



## Kansainvälisesti kilpailukykyinen sianlihantuotantoketju -hanke



### H13 - The environment of the piglets

**Check piglet's environment in the heating corner / area (piglet's nest) on morning, at least before 8:30. The environment is optimum if:**

1. The piglets lie together, side by side and fill the heating area's back corner also.
2. It is dry.
3. It is draught -free (air wind)
4. All piglet's have enough space on heating area.
5. On the bellow is temperature strategy for optimise piglet's covered heating area environment.

Day	0-4	4-14	14-wean.
Floor temperature on piglet's sleeping area °C	34 - 36	32 - 34	30
income water temp. °C	40 - 42	approx. 40	30 - 35
Heat lamp (100 W)	+	turn off day 3 - 5, (according of need)	-



Piglet's nest working well shortly after farrowing



The well working nest end of lactation

**Piglet's nest / heating area is too cold, if:**

- The piglets lie huddle together.
  - Check floor heat or is heating lamp turned too soon off
  - Check for draught / chimney effect if lamp have placed on the piglet's nest roof.



The piglets have too cold

**Piglet's nest / heating area is too warm if:**

- The piglets don't lie under heating lamp, what is on.
  - Day 0-5, if under lamp is too hot → Check the effect of lamp (100 watt) and the distance to the floor (50 cm).
  - Day 5 → the piglets don't need heating lamp anymore
- The piglets do not lie on the nest's back corner or they lie outside of the piglet's nest.
  - Check floor heat (do adjustment for income water) and turn heating lamp off if needs.



The piglets don't need any more heating lamp



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## Additional comments - The environment of the piglets

Check piglet's environment always immediately on the morning, at least before 8:30, because night time is for piglet a highly critical time. The piglets and a sow have very different requirements for their optimal environment. The sow's requirements must take notice on farrowing room climate and the piglets requirements must become right on the piglet's nest. Switch on the heat lamps in farrowing pens one – two days before expected farrowing day.

Usually the new born piglets learn to use piglet's nest about one day after farrowing. That's why on farrowing day and day after is necessary to have higher room temperature (about 22°C), if on farrowing using section / group management.

1. If the piglets do not lie side by side on nest / heating area or not lie on the nest back corner, you must do something. If the piglets have troubles to stay warm in the early of lactation period, you could put plate where is smaller walking hole in front of the piglet nest. That plate cover more and that how rice temperature. It is essential, that the hole on plate is enough large that all piglets can go in and out from the piglet nest (min. 20 cm high and 15 cm wide).
2. A wet floor in the nest / heating area is highly critical for the piglets. Wet floor is 5 - 10°C colder than a dry floor. A wet floor in the nest / heating area may be caused by:
  - Inadequate drying of the floor before transfer of pigs
  - Piglets have diarrhoea
  - Room temperature is too high
  - The sow is playing with the water
3. The covered heating area must be in the warmest place on the pen. Pigs will feel a draught if cold air flows into the warm nest area. A draught typically arises from some holes in the nest, especially:
  - From the hole for the heating lamp, when the lamp has removed, and a roof is missing (chimney effect).
  - Some holes on a joint between the back wall and the side wall or the roof of the creep area.
  - Broken nest or haven't enough or not at all any edge downwards from the nest roof.If nest back wall is cold, or there are some holes, it could also cause mess on the sleeping area.
4. When piglets are four weeks old, they need about three times more space as they need when they were born. That's why the end of the suckling period, when the room temperature is below 20°C, it is necessary that the piglets have on the nest requirements temperature of the piglets.
5. The temperatures are guiding → always adjust must base on the behaviour of the piglets (how and where they lie). New born piglets requirement temperature is 34-36° C; lower temperature will lower the body temperature of the new born piglets. Experience shows that after about two hours on a cold floor, piglets' body temperature drops, and the risk of disease increases significantly.
  - You can measure floor heat income and outcome water temperatures with an infrared thermometer. The difference must not be more than 2-3 degrees. Check the circulating pump if the difference is bigger. A bigger difference can also become on some cooler part on the circulation. For example, if there is a wet floor. You could also feel large differences in temperature, if you hold with one hand on the income pipe and the other hand on the outcome pipe.
  - In farrowing pens facing sideways, there is a greater heat loss in the creep area than in pens facing backwards. Therefore, could be on those pens necessary to have a higher income temperature or use a higher effect in the heat lamp. In fully slatted pens with heat plates, the income temperature should be 37 - 38°C.

In periods where is large variation on temperatures between day and night:

- Diffuse ventilation and piglet's have nest → no need to change
- Air inlets ventilation → You may need to increase the temperature in the room 1-3 degrees