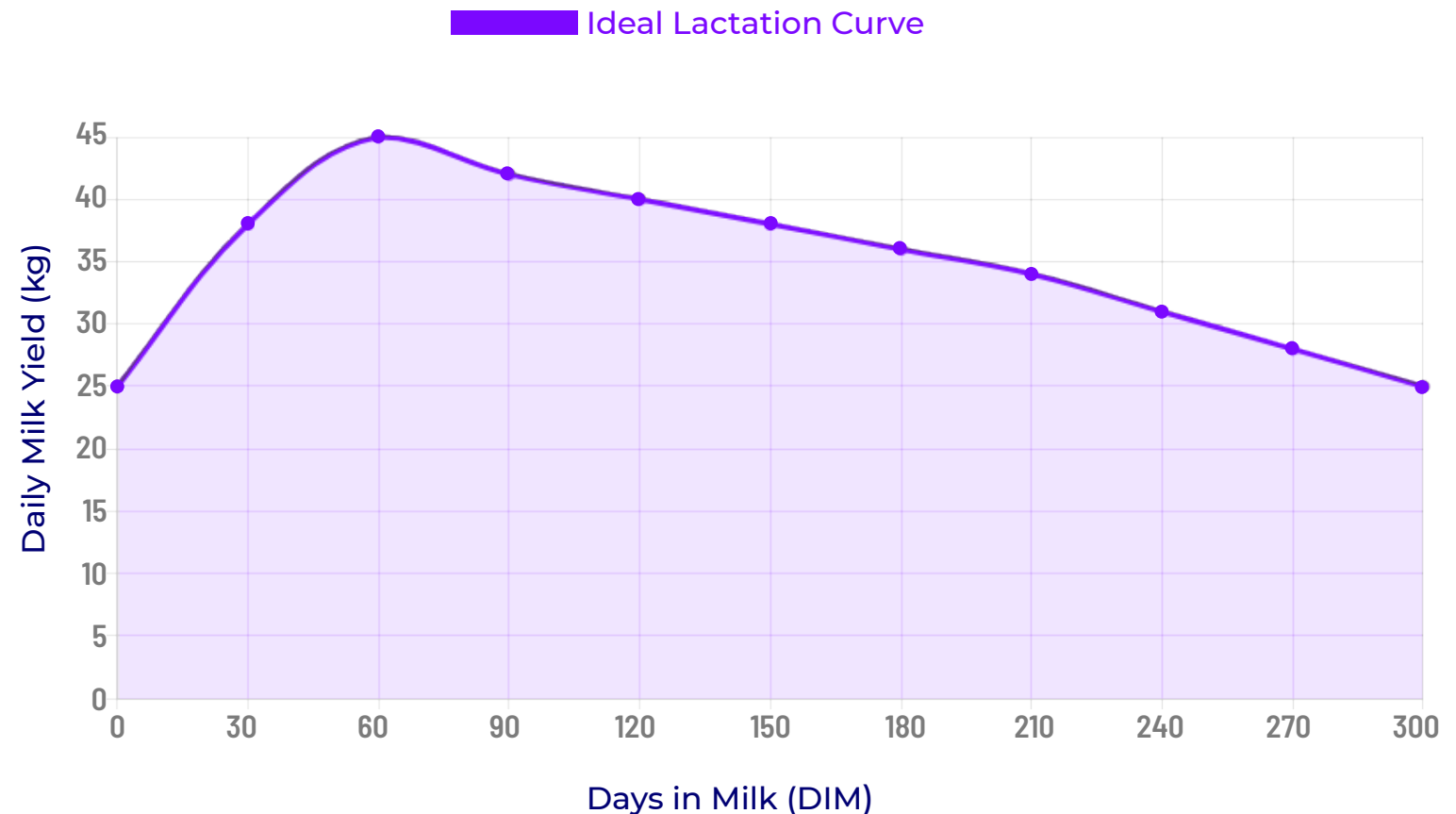
1. The Ideal Lactation Curve

A lactation curve plots milk production over time.

A healthy, productive curve has a strong peak followed by a gradual decline, known as high persistency.

Mastering this curve is key to herd profitability.

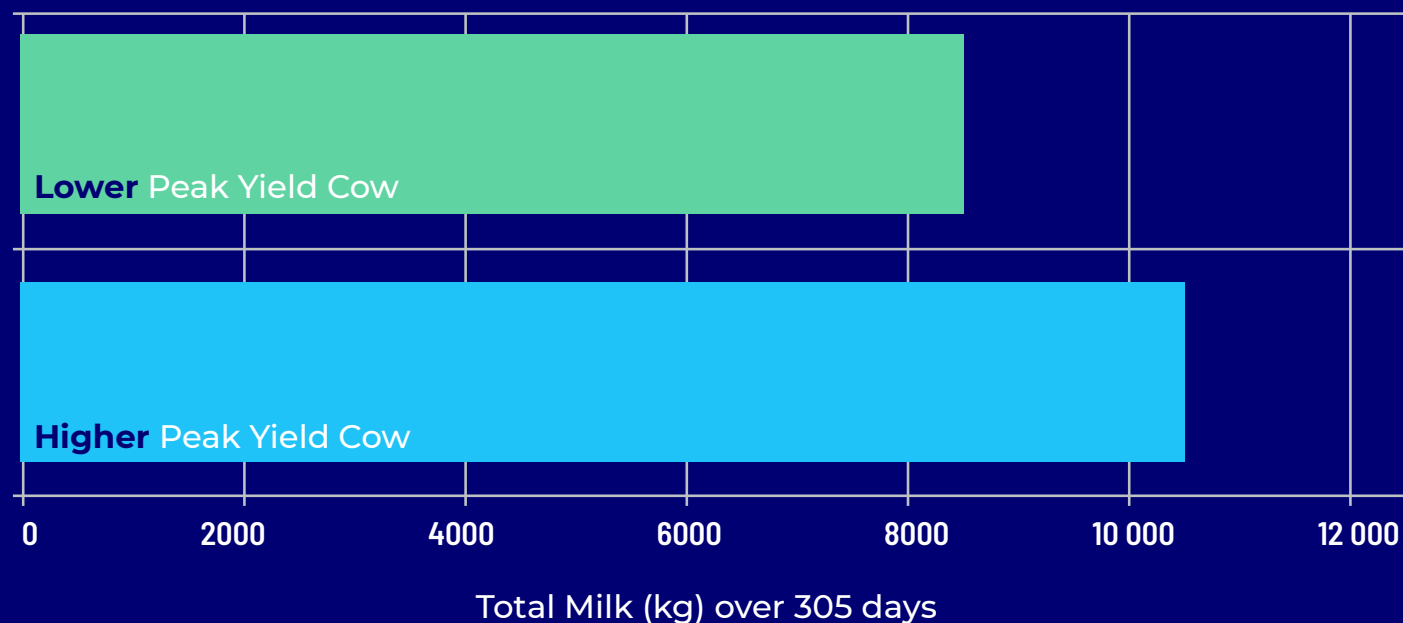
The typical curve shows a rapid rise to peak yield around 40-60 days in milk (DIM), followed by a steady, persistent decline.



2. Key Performance Indicators

— The Power of Peak Yield

Every extra 1 kg of milk at peak can translate to 200-225 kg more milk over the entire lactation. This chart shows the dramatic difference in total yield between a cow with a modest peak and one with a high peak.



— Persistency Target **~7%**

The ideal rate of milk decline per month after peak. A lower number means better persistency and a more profitable lactation.

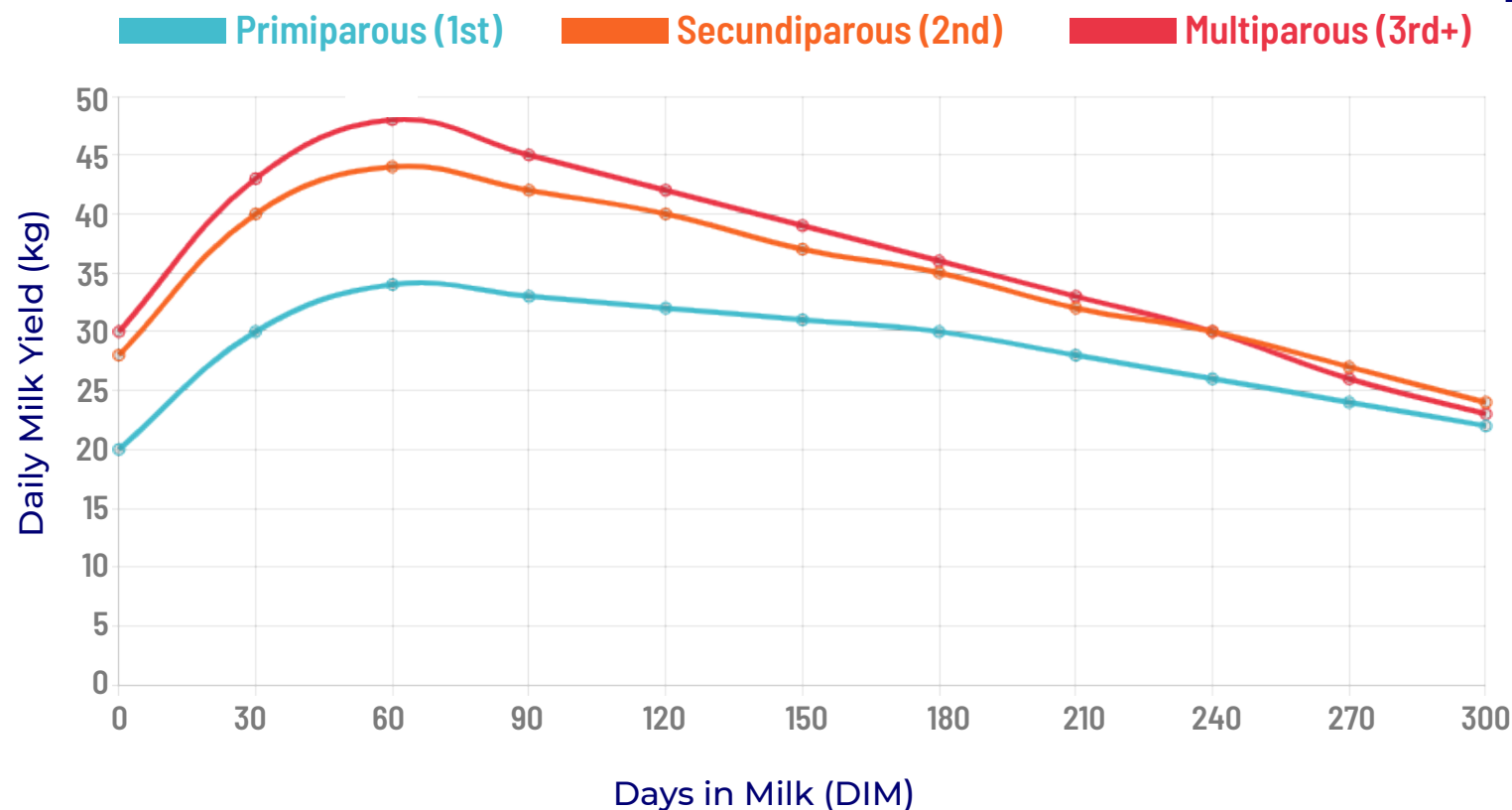
— The Goal



Maintain **over 90%** of production month - on - month

3. Performance by Parity

Not all cows are the same. First-calf heifers, second-lactation cows, and mature cows have **distinctly different lactation curves**. Understanding these differences is crucial for targeted management.



Primiparous (1st Lactation):

Lower peak, but often more persistent as they are still growing.

Secundiparous (2nd Lactation):

Significant jump in peak yield as they approach maturity.

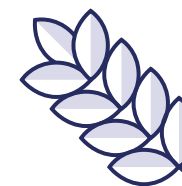
Multiparous (3rd+ Lactation):

Highest peak yield, representing the herd's full genetic potential under current management.

4. What Shapes the Curve?

Nutrition

The single most important factor. Dry period, transition, and early lactation feeding strategies set the stage for peak yield and persistency.



Genetics

The blueprint for potential. Selecting sires for persistency and other functional traits builds a more resilient and efficient herd over time.



Health

Healthy cows are productive cows. Preventing metabolic diseases (ketosis, milk fever) and mastitis is essential for a strong lactation.



Comfort

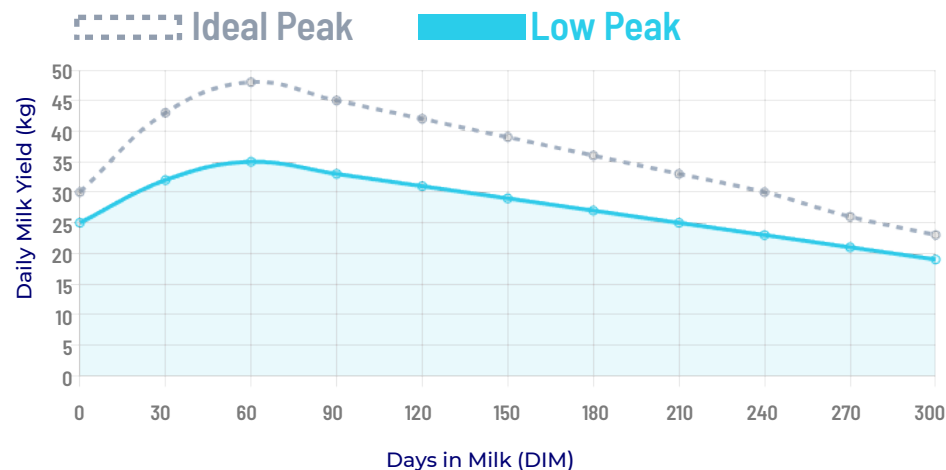
A stress-free environment with ample space, clean water, and comfortable stalls allows cows to express their full genetic potential.



5. Red Flags: Spotting Atypical Patterns

Your lactation curves are an early warning system. Learn to spot deviations from the ideal to proactively address underlying issues before they impact profitability.

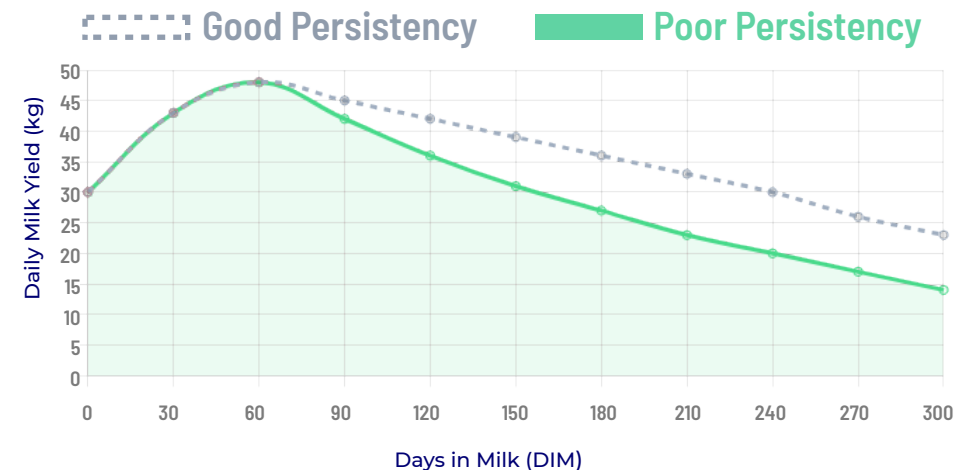
Problem: Low Peak Yield



What it means:

The herd isn't reaching its potential. Look for: Issues in the dry/transition period, poor fresh cow nutrition, subclinical milk fever, or inadequate cow comfort.

Problem: Poor Persistency

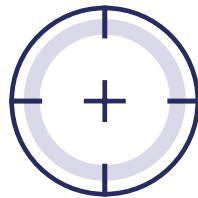


What it means:

Cows are "burning out" too quickly after peaking. Look for: Underfeeding in mid-lactation, exhaustion of body reserves, chronic health issues (lameness, mastitis), or environmental stress.

6. Your Action Plan Flowchart

— Use this simple process to turn your data into decisions and drive continuous improvement on your farm.



1. **Observe
The Curve**

2. **Identify
Atypical
Patterns**
(Low Peak,
Poor Persis-
tency, etc.)

3. **Investigate
the Cause**

- Nutritional Audit
- Health Review
- Comfort Assessment
- Genetic Strategy

4. **Implement
Targeted
Changes
&
Monitor**



Data solutions for sustainable dairy

Drop us a follow to get more info from our experts
on tips of improving productivity on dairy farm.

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