



EUROPEAN UNION
European Regional Development Fund

Gaļas liellopu ganampulka veselības uzlabošanas pasākumi

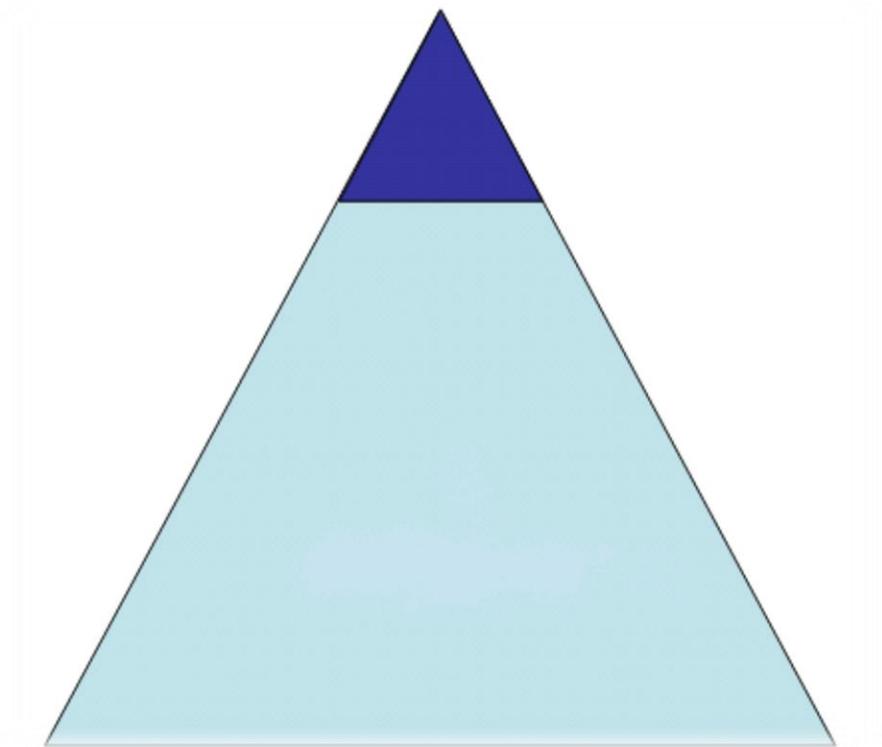
Mg.vet.med. Lauris Štelfs

Kas ir ganāmpulka veselība?

- Ganāmpulka veselība ir disciplīna ,kura veic slimību diagnostiku, ārstēšanu un preventīvos pasākumus dzīvnieku grupā.
 - Ganāmpulka veselības plāna
 - Rīcības plāniem, neparedzētām darbībām
 - Informāciju par grupu, datiem, sasniegumiem, standartiem
 - Dzīvnieka labturība
 - Dzīvnieka mītņošanu
 - Biodrošību
 - Ēdināšanu
 - Ārstēšanas protokoliem
 - Preventīvo pasākumu veikšana

Kāpēc jāveic ganāmpulka uzlabošanas pasākumi?

1. Acīmredzamos ražošanas zaudējumus
2. Mazāk acīmredzami ražošanas



Pirms mītņošanas veicamie pasākumi rudens periodā

Pirmsatnešanās periodā veicamās darbības

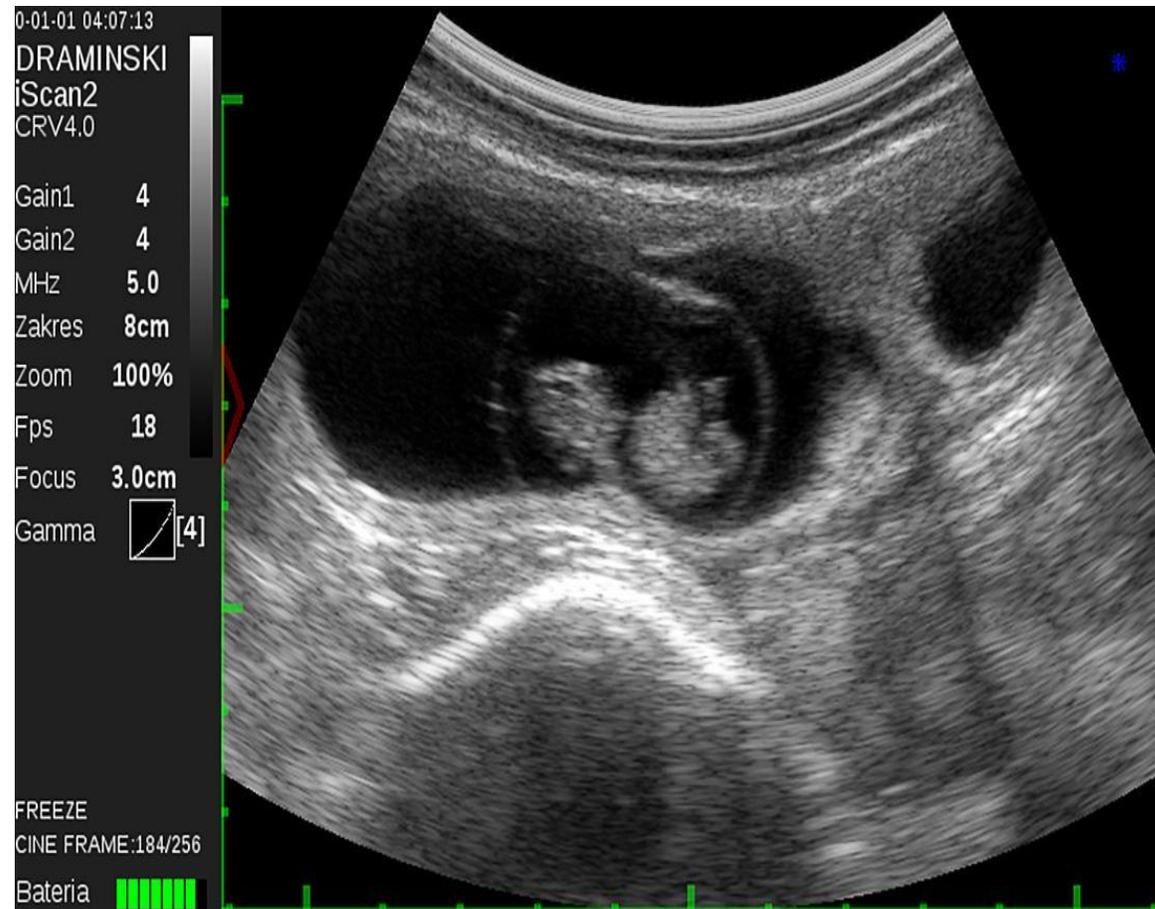
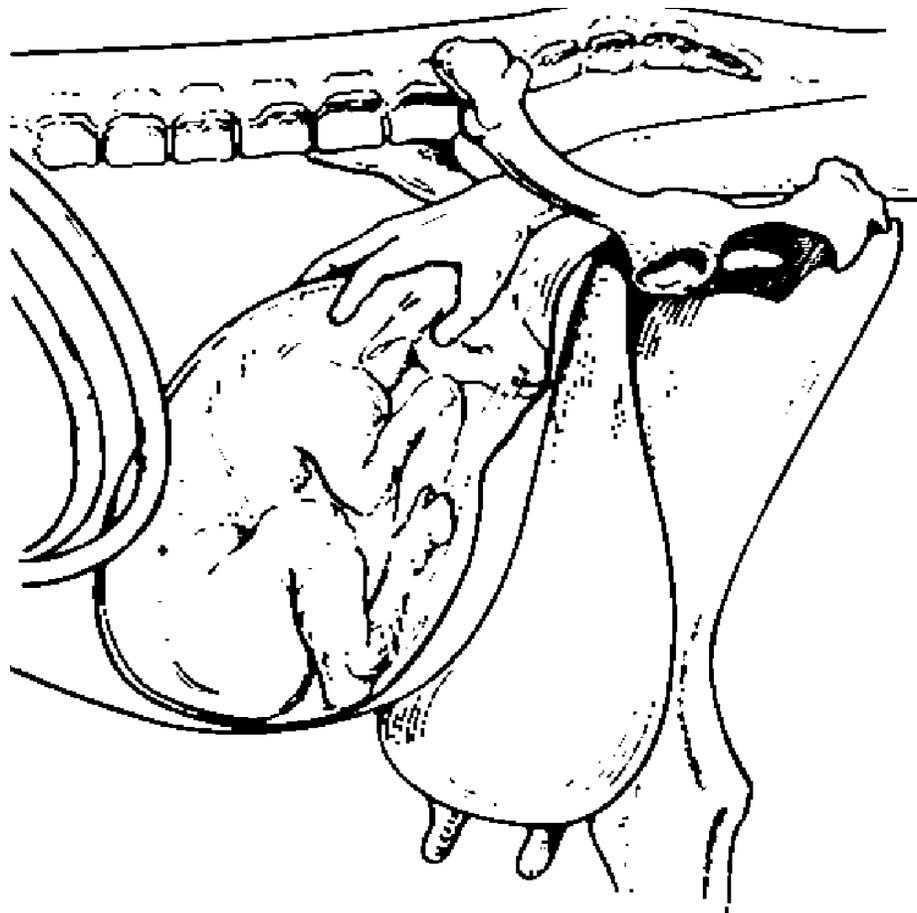
- Grupēšana
 - Grūsnību identifikācija
 - Ķermeņu kondīcijas novērtējums
- Nagu apstrāde
- Parazītu kontrole
- Vakcinācijas plāni
- Citi veicamie pasākumi



Grupēšanas plāns

- 1 grupa- negrūsnās govīs
- 2 grupa- grūsnās govīs vēlā grūsnības posmā
- 3 grupa- grūsnās govīs agrā grūsnības posmā
- 4 grupa- pirmo reizi kuras dzemdēs

Grūsnību pārbaude



leguvumi no grupēšanas



Ķermeņa kondīcijas noteikšana

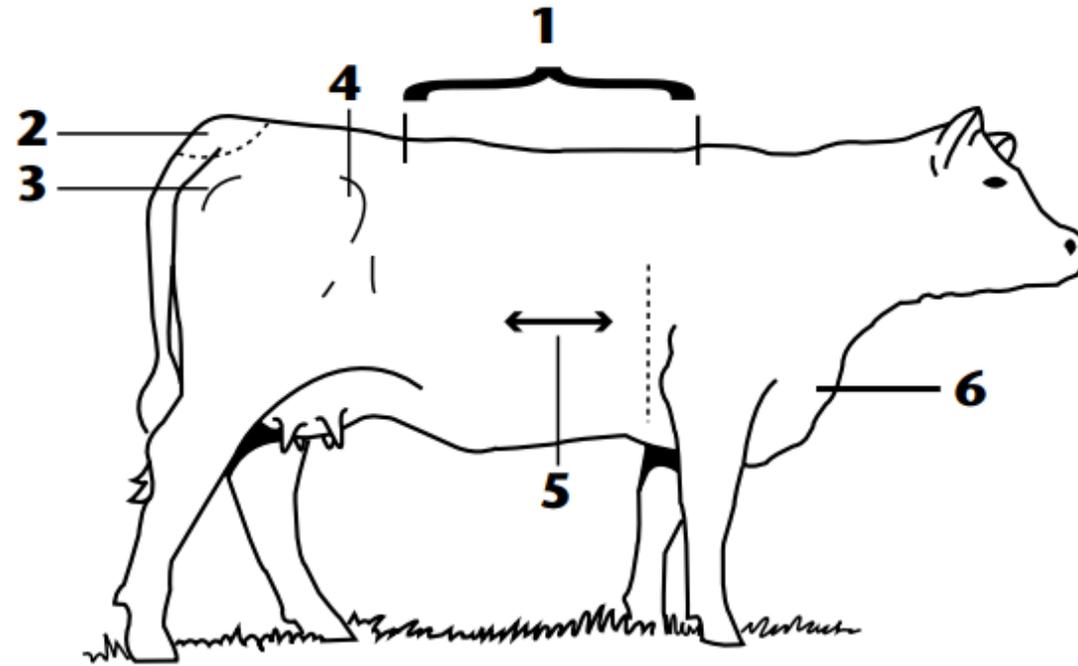
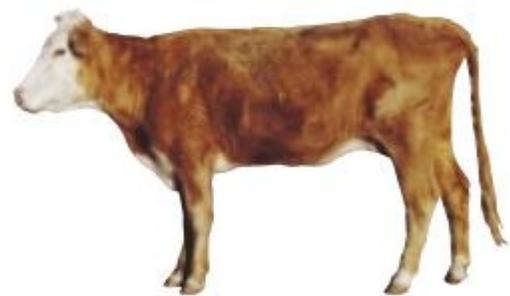


Figure 1. Key points for body condition scoring: 1. back; 2. tail head; 3. pins; 4. hooks; 5. ribs; 6. brisket.

Ҷермеҥа кондїcija?



1

3.77

2

7.54

3

11.30



BCS 5

4

15.07



5

18.89

6

22.61

7

26.38



BCS 7

8

30.15

9

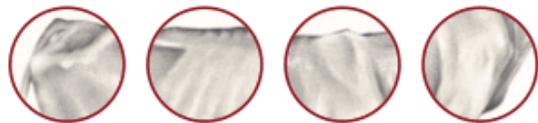
33.91

What is Body Condition Score?

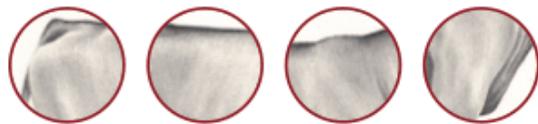
Body condition score gives us a snapshot in time of the animal's energy status. This indicates how well the animal is doing based on production stage and diet. Body condition score should be assessed on cows at different times of the year so that you can make management decisions based on their current condition. The three most critical times of the year are at calving, mid-lactation and mid-late gestation.

BODY CONDITION SCORE

1 **Hips:** no palpable fat **Ribs & Spine:** no palpable fat **Shoulder:** front of shoulder is slightly pointed **Brisket:** no palpable fat



3 **Hips:** some palpable fat cover **Ribs & Spine:** ribs still individually identifiable but with rounded edges, some palpable fat along spine and over dorsal portion of ribs **Shoulder:** front of shoulder is slightly pointed **Brisket:** some palpable fat cover



56 percent of BCS 3 cows became pregnant after 75-day breeding season.

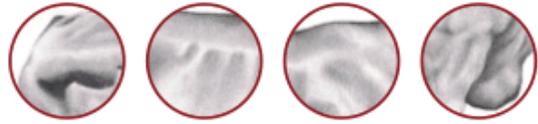
According to a study conducted, in part, by Ryon Walker, Ph.D., at Louisiana State University, the ideal body condition score for breeding cows is 5 or 6. The rate of pregnancy after a 75-day breeding season was 88 percent in cows with a BCS of 5 and 89 percent in cows with a BCS of 6. Rates dropped to 56 percent in cows with a BCS of 3.

7 **Hips:** very spongy fat cover, developing pones (fat pockets) **Ribs & Spine:** ribs and spine not visible, very spongy **Shoulder:** very spongy, hard to distinguish front of shoulder **Brisket:** very spongy



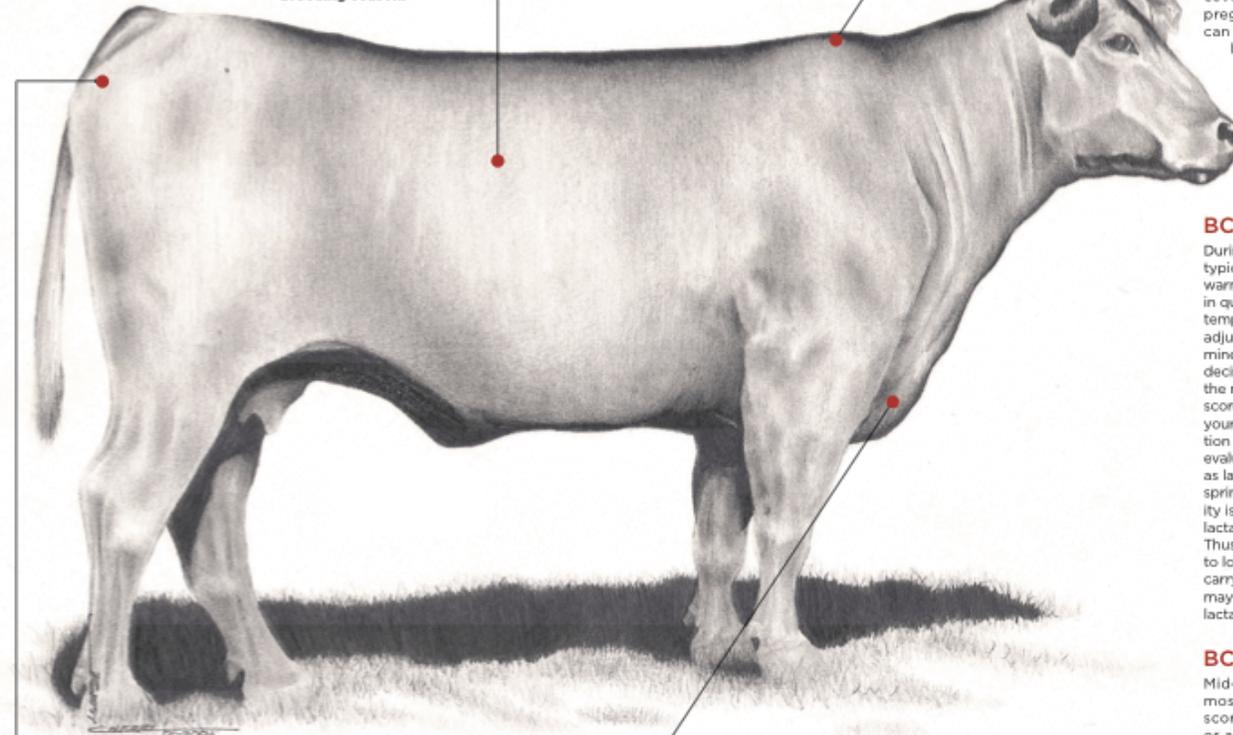
67 percent of BCS 7 cows became pregnant after a 75-day breeding season.

9 **Hips:** tail head and hips buried in fatty tissue, pones are protruding **Ribs & Spine:** excessively spongy along back and over ribs, no bones detectable **Shoulder:** excessively spongy, shoulder looks blocky **Brisket:** excessive amount of fat hanging between front legs



5 A BCS of 5 or 6 is the ideal body condition for breeding and calving. The large cow below shows a BCS of 5.

88 percent of BCS 5 cows became pregnant after a 75-day breeding season.



HIPS

Palpable fat cover is detected over hips with some signs of fat pockets developing around the tail head.

RIBS & SPINE

Developing a spongy feel over ribs and spine. Spine is not visible, but the last two ribs are still visible.

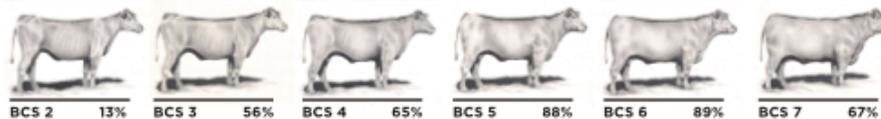
SHOULDER

Some palpable fat cover is developing. The front of the shoulder is rounded, not pointed.

BRISKET

Starting to develop palpable fat cover in the brisket. Fat cover is smooth to the look with no developing fat pockets yet.

75-DAY BREEDING SEASON PREGNANCY RATES



Images provided by University of Minnesota Extension Beef Team

Source: Demeterco et al., 2017

When to Assess

The three most critical times of the year to assess body condition score are at calving, mid-lactation and mid-late gestation.

BCS AT CALVING

Many studies have correlated cow BCS at calving and the likelihood of getting pregnant during the breeding season. For example, cows in a BCS of 5 or greater have a better chance of getting bred early during the breeding season compared with cows in a BCS of less than 5. In addition, cows that have too much condition or fat cover (BCS greater than 7) can have lower pregnancy rates. This snapshot at calving can allow you to make adjustments in diet based on the time of year and calving season (spring or fall) to improve a cow's plane of nutrition and body condition prior to the breeding season. Young lactating females that are thin at calving will struggle to improve their body condition prior to breeding, unless they are on full feed.

BCS AT MID-LACTATION

During mid-lactation, the breeding season is typically wrapping up. For spring-calving cows, warm-season grasses are starting to decrease in quality because of lack of moisture and hot temperatures. This time of year will allow you to adjust your summer grazing strategy and determine if supplementation or other management decisions are needed. For fall-calving cows, it's the middle of winter. Based on the condition score of your cows, you may need to adjust your supplementation program. At this production phase, it is critical that condition scores be evaluated in younger producing females, such as lactating 2- and 3-year-olds. Oftentimes in spring-calving cows, warm-season forage quality is not sufficient to meet the requirements for lactation and growth of a lactating 2-year-old. Thus, most of those younger females will begin to lose body weight and condition, which will carry over into the next calving season. You may want to consider early weaning the young lactating females if this occurs.

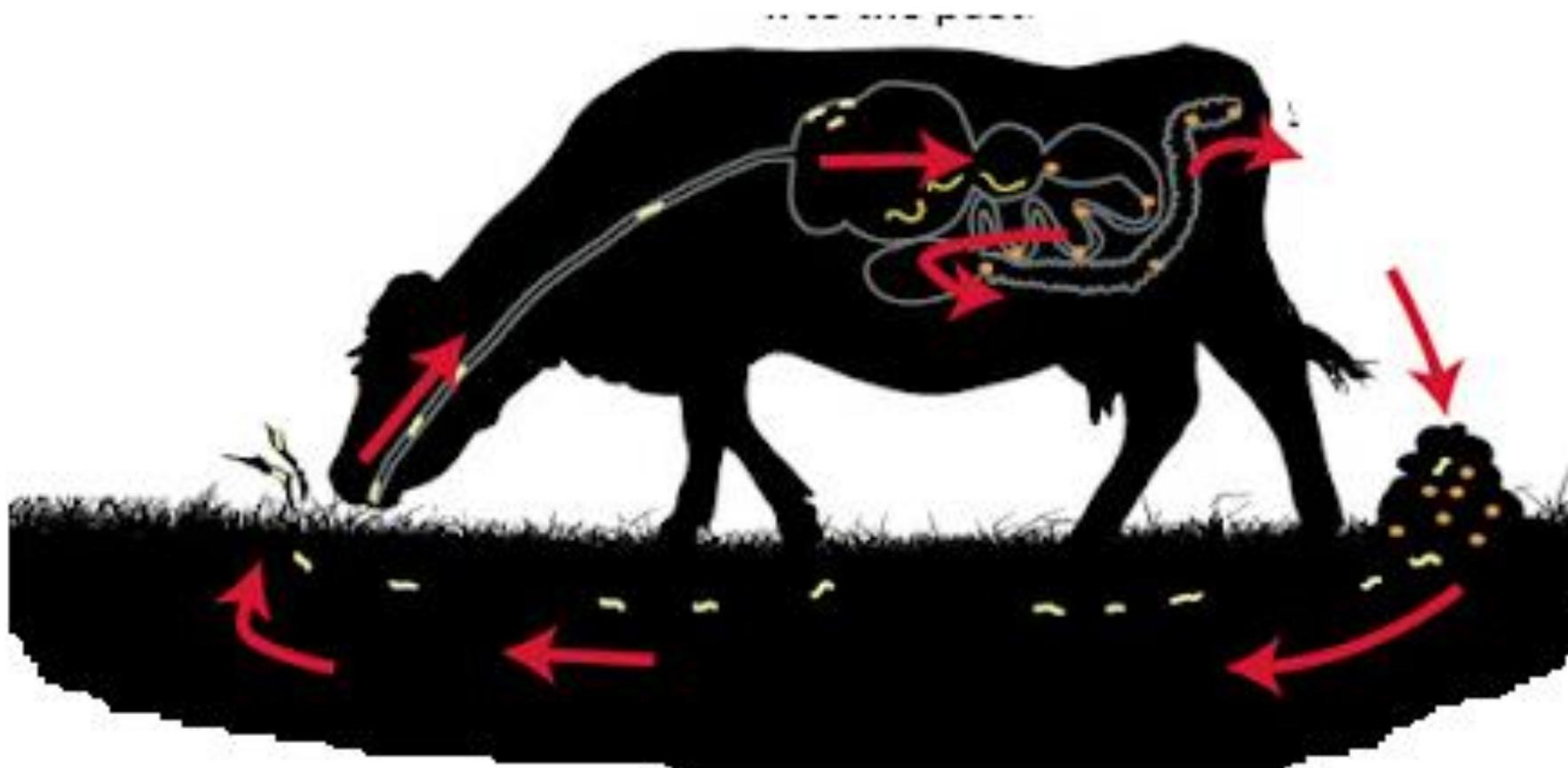
BCS AT MID-LATE GESTATION

Mid-late gestation is the most critical and most convenient time to body condition score. This is typically done at weaning or a follow-up working after weaning where cows are palpated for pregnancy, dewormed and possibly vaccinated. At this stage, cows are approximately three to four months prior to calving, which allows the opportunity to adjust management so the majority of cows calve in a BCS range of 5 to 6. Cows can then be sorted into a fleshy and thin group using BCS, if pastures and resources allow. This prevents overfeeding or underfeeding certain groups, which ultimately saves money.





Parazītu kontrole

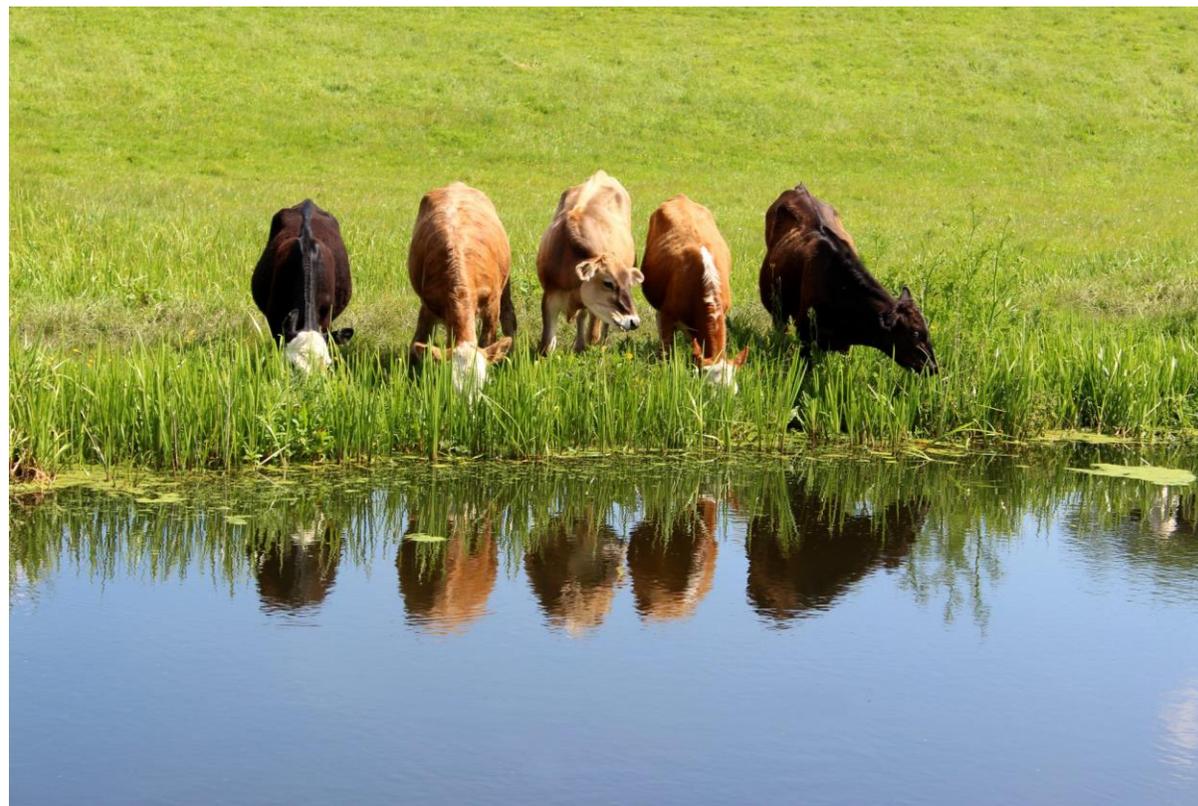
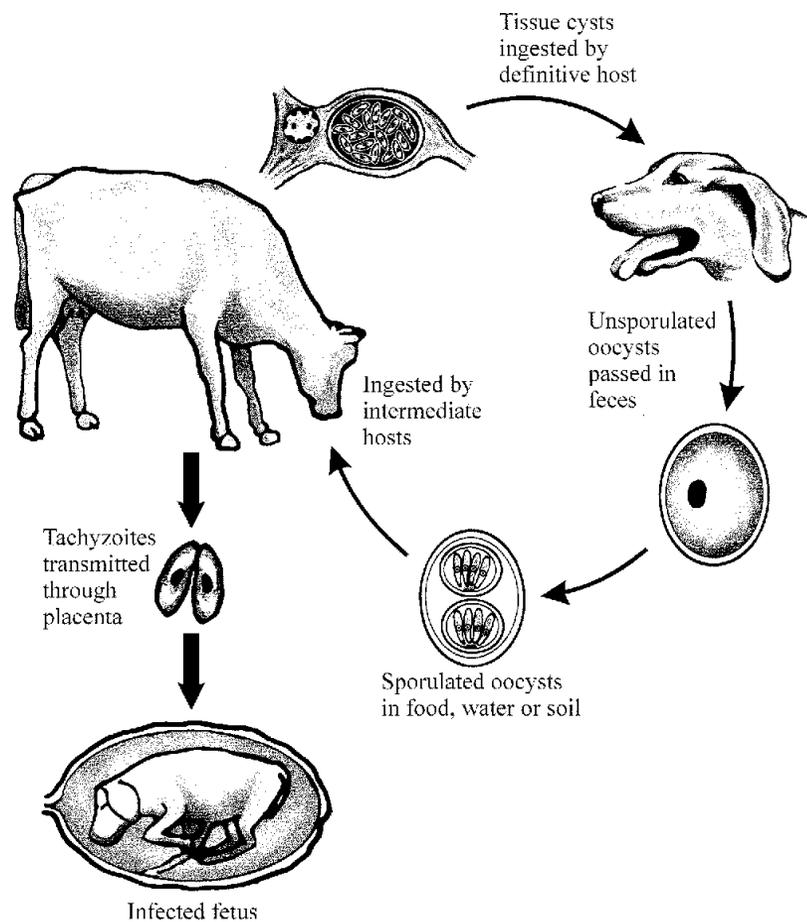


- 1. Identificēt risku parazitārām slimībām
- 2. Samazināt risku
- 3. Izvairīties no rezistences palielināšanas antihelmentiskajiem līdzekļiem

Riska izvērtējums



Riska samazināšanas pasākumi



Rezistences samazināšanas pasākumi

- Regulāra paraugu noņemšana un izmeklēšana
 - Diagnostika parazitārām saslimšanām
 - Sekot līdzī parazītāro slimību piesārņojumam ganībās/ganāmpulkā

Paraugu noņemšanas metode

- Svaigs fekāliju paraugs
- Ūdens necaurlaidīgā iepakojumā
- Informācija par paraugu
- Uzglabā ap +4 grādiem



Vakcinācijas plāns/plāni



Vakcinācija

- Vakcīna ir viela, ko izmanto, lai stimulētu antivielu veidošanos un nodrošinātu imunitāti pret vienu vai vairākām slimībām, kas izgatavota no slimības ierosinātāja vai tā produktiem, neizraisot slimību.

Vēlamais vakcinācijas plāns



- Maternālā imunitāte
!!!Pirmpiena kvalitāte



- Respiratorais sindroms
- Jaundzīvnieku caureja



- 7-5 nedēļas pirms dzemdībām, revakcinācija/bez 4-2 nedēļas pirms dzemdībām
 - Respiratoro slimību ierosinātājiem- **bakteriālām** infekcijām *Pasteurella* and *Mannhaemia Haemolytica*. **Virālām** infekcijām Paragripai un sincitiālajam vīrusam.
 - Caurejas slimību ierosinātājiem- **bakteriālām** infekcijām kā *Escherichia coli*, **Virālām** infekcijām Rota un korona vīrusam.
- **Papildus vakcinācija ganāpulkā no slimību statusa.**



Citi veicamie pasākumi

- Identificēt dzīvniekus kuriem ir redzamas pazīmes
 - Secinājumi
- D3 vit injekcija zīdītājmātēm
- Selēns un E vitamīns



Mineral	Unit	Gestating cows	Early lactation cows
Magnesium	%	0.12	0.20
Potassium	%	0.60	0.70
Cobalt	mg/kg ^a	0.10	0.10
Copper	mg/kg	10	10
Iodine	mg/kg	0.50	0.50
Iron	mg/kg	50	50
Manganese	mg/kg	40	40
Selenium	mg/kg	0.10	0.10
Zinc	mg/kg	30	30

^aSame as parts per million (ppm).

Paldies par uzmanību!!!

