# Filling Buckets or Feeding Water? [For calves housed individually rather than group pens.] A Checklist for Calf Rearers 

We all know how to feed water. Right? It's the least complicated task in calf care. Even the person with the least amount of experience can do it. You just refill the buckets.

Well folks, the good news is that the calves have water. The bad news it that you are filling buckets but not feeding water. Here is the outline for this discussion:

- Feeding water and collecting information
- Example No. 114 - did not finish her milk
- Example No. 104 - loose dung
- Example No. 103 - no drinking either milk or water
- For more information go to www.calfnotes.com


## "Feeding" Water

Let's look behind the activity when a person feeds water. It's time to dump out leftover water. Let's assume that your arrangement of individually housed calves allows you to have a reasonable idea how much water calves in different areas probably will drink each day. How much is water is left before dumping? Did the calf drink more or less than expected?

I know it is very tempting to let one's mind go off to solve other problems while dumping water.

But if we do that we literally are throwing away information along with the water. The same is true if we have an unknown amount of water going into the buckets as well.

In my experience on any given day less than ten percent of the calves will deviate from "normal" consumption to warrant attention. But, that ten percent need attention.

## Using water consumption information

For example, calf \#114 is seven days old. She's been drinking all of two litres of milk replacer fed twice a day. The water buckets are emptied before feeding milk replacer twice a day. Fresh water is fed after the calves have drunk their milk replacer. She has ad lib water - the bucket is refilled with about two litres.

Since day two, she has drunk about half a litre of water daily. Last night she drank all two litres of milk replacer. This morning before feeding milk her water bucket was dumped. It was nearly empty - very unusual - I clipped a tag to her hutch as a visual reminder of this.

She only drank half of her two-litre milk replacer feeding this AM. She seems alert, no snot, and breathing okay. Calf \#114 has consumed five litres of fluid ( $2 \mathrm{MR}+2$ water +1 MR ) including last night.

I'll leave her alone now but leave the "flag tag" on the hutch so her fluid consumption can be monitored this PM. Now, put yourself in my place. Would you have reached the same conclusion without the water consumption information?

## Another example

Calf \#104 is twelve days old. For several days she's been drinking all of two and a half litres of milk replacer fed twice a day. She has ad lib water the bucket usually has four litres in it. Her normal water consumption this past week has been about a half to three-quarters of a litre daily - varies some from day to day.

Two days ago her dung was observed to be unusually loose and lighter yellow than normal. That was a signal that her fluid needs were going to be high for the next few days - put a flag tag on her hutch to monitor fluid intake.

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We were especially careful to observe how much water she was drinking. Four litres in - how much dumped before next feeding? Is she drinking at least eight litres of fluids daily?

She continues to drink all five litres of milk replacer daily along with more than double her normal half to three-quarter of a litre of water. No problems, take the tag back off three days later.

## A contrasting example

Her neighbor, \#103, same age and history, did not keep drinking. On day thirteen she only drank half of her AM milk replacer and no water between AM and PM feeding.

After she drank less than half of her milk replacer in the afternoon, we followed up with a physical check. She had an elevated temperature of $40^{\circ}$ and some thick nasal discharge accompanied by an inability to breathe easily through her nose. No abnormal lung sounds. A skin pinch test on her neck skin was a bit slow in responding and her eyes didn't look just right - a bit sunken - some degree of dehydration present. No evidence of severe loose scours.

Following the protocol worked out the with the vet for these cases, \#103 received via esophageal tube feeder two quarts of a high energy electrolyte solution, two liters of $37^{\circ}$ lactated ringers SQ and the prescribed antibiotic treatment. Her water was replaced with eight litres of fresh warm water.

Next AM prior to milk replacer feeding her water bucket was half empty good, that's four more litres of fluids. As we bed-up the hutch she is scouring and evidence of diarrhea is everywhere.

By monitoring both milk replacer and water intake we were able to manage her fluid intake for the four days needed to get past her crises with both a bacterial respiratory infection and scours.

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In each of these examples, water consumption information was routinely collected when it departed from "normal" when the left over water was discarded. This enterprise had a system in place to pass this information around among the calf rearers. When these three sick or abnormal calves needed to be diagnosed, the water consumption information was used routinely to improve management.

## Are you feeding water rather than just filling pails?

YES NO

1. All the calves start over with fresh water at least once a day. $\qquad$
2. We know how much water is fed each calf each feeding (for example, calves less than one week receive two litres AM/PM, the next older group receives four litres AM/PM).
3. The person dumping buckets watches each feeding for unusual behavior (\#114 drank a lot of water overnight, \#104 doubled her water consumption due to scours, \#103 felt awful and just quit drinking).
4. When diagnosing sick or abnormal calves we include water consumption along with milk replacer consumption and other indicators of calf health.

## FOR YOUR INFORMATION

Website: http://www.calfnotes.com

1. go to "Calving Ease" link, select June 2000 for notes on increased water needs in hot weather.
2. go to "CalfNotes in Order" link at the left and then select:

- Calf Note 4 Water, Water Everywhere - basic relationship between water consumption, size and starter intake

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- Calf Note 77 Methods of Feeding Water - provides data comparing bucket and nipple feeding methods.

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