

## H22 – Texture of feed and gastric health - sows

The texture of the sows' feed is important to their gastric health.

Incorrect texture changes the gastric content and in severe cases sows may die.

### 1. Feed with an effect on gastric ulcers

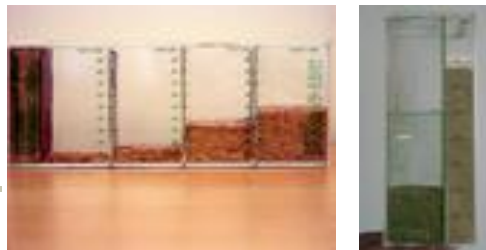
- Coarsely ground meal feed, min. 15% above 2 mm
- Ready-mixed feed with approx. 20% rolled grain added after pelleting
- Expandate
- Pelleted feed with coarsely ground grain

### 2. Feeding strategy against gastric ulcer

- Gilts: Restricted feeding = fewer gastric ulcers than ad lib feeding with pelleted feed.
- Gestating sows: Identical gastric health with one and two daily feedings

### 3. Observations

- A few pale and unwell sows
- Loss of body condition among some sows
- Many sows stop eating, vomiting around feeding
- Black and lumpy faeces
- Sudden deaths
- If you observe an increase in the above symptoms, investigate further via gastric USK



Check grinding of home-mixed feed every 14 days.



Coarse meal feed improves longevity in gilts and sows



Add rolled, not heat-treated grain to the pellet to improve texture of the feed.

Gastric USK on min. 20 stomachs. Assess the outcome according to the below scale:

**Index 8-10: large ulcer/expressed scarring**

**Index 7: medium ulcer/moderate ulceration**

**Index 3-6: light changes**

**Index 0-2: normal/almost normal conditions in the stomach**

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Routinely check grinding of home-mixed feed using the Bygholm sieve.

Make a control screening every four weeks before fat, minerals and soybean meal are added to the feed.

Optimum screening profile for sows, Bygholm sieve:

Result of sieving analysis					
Below 1 mm	1-2 mm	2-3 mm	Above 3 mm	Whole kernels (Yes/No)	Husks/hulls above 2 mm (Yes/No)
50%	35%	12%	Approx. 3%	No	No

*Shake the sample for 5 minutes.*

Optimum screening profile for sows, Bygholm 2 sieve:

Result of sieving analysis				
Below 1 mm	1-2 mm	Above 2 mm	Whole kernels (Yes/No)	Husks/hulls above 2 mm (Yes/No)
50%	35%	15%	No	No

*Shake the sample for 2 minutes.*

How to obtain a good texture of ready-mixed feed:

- **Rolled, not heat-treated grain.** The addition of roughly 20% rolled, not heat-treated grain will positively affect gastric health.
- **Expandate.** Several companies offer expandate, which is heat-treated feed that has is led through an expander instead of through the pelleting process and has a texture similar to toppings for dairy products. The effect on gastric health depends on the grinding used by the company. Note that the volume of expandate is lower than that of regular pelleted feed, and it is therefore essential to verify the amount feed from the feeder at regular intervals.

- **Colour and texture of manure.** Sows with bleeding gastric ulcers will have lumpy black faeces.
- **Pale sows.** A pale sow may suffer from gastric ulcer caused by internal bleeding. Investigate further if you see many pale sows.

Gastric USK is an extended health examination that may provide indication of the current health status in the herd. Post-mortem examinations are made on stomachs from min. 20 sows – preferably of different ages – to make the result as representative as possible. Ask your vet for more information on how to do this.