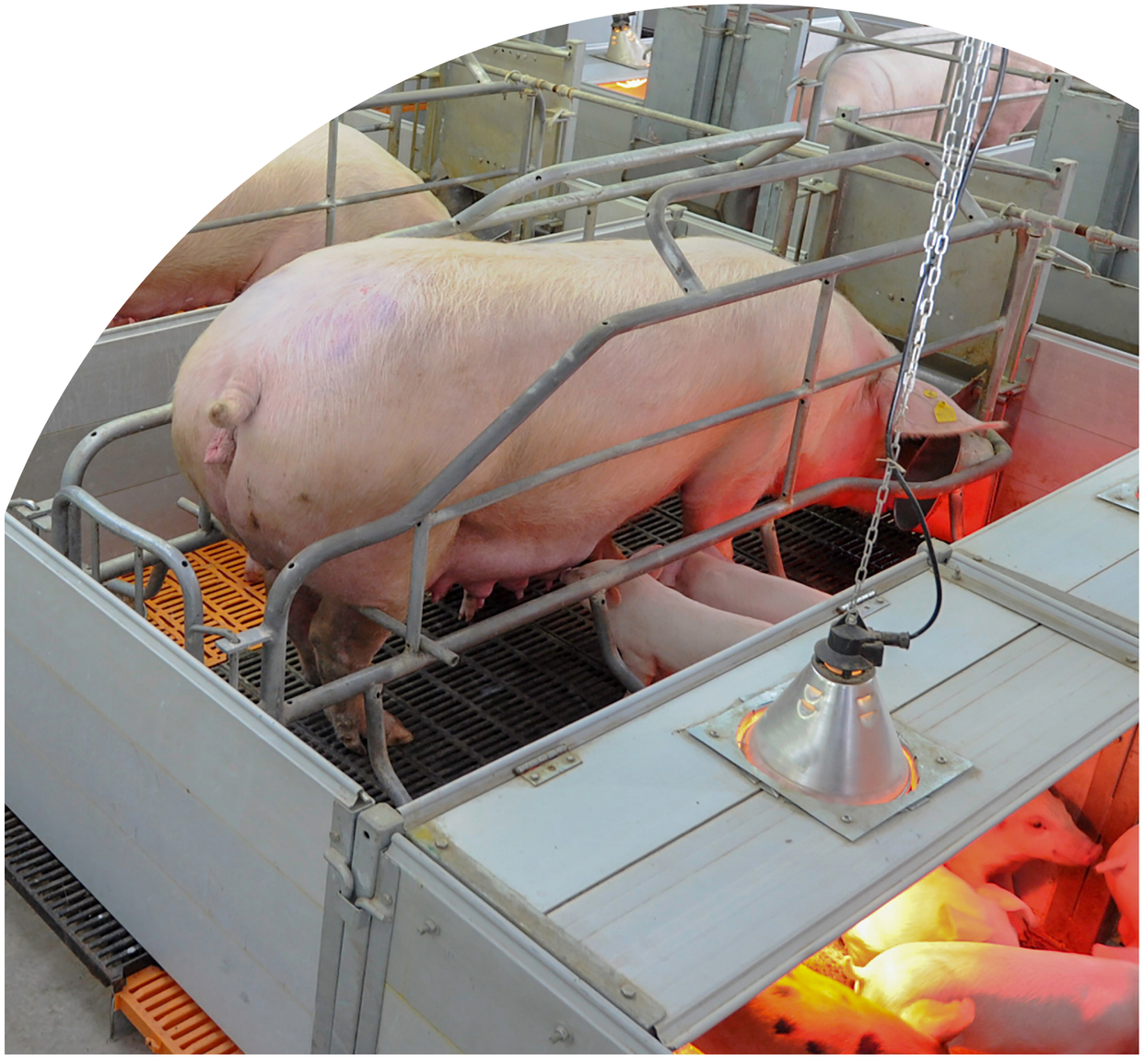


nuscience
member of the royal agrifirm group

# Summer Balance

Nutritional supplement for heat stressed sows



## Application

A supplement for lactating sows
Inclusion: 10 kg/ton in lactation feed

ATC
ACTIVE **THERMO** CONTROL

## Main benefits

- Higher feed intake
- Higher milk production
- Reduced weight loss
- Higher litter weight
- Higher farrowing rate
- Increased liveborn

Claims associated with products may be different based on government requirements. Certain statements may also not be applicable in all regions.

**More information**

Go to **www.agrifirm.com**, call to **T** +32 (0)9 280 29 00 or contact your advisor.

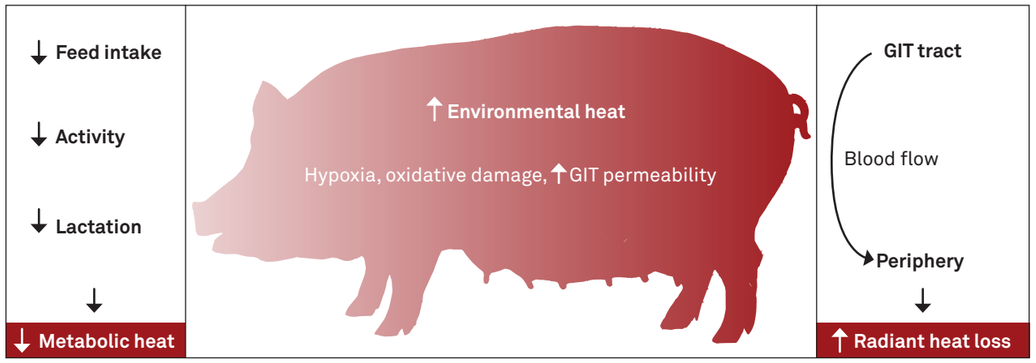
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ATC
ACTIVE THERMO CONTROL

# Improving sow performance during hot conditions with active support

*Although sows have a relatively large thermoneutral zone in which production and reproduction is not affected by temperature or humidity, the current farrowing house conditions as well as the increasing summer temperatures are responsible for important economic losses. The Active Thermo Control concept (ATC) offers support to hyperprolific sows to maintain their production and health during heat stress.*




Pigs, as most mammels are not able to cool themselves down in an efficient way. Lactating sows are living constantly on the edge, even in cooler months. Sows are kept in farrowing houses designed to keep young piglets warm. On top, hyperprolificacy has increased metabolic heat production and newborn piglets need more attention as they are born smaller and more sensitive to hypothermia. When summer strikes with more extreme temperatures as in the past, heat stress situations in sows occur sooner and more severe.

The effects of heat stress becomes for most farmers clear when feed intake drops. A natural reaction to limit internal heat production. Not so visual, but as important, is the damage heat stress is causing in the intestines. The combination of these two effects, on the one hand lower intake of nutrients and on the other hand less efficient uptake of nutrients in the bloodstream will affect the ongoing lactation and jeopardize the upcoming insemination and gestation.

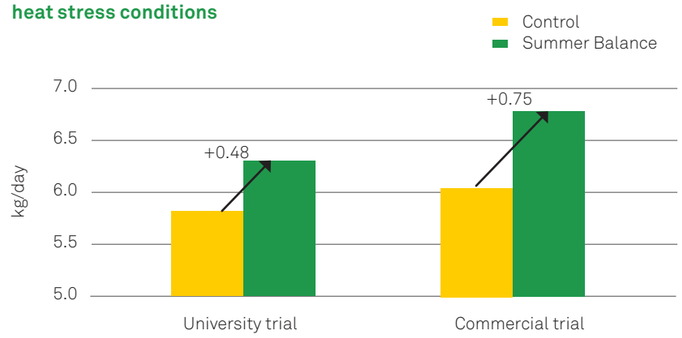
An extra effect of heat stress and its consequence on the intestines is that blood will be flowing towards essential parts of the body such as heart, lungs but also skin, in order to maximize heat loss. This will cause ischemia and as a consequence oxygen shortage in the epithelial cells. As the intestines are host to enormous amounts of beneficial but also pathogenic microorganisms the epithelial cells play a massive role in regulating health. Leaky gut, caused by ischemia will allow translocation of pathogens and endotoxins into the bloodstream causing inflammation.

The ATC concept focusses on good practices on farm- and nutritional level in order to limit the effects of heat stress. Proper management during heat stress will allow increased cooling of the sow. By choosing the correct nutritional strategies metabolic heat production, electrolyte loss, feed intake and gut protection can be optimized. **Summer Balance** the sow supplement of Nuscience experts a dual action. An innovative direct action regulating feed intake to counteract a negative energy balance and an indirect action to protect the gut.

## Improving feed intake

A unique and highly innovative module regulating the two main drivers of feed intake. By influencing the first driver, the hedonic pathway, feed intake will be maximized during feeding moments to compensate diurnal low feed intake. By influencing the second driver, the homeostatic pathway, voluntary feed intake will be influenced by appetite and satiety signals. This unique mode of action has been extensively tested at universities and in the field in sows under heat stress conditions and significantly increased feed intake during lactation.

**Effect of Summer Balance on sow's feed intake during lactation under heat stress conditions**

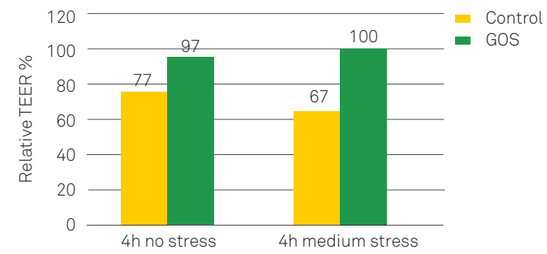



## Fortifying and protecting GIT

By protecting the gastrointestinal tract from stress, translocation of pathogens and endotoxins in the blood will be blocked. Through a well functioning GIT, the sow will be able to limit inflammation and optimally absorb nutrients. This will maximize the energy and mineral flow to be used for lactation and reproduction.

**Summer Balance contains:**

- Betaine for increased osmoprotection of cells
- Natural plant polyphenols with bioactive functioning
- Synergistic antioxidants: vitamin E, vitamin C and organic selenium
- Galacto-oligosaccharides (GOS): improving gut barrier functioning
- Unique endotoxin neutralization




## General tips and tricks

### Management precautions

Supply adequate quantity of fresh & clean water

Active stable cooling

Feed during cooler moments

Limit sow activity (movements, *etc.*)

### Nutritional precautions

More concentrated feed

Increase fat content

Reduce crude protein content

Feed less fiber

Pay attention to electrolyte balance