

## **Favor Fresh Cows and They'll Pay You Back**

*Fresh-cow pens and aggressive health protocols pay off with healthier cows and more milk.*

by Shannon Linderoth

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(Wednesday, November 13, 2002)

### ***Got fresh cows? Got challenges.***

Challenges that build on themselves. A comprehensive study published in the 1985 Journal of Dairy Science detailed that cows with clinical milk fever were 23.6 times more likely to have ketosis, 7.2 times more likely to have dystocia problems, 4 times more likely to retain fetal membranes, and 5.4 times more likely to have clinical mastitis.

“And, clinical incidence of these diseases is just the tip of the iceberg with fresh-cow health,” explains veterinarian Earl Aalseth of the Pilchuck Veterinary Clinic in Snohomish, Wash. “Undetected subclinical diseases — problems not yet full-blown — affect far more cows than clinical cases. An aggressive fresh-cow program treats cows with suspicious anticipation; that is, we’re looking for diseases long before cows show significant symptoms.”

To stop minor problems from becoming major wrecks, consider using rectal thermometers, physical exams and specifically designed protocols that feature early-intervention antibiotic therapies to support cow immune systems.

For producers who don’t believe they have the time or resources to devote to fresh cows, or think they can’t improve on their current program, results from aggressive fresh-cow management programs already in use prove otherwise.

### **Time Investment Equals More Milk**

The first tenet of any fresh-cow program involves a fairly significant time commitment by herd managers — usually about an hour a day in a 500-cow herd. But that’s an insignificant investment, considering the returns you’ll see in improved cow health and milk response.

An investment of a few minutes per cow per day pays off for most dairies, since early intervention sets cows up for a more productive lactation by staving off most health problems that strike cows during this time frame. That extra hour per day can yield as much as an 8- to 9-pound increase in daily peak milk production per cow.

“You must spend several minutes every day with every fresh cow, and that takes time,” admits Washington dairy producer Andy Werkhoven. “But, we wouldn’t be able to fill our new barn without our fresh-cow program. And, our overall health cost is down, since we’re seeing savings with fewer DAs (displaced abomasum), milk fevers and so on.”

### **A Space of Their Own**

A fresh-cow pen is one of the most important ingredients in maintaining good fresh-cow health, Aalseth asserts. That’s because intermingling these animals with the rest of the herd makes it difficult to find and examine them efficiently.

The fresh-cow group may have difficulty competing for feed with cows that are further along in their lactations. This is particularly true for first-calf heifers.

And, not segregating fresh cows adequately may diminish your ability to head off several of the health complications that you’re attempting to avert.

Why? Successful fresh pens prevent overcrowding during this critical time. Evidence suggests fresh-cow pens be stocked at no more than 85% of feeding and resting capacity. This helps cows maintain optimum dry matter intakes of 40 to 45 pounds per day. Once you exceed that population level, you lose many of the advantages that fresh pens afford.

Creating a fresh-cow pen will be easier for some dairies than others, but it is a crucial consideration for aggressive management.

## Evaluate and Treat Cows Early

The advantage of an aggressive program like this is that you catch problems before they become full-blown fresh-cow diseases like milk fever, metritis and ketosis or the development of a DA. Often, by the time a cow acts sick — her appetite has dropped off, milk production has slipped and you note a generally depressed attitude — the afflicting malady has already taken hold, which makes corrective action more difficult and usually more expensive.

Aggressive programs also monitor cows longer than the week or so that most dairies currently keep track of fresh cows. Research indicates that while many elevated temperatures appear within three to five days of calving, a significant number show up later in lactation. And not all of these fevers appear in cows that have had calving problems.

“During our nine-month on-farm study, when fresh cows with fevers were treated early according to the protocol, these cows averaged 5.5 pounds more milk per day than fever cows not treated correctly over the first 90 days in milk,” says Mark Kinsel, consulting veterinarian and president of Agricultural Information Management, Inc.

Therefore, a thermometer is one of your major weapons in the fight against fresh-cow disease, since it provides a base from which most ensuing disease management decisions are made. You can create clear action points — like when temperatures fall below 101.5° and rise above 103° Fahrenheit — to build your protocols and offer guidance to herd managers.

But, astute adapters don’t stop there. They add careful visual observation, physical exams and quick antibiotic intervention when necessary. These actions increase your level of disease control over this lactation phase because body temperature alone doesn’t always indicate the presence or severity of infection. You can make a much more informed treatment decision if you listen for heart, lung and rumen sounds, as well as monitor manure quality and check for the possibility of uterine infection.

“It takes a bit of a learning curve, but anybody can become good at working with these cows if they want to do a good job,” says Werkhoven. “Every cow is different, but if you’re working with them closely for 10 days or more, you learn to tell the difference when things change. If all you do is just run temperatures, or just feel her ears, you miss so much about what’s going on with her health.”

## Return On Investment

You’ll see the largest pay-off from an aggressive program if you work with your veterinarian to develop specific treatment protocols that optimize the skills and abilities of your farm’s personnel. Once you get an idea of what you want to accomplish with your program, you and your veterinarian can sketch out a treatment decision-tree that empowers key employees to support cows medically long before clinical signs of disease appear.

And, while these general outlines help with initial decisions, remember that fresh-cow programs aren’t lumped into the “one-size-fits-all” category. Certain situations call for extra-label therapy.

When used successfully, intense evaluation and treatment should result in 95% of treated cows rejoining the herd by 10 to 12 days in milk.

When fresh-cow pens feature standard occupancy and pressure, about 15% of cows will require antibiotic therapy. Overall, if you’re doing a good job of disease and metabolic problem prevention, less than 5% of all cows should end up in the hospital pen.

Just about any fresh-cow program of significance can reduce left DAs to no more than 3% of the herd, says Aalseth. “An intense program should reduce DAs to less than 0.5% of cows. And, several herds we work with have reduced death losses below 3% and involuntary culling to 20%.”

A 1,200-cow Idaho dairy that instituted an aggressive fresh-cow program has been able to return \$8 in milk revenue for every dollar invested in medication. Even after charging all fresh program labor cost against increased milk production, the dairy still netted \$6 in extra milk revenue for every \$1 invested in drugs. A renewed emphasis on close-up cow management has led to even better support of fresh cow performance. This action reduced fresh-cow drug cost by 60% over previous expenditures.

Meanwhile, herd death loss dropped from 7% to 3%, and the involuntary cull rate decreased from 37% to 19%. And the dairy gained a productive lactation from about 140 cows that otherwise would have died or been culled — not a bad return for spending a little extra time with the cows.

<b>NET RETURN ON A PER-COW BASIS</b>			
<p>These economic return figures are based on an 8- to 9-pound per cow milk increase gained on an average 1,000-cow dairy by an aggressive fresh-cow program when milk is \$12 per hundredweight. In this chart, facility cost is based on building cost and depreciation, and feed cost is based on the premise that each pound of milk requires an additional 0.5 pounds of dry matter at \$0.07 per pound. Average drug cost is estimated at \$16.56 per treated cow, with \$10 allotted for labor. In this herd, 24% of cows are first-calf heifers – which give the highest net returns per cow to the program – 71% of cows are second lactation or higher, and 5% didn't complete the lactation.</p>			
	<b>1<sup>st</sup> Lactation</b>	<b>2<sup>nd</sup> Lactation Plus</b>	<b>All Cows</b>
Additional milk	\$444.30	\$273.33	\$291.89
Additional feed cost	(\$155.65)	(\$95.75)	(\$102.25)
Additional drug and labor cost	(\$26.56)	(\$26.56)	(\$26.56)
Additional facility cost	(\$5.95)	(\$5.95)	(\$5.95)
Net return/cow	\$256.14	\$145.06	\$157.12
Net return on a herd-wide basis (based on herd demographics)	\$62,498.86	\$102,560.86	\$149,420.50
<b>Return on investment</b>	136%	213%	217%
<i>Source: Earl Aalseth, Pilchuck Veterinary Clinic.</i>			

### For More Information

If you want to learn specific information about veterinarian Earl Aalseth's aggressive fresh-cow program, you can contact him at: 360-568-3111, or send e-mail to: eabovadude@aol.com.

### Managing One Fresh Cow at a Time

Armed with a stethoscope, digital rectal thermometer, a seemingly endless supply of examination gloves, cow list and a firm belief in what he's doing, Andy Werkhoven spends a couple of hours every morning with the fresh cows on his family's dairy near Monroe, Wash.

Encouraged and coached by veterinarian Earl Aalseth, of the Pilchuck Veterinary Clinic in nearby Snohomish, Wash., Andy and his brother, Jim, instituted an aggressive fresh-cow-management program on their 600-cow farm last April. They subscribe to the theory that you need to manage one cow at a time, whether you're milking 30 cows or 3,000 cows.

"The key is to be aggressive, fast," says Andy Werkhoven. "You have to think fundamentally about what you need to do to prevent serious problems. It is a lot of work, and it does take time to check cows out every day, but it is definitely worth it."

Since the program's inception, the Werkhovens note significant health and productivity gains, despite the fact that the dairy's free-stall barns are currently overcrowded and fresh cows are not segregated.

"We've seen percent open by days in milk improve by 5%, our heat detection has improved, our number of DAs has gone down, and our percent pregnant following first service has increased," says Werkhoven.

"Overall, it's too early to say exactly how much the program has impacted our dairy," he concludes. "But, the preliminary trends look really good." Good enough that Jim and Andy have broken ground on a new free-stall facility to house the fresh cows.