NAVAN VETERINARY SERVICES – FEBRUARY 2015 NEWSLETTER

ROBOTIC CALF FEEDERS

Last week, one of our vets (Dave) attended a robotic calf feeder workshop/seminar held by Mr. Jan Ziemerink of Foester, one of now many companies making robotic calf feeders. The discussion in this newsletter can be applied to many of the other manufacturers including Lely, DairyLogix, Urban, GEA & DeLaval feeders.

The increasing popularity of robotic calf feeder installations in recent years can likely be attributed to many factors including time saving, labour costs and arguing over whose turn it is to feed the outside hutch calves in -30° weather.

Most producers who are on free-choice acidified milk feeding or fully robotic feeders have commented on how much "growthier" and healthier their calves are compared to when they were feeding by hand twice a day.

Most calf health problems can be eliminated by providing fresh, draft free air, fresh adequate feed and a clean environment to live. With regards to nutrition, underfeeding calves at any time of year (but especially during cold stress) improper mixing & temperature of replacer, and improper concentration of powder will have serious repercussions on your calves health. A weakened immune system caused by the above will predispose your calves to pneumonia and scours, including cryptosporidiosis.

So, the main plus of automating your calf feeding is consistency. Mixes are prepared for individual calves at the correct concentration, volume and temperature every time. Calves are fed 4-5 times per day which also makes it easier to wean them when the time comes.

Most units will alert the producer when calves have not visited the feeder or did not drink their entire meal. Some robots use RFID eartags instead of transponders & collars. Others have options for thermometers in the nipples to help find sick calves, weigh scales and other systems tied to calf starter feeders that can adjust feedings according to intakes and growth. The benefits are many.

A few note-worthy points taken form Dr. Dave's afternoon with one company are presented below.

Day 0-5	6-8 litres
Day 5-15	8-12 litres
Day 16-45	12-12 litres
Day 46-60	12-2 litres

At 150g replacer/litre, calves should consume approximately 100kg replacer over 60-65 days.

ROBOTIC CALF FEEDERS CONTINUED

		Min.	Max. (Litre)
Meal sizes:	Day 1 – Day 5	1.0	2.0
	Day 6 – Day 20	1.5	3.0
	Day 21 – wean	1.5	3.5

- 3 litre meal size by day 20 at the latest

- dried fat milk replacers clean up better
- temperature warnings likely signify boiler element problems
- always provide water
- provide calf starter with hay or straw by week 1
- calf starter – replace daily if not eaten
- make sure robot is grounded
- if possible make sure that young calves get priority on machine
- if only 1 station and 2 groups of calves, block off older calves 3-5 hours/day so young calves have unobstructed access
- calves should double weight by day 56-60
- to achieve growth – 0.9 kg BW gain/day
- 1.1 kg gain is very achievable

- reduced drinking speed is 1st sign of poor health
- monitor drinking speed – if drinking speeds drops to 80-85 % for 2 periods in a day or over 2 days. Feed electrolytes and water, before giving antibiotics

- do a per walk daily – note calf activity
- weaning calves should have grain intake increasing from 900 grams to 2.5 kg/day
- monitor grain consumption

Cleaning of the system is critical. Automatic cleaner should be supplemented by daily or every other day cleaning of nipple and feeding station area. Giving the nipple a quarter turn when cleaning will also help extend the life of the nipple.