

**In case
of fever
or pain...**



**LET'S MAKE THEM
FEEL BETTER**

Pracetam®

Economic and welfare consequences of fever related issues

Although fever is a natural mechanism and is beneficial, it should be controlled. Too high a fever can lead to associated clinical symptoms and can also diminish the efficacy of immune defenses.

Fever can have harmful consequences on the general condition of the animals: depression, reduction in feed consumption, even anorexia; risk of secondary bacterial infection.

Consequences in growing pigs (fever or pain caused by castration, teeth clipping, tail docking, etc.)

- Degradation of growth performance
 - Decrease of feed intake
- Reduced efficacy of anti-infective treatments administered by oral route

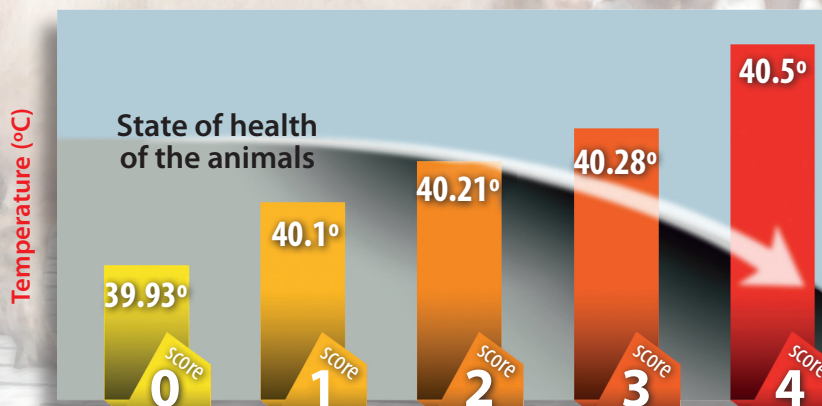
Consequences in sows (fever or post-partum pain)

- Abortions
- Degeneration of state of health
- Stress caused by pain

Pracetam has been proven efficient to fight fever.

It has a powerful analgesic effect reducing the stress caused by pain in animals and improving their welfare.

- A preliminary supporting study on the efficacy of Pracetam® 10% Premix has demonstrated the tight correlation between clinical scores and body temperature ($p < 0.001$).



If temperature rises above 40°C, even slightly, the general condition of the animal worsens.

Pracetam helps to quickly reduce fever and maintain production levels.

- Its active component, paracetamol, is a safe and efficient substance, with many years of history in medical use. Now that it has been developed for animal health, it can be **first choice remedy for treatment of fever and pain**, essential for your first aid on-farm kit.

Rational use of antibiotics with Pracetam®

All legislation and production trends in Europe show that responsible use of antibiotics and decrease in their usage are key points to delivering a competitive and sustainable product.

Pracetam® helps reduce antibiotic use.

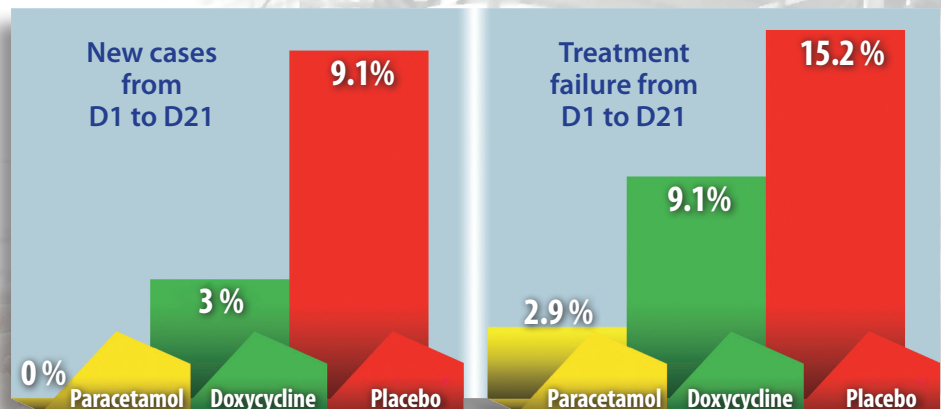
It efficiently treats fever and symptoms caused by viral infections (Influenza, PRRSv), thus allowing rational use of antibiotics and reducing their consumption.

- A field trial in order to compare the efficacy of two different treatments showed the following:

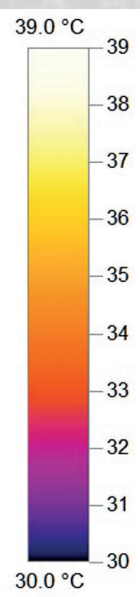
Group 1 treated with Pracetam® 20% Oral Solution (paracetamol) for 5 days.

Group 2 treated with Doxycycline in water for 4 days.

Group 3 control group (placebo).



Pracetam® showed lower rate of treatment failure, no relapse or new cases during study.



Thermal image of sows in group housing.

Main Indications

Pracetam is a highly versatile product, which can serve a variety of production purposes and is applicable throughout the entire production cycle.

Influenza-like syndrome / Respiratory disease

Sows: Pracetam® can be used throughout pregnancy and lactation.

Fattening pigs: Pracetam® can be used from weaning to slaughter for influenza-like syndrome, respiratory disease, PRRS outbreak or non-specific fever.

Peripartum management

Pracetam® can be used around the farrowing period. Safety has been demonstrated in pregnant and lactating sows.

Post-weaning multisystemic wasting syndrome (PMWS)

Pracetam® can be used to reduce the clinical expression of PCV-2 (wasting piglets).

Post-vaccinal reactions

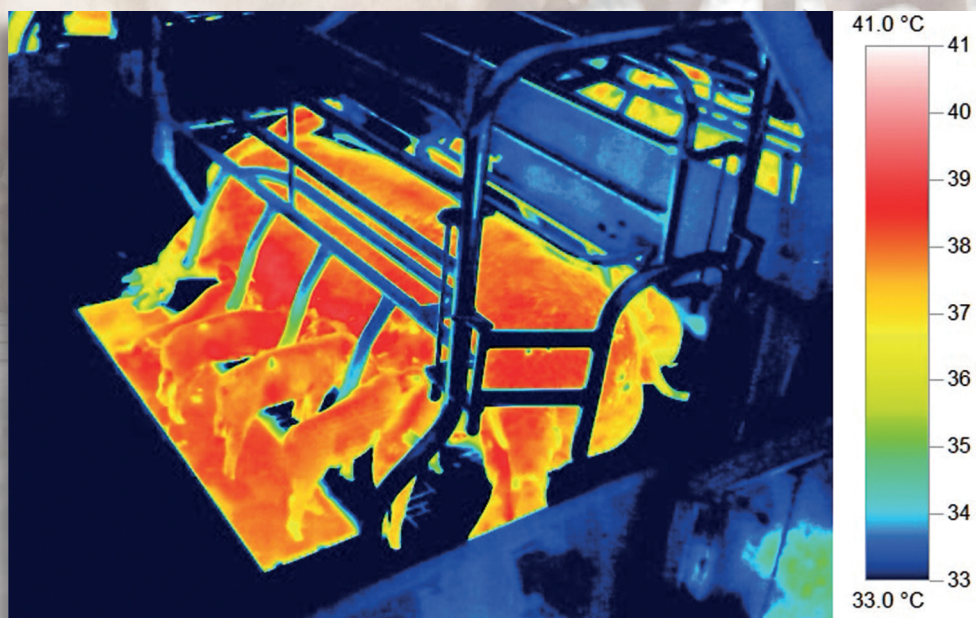
Sows: Pracetam® can be used at vaccination time, either just before or just after vaccination. Safety has been demonstrated in pregnant and lactating sows.

Pain linked to castration

Pracetam® has been used in the field of a castration study. Security has been demonstrated in piglets.

Weaning period (stress management)

Pracetam® can be used during the weaning period (fever/stress).



Thermal image of nursery.

Comparative with similar remedies

Aside from helping reduce antibiotic use and having an excellent tolerance, Pracetam® is a product with no side effects or risks in application. The results of studies confirm its safety and efficiency at all times of application.

COMPARATIVE TABLE				
PRACETAM®	ACETYSALICYLIC ACID	SODIUM SALICYLATE	KETOPROFEN	MELOXICAM ORAL SUSPENSION
TOXICITY / RISKS (ULCERS)				
No risk of ulcers.	Ulcerogenic. Do not use in case of risk of ulcers.	Ulcerogenic. Stop the treatment in case of dysfunction of stomach or intestines.	Very ulcerogenic. Do not use in case of risk of ulcers.	Do not use in case of risk of ulcers.
BLOOD COAGULATION				
No anti-coagulation effect.	Do not use in case of hemorrhagic risk.	Do not use in case of hemorrhagic risk. Reversible after 7 days.	Do not use in case of hemorrhagic risk.	Do not use in case of hemorrhagic risk.
REPRODUCTIVE TOXICITY				
Safe for pregnant and lactating sows at 3 times the dose.	The use is not recommended during pregnancy and lactation. Hemorrhagic risk for sows during delivery.	The use is not recommended during pregnancy and lactation.	The use is not recommended during pregnancy. Hemorrhagic risk for sows during delivery.	Can be used during pregnancy and lactation.
USES				
Pain +++ Inflammation - Fever +++	Pain ++ Inflammation ++ Fever ++	Pain ++ Inflammation ++ Fever ++	Pain +++ Inflammation +++ Fever ++	Pain +++ Inflammation +++ Fever ++



LET'S MAKE THEM FEEL BETTER

- Better action against fever.
- Better general condition of animals.
- Better and rational use of antibiotics.
- Better absorption and tolerance.
- Better withdrawal period: 0 days.
- Better solubility and stability.
- Better tools for the best in business!

Pracetam®

Pracetam® complete product range



Pracetam® product range characteristics

Drinkable PRACETAM® 20% Oral solution for pigs. **Composition:** Paracetamol 0.20 g. Excipient qs 1ml **Properties:** Paracetamol or acetaminophen, or N-acetyl-p-aminophenol is one of the derivatives of para-aminophenol with analgesic and antipyretic properties. Maximal concentrations are attained a little less than 2 hours after ingestion. **Therapeutic indications:** in pigs: Treatment for fever symptoms caused by flu. **Directions for use and method of administration:** 30 mg of paracetamol per kg of live weight per day, during 5 days, by the oral route administered continuously in the drinking water, which is 1.5ml of solution per 10kg live weight and per day during 5 days. **Waiting time:** meat and offal production: 0 days. **Contraindications:** Do not use in animals with a known hypersensitivity to paracetamol or to other constituents of the product, or with a serious hepatic or renal insufficiency. **Undesirable effects:** No undesirable effect has been observed as a result of the administration of this medication at therapeutic doses. **Use during pregnancy or lactation:** Studies in laboratory animals have not shown any evidence of teratogenic or fetotoxic effects at the doses used therapeutically. The administration of the product to gestating or lactating sows, at three times the therapeutic dose has not shown any undesirable effect. **Overdose:** No side effect has been demonstrated in pigs at up to 5 times the recommended dose. **Medical and other interactions:** None known for pigs. **Packaging:** 1 litre or 5 litre container. **AMM number:** FR/V/0407159 2/2005 of 20/12/2005 . **Holder of marketing authorisation:** SOGEVAL, 200 Route de Mayenne, BP 2227, 53022 LAVAL CEDEX 9, FRANCE.



Drinkable PRACETAM® 40% Oral solution for pigs. Composition: Paracetamol 0.40 g. Excipients: Dimethyl sulfoxide, Pon-
ceau 4R(E124), Macrogol 300. **Properties:** Paracetamol or acetaminophen, or N-acetyl-p-aminophenol is one of the deriva-
tives of para-aminophenol with analgesic and antipyretic properties. Maximal concentrations are attained a little less than 2
hours after ingestion. **Therapeutic indications:** in pigs: Treatment for fever symptoms caused by flu. **Directions for use and
method of administration:** 30 mg of paracetamol per kg of live weight per day, during 5 days, by the oral route administered
continuously in the drinking water, which is 0.75ml of solution per 10kg live weight and per day during 5 days. **Waiting time:**
meat and offal production: 0 days. **Contraindications:** Do not use in animals with a known hypersensitivity to paracetamol
or to other constituents of the product, or with a serious hepatic or renal insufficiency. **Undesirable effects:** No undesirable
effect has been observed as a result of the administration of this medication at therapeutic doses. **Use during pregnancy or
lactation:** Studies in laboratory animals have not shown any evidence of teratogenic or fetotoxic effects at the doses used
therapeutically. The administration of the product to gestating or lactating sows, at three times the therapeutic dose has not
shown any undesirable effect. **Overdose:** No side effect has been demonstrated in pigs at up to 5 times the recommended
dose. **Medical and other interactions:** None known for pigs. **Packaging:** 0.5 litre, 1 litre, 2.5 litre or 5 litre container. **AMM num-
ber:** FR/V/2838154 7/2013 of 19/12/2013 . **Holder of marketing authorisation:** SOGEVAL, 200 Route de Mayenne, BP 2227,
53022 LAVAL CEDEX 9, FRANCE.

PRACETAM® 20% Oral powder for pigs. Composition: Paracetamol 0.2 g. Excipient qs 1.00g **Properties:** Paracetamol or ace-
taminophen is a derivative of para-aminophenol with analgesic and antipyretic properties. Its antipyretic effect is explained
by its capacity to inhibit brain cyclo-oxygenases. Paracetamol is a weak inhibitor of the synthesis of COX-1 and, in consequence
does not have an undesirable effect on the gastro-intestinal tract, nor any modification of platelet aggregation. **Therapeutic
indications:** target species: porcines (pigs and weaners). Treatment for fever symptoms caused by a respiratory infection, if
necessary in association with an appropriate anti-infective treatment. **Directions for use and method of administration:** Oral
route. 30 mg of paracetamol per kg of live weight per day, while the pigs suffer from hyperthermia, for a maximum of 5 days.
The product is administered continuously in the drinking water, at a dose of 1.5g of oral powder per 10kg of live weight. Accord-
ing to their clinical condition, the animals consume a variable quantity of water supplemented with the medicine. To assure
a correct dosage, the concentration in the drinking water must be adjusted in consequence. **Contraindications:** Do not use
in animals with a known hypersensitivity to paracetamol or to other constituents of the product, or with a serious hepatic
or renal insufficiency. Do not use in animals suffering from dehydration or hypovolemia. Administration concomitantly with
nephrotoxic drugs must be avoided. **Undesirable effects:** In rare cases, at therapeutic doses, a transitory softening of faeces
can appear and persist for up to 8 days after the cessation of treatment. This undesirable effect does not affect the general
condition of the animal and disappears without specific treatment. **Warning specific to each target species:** Animals showing
a loss of appetite and/or a poor general condition must be treated by the parenteral route. In case of viral or bacterial infection,
an appropriate anti-infective treatment must be administered concomitantly. **Use in cases of pregnancy or lactation:** Studies
in laboratory animals have not shown any evidence of teratogenic or fetotoxic effects at the doses used therapeutically. The ad-
ministration of the product to gestating or lactating sows, at three times the therapeutic dose has not shown any undesirable
effect. **Waiting time:** meat and offal production: 0 days. **Legal category:** Veterinary use **Packaging:** 10kg bag **AMM number:**
FR/V/1990948 4/2009. **Holder of marketing authorisation:** SOGEVAL, 200 Route de Mayenne, BP 2227, 53022 LAVAL CEDEX 9,
FRANCE.

Premixed medicinal PRACETAM® Paracetamol 100. Composition: Paracetamol 0.1 g. Excipient qs 1.00g **Properties:** Parace-
tamol or acetaminophen, is a derivative of para-aminophenol with analgesic and antipyretic properties. Paracetamol is a weak
inhibitor of the synthesis of COX-1 and, therefore does not have an undesirable effect on the gastro-intestinal tract, nor any
modification of platelet aggregation. **Therapeutic indications:** target species: porcines (pigs and weaners). Treatment for the
reduction of fever symptoms in the context of an acute respiratory infection, in association with an appropriate anti-infective
treatment. **Directions for use and method of administration:** Oral route. The daily dose is 30 mg of paracetamol per kg of live
weight, during 5 consecutive days, administered in feed. **Contraindications:** Do not use in animals with a known hypersensi-
tivity to paracetamol, or with a hepatic or renal insufficiency, or hypovolemia. Administration concomitantly with nephrotoxic
drugs must be avoided. **Undesirable effects:** No undesirable effect has been observed as a result of the administration of this
medication at therapeutic doses. **Use during pregnancy or lactation:** The safety of the product has been demonstrated in
gestating or lactating sows, by studies during which it has been administered at three times the recommended dose. **Special
precautions for use:** This premixed medicine is designed for use in the preparation of medicinal solid feedstuffs and cannot be
used in its native state; the rate of incorporation of the premixed medicinal cannot be less than 5kg/ton. **Waiting time:** meat
and offal production: 0 days. **Legal category:** Veterinary use. **Packaging:** 10kg or 25 kg bag **AMM number:** FR/V/7299701
3/2003 of 23/01/2003. **Holder of marketing authorisation:** SOGEVAL, 200 Route de Mayenne, BP 2227, 53022 LAVAL
CEDEX 9, FRANCE.

- Better action against fever.
- Better general condition of animals.
- Better and rational use of antibiotics.

Pracetam®



Ceva Santé Animale, S.A.

10, av. de La Ballastière - 33500 Libourne - France

Tél: 00 33 (0)5 57 55 40 40 - Fax: 00 33 (0)5 57 55 41 98

www.ceva.com - contact@ceva.com