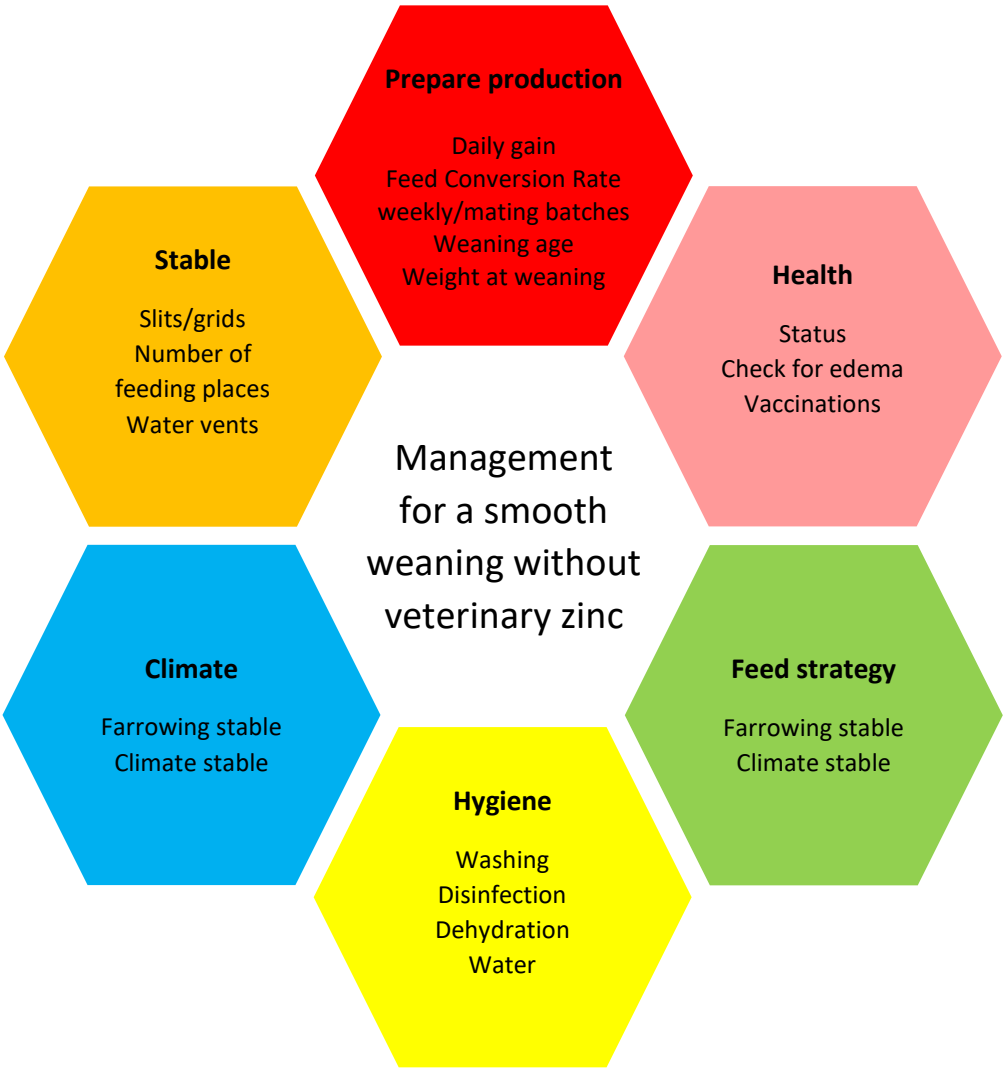
HEDEGAARD

Check on weaning without veterinary zinc

A problem-free weaning without veterinary zinc is an interaction of many factors.

When we (june 2022) remove the veterinary zinc from the weaning diets it will require an extra focus on a wide range of major focus points. It can be difficult to keep an overview of all points where it is important to make an extra effort to ensure a problem-free weaning without an increased use of antibiotics.

We have tried to create an overview of the major focus points in a checklist, where you can structure the points that are important in your production.



In the following you can put X at the major focus points you have checked in your production, or put X in the major focus points where an extra action needs to be done.

	Major focus	Check	Action
	Start weaning without zinc when you already have good production results in the climate stable. 500 g daily gain and a FCR at 1.7 FEsv/kg increase at 6-30 kg.	☐	☐
	Make sure that the weekly/mating batches is full so that there is no shortage of sows/gilts for farrowing in the individual weekly batches, as this will mean to many pigs weaned in different ages, when the climate stable is to be filled up.	☐	☐
	If the the number and pen places is pressed in the climate stable, you have to solve this problem. Max. 20-25 pigs per feeder.	☐	☐
	Although the piglets has learned to eat dry food in the farrowing stable, it remains the case that the older and the more robust the piglets is at weaning, the greater is the possibility of success. Min. 25-26 day old piglets (28-30 days nursing period)	☐	☐
	If you have concrete slits in the climate stable, you should consider replacing them for cast iron or plastic grids. They are more hygienic and much faster and cheaper to dry out and heat than concrete slits.	☐	☐
	The smallest pigs are the last to get a place at the feeder, so make sure there are enough feeding places (20-25 pigs per feeder). Important that the feeder are fully open from start, as the pigs must learn to use the feeder. Activate the feeder manually several times a day when you are checking the pigs, to promote accessibility and feed intake.	☐	☐
	Feeding on the floor increases the number of feeding places, and should be practiced the first few weeks in the climate stable. Likewise, the number of feeding places and availability of feed and liquid increases when allocating feed soup.	☐	☐
	When the pigs have started eating well, we do often see that water vents in the feeder are closed for better feed hygiene. In that case an additional water vent or water cup should be set up next to the feeder. A water vent on the opposite side of the pen will not be enough, and in that case water and feed intake will be reduced.	☐	☐
	The higher the health status is, the easier weaning. Do you have lower health status than Myc+Ap12 may a eradication of disease become current. - Talk to your advisors.	☐	☐
	Zinc keeps down the coli bacteria that produce the toxin Shigatoxin, which causes to edema disease. Talk to your vet. about having the pigs analyzed for these coli bacteria, and maybe start a vaccination. Price 6.00-7.00 dkr per pig.	☐	☐
	Is your or your piglet supplier's vaccination programme sufficient to handle a smooth weaning without zinc. - Talk to your vet.	☐	☐
	The feed strategy starts in the farrowing stable. It is very important that all pigs are eating in the farrowing stable. Start with at least 4 times daily feedings from no later than day 5 – “a little but often”. Everything should 30 minutes after feeding.	☐	☐

Major focus	Check	Action
It is important that the piglets are quickly in the process of eating after weaning - if the piglets starve the intestine will be damaged. Light in the stable the first 24 hours after weaning, will help the pigs start eating faster. Feed on the floor or even better soaked feed in long trough at min. 4 times daily the first days, while at the same time ensuring that the pigs get to activate the feeder.	☐	☐
Use a weaning feed with a low protein content composed of many various highly digestible protein sources, preferably with added probiotics and organic acid. Low acidity binding capacity (low calcium content). Use the same feed in the farrowing stable and in the period of weaning to avoid switching of feed when weaning.	☐	☐
If you do not have acid in the feed, you should at add acid to the drinking water. Apply 1.0 per thousand acid during the weaning period. If the level of bacteria is high, 2 per thousand acids can be used, but be aware that the pig's water intake does not goes down.	☐	☐
The main thing is that the pigs get through the weaning period with a healthy intestine and a low mortality rate. Accept that the daily gain will be slightly lower during the weaning period, as a healthy and strong pig will make up for lost growth before leaving the climate stable.	☐	☐
Weaning without zinc requires even more focus on hygiene. Never accept a bacterial soup of feed and faeces. Make sure that drinking water in feeders and cups is clean in farrowing and climate stable.	☐	☐
After soaking, the stable is thoroughly washed with soap, that all fat membranes where microbes can survive, removed. After washing, the stable and drinking water system are disinfected. Please follow the below washing and disinfection plans.	☐	☐

Cleaning before disinfection	Disinfection of stables and rooms without animals	Disinfection of stables and rooms with or without animals	Cleaning and disinfection water and water systems
After soaking and rough washing, the soap is laid out with foam equipment on all surfaces, floor, walls and equipment. In practice, the soap is laid out on all surfaces that have been in contact with animals or their feces. After 10-30 minutes, the soap can be washed off at high pressure. The impact time can be longer, but the soap must not dry before washing. **Desintec Stallclean Profi D:** Dosage: General cleaning 1,0 % Softening with Pressure washer 2,0 % Manual brush wash 4,0 % Average consumption: 1,0 litre Stallclean Profi D per 100 m² stable. About 10 litres of mixture per 30-50 m² surface.	After washing, disinfect all surfaces while moist, but not wet. **Desintec FL-Des GA:** Dosage: Surface disinfection: 1,0 % Cooling nozzles: 1,0 % Dipped disinfection: 2,0 % Foams when laying with foam equipment. 10 liters of solution ranges to about 50-75 m² flat. Full effect after 2-4 hours. Hot mist: 25,0 % Dosage: 1.0 litre Desintec FL-Des GA + 3,0 litres of water per 400-500 m². Venting after 8-12 hours. Cold mist: 1.0 litres Desintec FL-DesGA + 9,0 litres of water per 400 to 500 m². Venting after 4-8 hours. Mixture should be used within 2 weeks. Does not damage furniture and can be used from 5°C.	After washing, disinfect all surfaces while damp but not wet. Disinfection in pig and cattle stables, horse boxes and animal cages. Dipped infection of boots, equipment and tools, as well as disinfection of transport equipment, trucks, trailers, wheels, etc. **Desintec Peroxx Liquid** Dosage: Surface disinfection: 0,75 % Cooling nozzles: 0,75 % Dipped disinfection: 4,0 % Full effect after 30 minutes. Foams when laying with foam equipment, so it is easy to see how far you have come. 10 litres of mixture ranges to about 50-75 m² surface. The mixture should be used within a week. Gentle – can be used from 0°C. Therefore suitable for loading bays, delivery trucks, etc.	Cleaning and disinfection of drinking water and drinking water systems. Remove both organic and inorganic coatings. Effective disinfection of the water and lowers the pH. After water medication, the water system should be cleaned with Desintec W-Hr Aktiv Plus for 3-5 days. **Desintec W-Hr Aktiv Plus** Instructions for use: Dosed through medicine mixers, or directly in water vessels or water tanks. When adding animals, dosage should be carried out by means of a stock mixture. Dosage: Cleaning/disinfection of water systems: 1,0-2,0 % Continuous disinfection of drinking water: 0,2 ‰ Cleaning by continuous operation: 0,5-1,0 ‰ Shock disinfection buffer tanks/drinking vessels 0,5-1,0 ‰ Disinfection of wet feed tanks: 0,5-1,0 %

Major focus **Check** **Action**

Drying out and heating the stable is extremely important, otherwise the pigs will need much feed to maintain body heat, which will significantly reduce daily gain.
The pigs will lay and clump under the cover and not have the necessary feed intake.

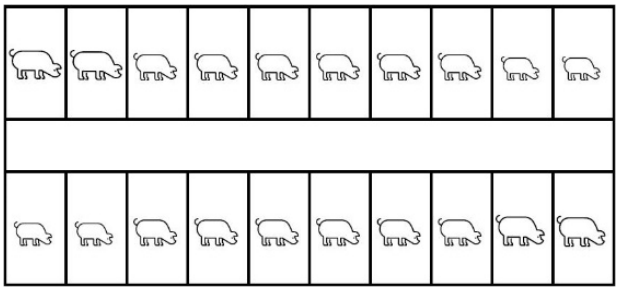
The definition of proper drying and heating in climate stables and farrowing stables is An air temperature, which must be equal to inventory and floor temperature - at minimum 22 degrees and 32 degrees on the floor under cover with floor heating.

Recommended stable temperature in two-climate stable with partially solid floor.

Day	1	7	14	21	28	35	42	49	56
Weight kg	5,5	6	7	8,5	11	15	18	25	30
Temp. u. upper deck °C	31-32	30-31	29-30	28-29	27-28	26-27	25-26	22-23	21-22
Floor u. upper deck °C	32	32	32	32	32	Closed	Closed	Closed	Closed
Targit roomtemp. °C	25-26	24	24	23	22	21	20	19	18
Targit humidity %	60	61	61	62	63	64	70	71	72
The room temperature must be adjusted to get the wanted temperature under the cover. Be careful – the less moisture is required, the more heat the stable consumes. Rules – When the underfloor heating is off, room temperature + humidity = max. 90									

Recommended strategy for room temperature in farrowing stables.

Stable design and function	Before farrowing	Farrowing to Day 4	Day 4-14	Day 14 to weaning
Sectioned with - Diffuse ventitalition - Partial slit floor - Underfloor heating in the piglet cavity	18 – 20 °C	20 – 22 °C	Reduce the temperature by 0,3 °C per day	17 – 18 °C
with radiation ventilation	18 – 20 °C	*) 20 – 22 °C	18 – 20 °C	18 – 20 °C
Sectioned farrowing stable - full-slits floor	18 – 20 °C	22 – 23 °C	20 – 22 °C	20 °C
Non sectioned farrowing stable (continuous function) - All ventilation types	19 – 20 °C	19 – 20 °C		
*) Depending on ventilation performance as well as outdoor temperature and thus the local environment in the pen. The piglet cavity must always be free of drafts.				



Sort and insert the pigs into the Climate stable, so you get a one's heat production throughout the stable.
Sort 2-4 teams with the largest pigs and 2-4 teams with the smallest pigs, and the rest evenly distributed.
Insert smallest and largest pigs as shown here.