TRANSITION MANAGEMENT

"THIS PERIOD POSSIBLY DEFINES THE ENTIRE LACTATIONAL PERFORMANCE OF THE DAIRY COW" (WANG 1990)

The transition period is defined as four weeks before calving to four weeks after calving. The key objectives of transition management is to prepare the cow and the rumen for the change from a dry state to a lactating one, prevent metabolic problems around calving & to prevent immuno-suppression. The areas that need to be focused on include: body condition, dry matter intake, rumen fitness, minerals, effective fibre intake, carbohydrate intake, protein intake, DCAD, rumen health, socialisation, cow comfort and heifer management. To cover all these aspects in detail would take up several newsletters, so here it is in a nutshell.

Dry Matter Intake

The single most important factor in transition management is dry matter intake (DMI). Aim for intakes of 2-2.5% of bodyweight. Remember that cows close to calving have a significantly higher energy requirement because of the energy demands of the pregnancy.

Weeks before calving	Calf Weight kg	Plus placenta kg	Energy required MJME/day	Pasture kgDM/day To maintain Pregnancy
12	9	27	8.2	0.75
8	16	37	14.2	1.3
4	26	54	24.7	2.25
0	40	73	42.9	3.9

DMI is influenced by management, BCS, liver health & cow health. Increasing the DMI also helps prepare the rumen physically for the increased intakes required post calving. Fibre, like hay or straw, fed above maintenance requirements is good for developing rumen musculature strength. It is also a useful carrier of minerals and energy feeds like molasses to cows on a pasture based system.

Management

Mob management is crucial. Early calving cows have reduced gut capacity due to the size of the foetus, and will take longer to eat their allocation of feed. In competition with late calving cows they will inevitably miss out. The priority has to be getting cows into the right mobs to allow for targeted feed allocation. Start now by drafting early calving cows (e.g. due in the first 2 weeks) and heifers into a separate group. Increase DMI to 2% of bodyweight & try to introduce any feeds that will be used post calving e.g. maize silage, meal.

Minerals & Supplements

Getting magnesium supplementation right is critical to preventing metabolic problems. Ensure adequate levels of trace elements like selenium, copper, zinc & B12 are present to support immune function and maintain appetite. Rumensin can help magnesium uptake and prevent ketosis. Post calving all cows will be deficient in calcium so consider adding calcium to the diet, dust pastures with 200-300 grams/cow/day of limeflour. Energy supplements such as starter drench, MPG or calcium enriched molasses for the first 4 days after calving can help prevent metabolic problems and stimulate appetite in freshly calved cows.

The key point with transition management is to do no harm. If you would like help establishing a transition management plan please call the clinic.