

# Water

Healthy water is a core requirement for any swine operation. Water is the most consumed nutrient, by volume, in a pig's diet<sup>1</sup>, yet often receives inadequate attention.

Water intake is directly correlated to feed intake. So keeping the water supply in a swine operation clean and performing at maximum efficiency is essential to a well-functioning nutrition program. Due to water importance to a successful nutrition program, its quality and value should be given as high a priority as the quality and value of feed chosen for your herd. Minerals and microbes are two factors that can impact the quantity and quality of water swine consume, by restricting the flow through pipes and by simply causing the water to smell or taste off.

**AQUAKAT**® By addressing water-related issues such as lime build-up, iron, hydrogen sulfide smell and chlorine taste, the AquaKat (Penergetic's water device) can improve the water's taste and quality. This can lead to swine drinking more and making more efficient use of the water they do drink – creating the potential for healthier and more productive animals.



**AQUAKAT 2"**  
Capacity: 3,000 gal/day

AquaKat technology was developed over 25 years ago. An AquaKat is easy to install (requires no plumbing/disruption to the water lines), no on-going operating expenses (no filters to change, salt or chemicals to add or power supply) and the first AquaKats (installed over 25 years ago) are still in use today.

The AquaKat offers the following attributes:

- Improves water's taste and smell
- Eliminates lime build-up and rust
- Prevents biofilm in lines
- Eliminates chlorine taste in water
- Keeps water nipples & mister from clogging
- Increases nutrient bioavailability

<sup>1</sup> Under normal conditions, swine consume 2 to 5 quarts of water / lb. of dry feed or 7 to 20 quarts of water / 100 lbs. of body weight daily.

## AQUAKAT USAGE AT TWO MINNESOTA SWINE OPERATIONS

**First Location:** Operator says: "Before AquaKat installed, water filter on the main water line had to be cleaned every two weeks or pigs had no water (as filter filled with sediment shutting off flow of water)." Yet, as shown in picture (on right), six weeks after AquaKat installed there is still no sediment in the filter and has not needed to clean it". He also says: "same water source supplies the house as the barns (and in the past would never drink water at the barns). Yet, since AquaKat was installed, the water at the barn now tastes and smells better than at the house." – so he now drinks (and prefers) it.



**Second Location:** This property contained five (5) swine houses: two recently emptied, the three remaining houses still contained swine (close to market weight). These three barns were identical in terms of genetics and age of pigs, feed rations, water, etc. The only difference was that one barn was equipped with two AquaKat XLs on the water line. Without expressing an opinion, the operator asked us to first visit one of the non-AquaKat (Control) houses and then go into the AquaKat barn. As documented below, the differences simply by changing the water were dramatic.

	CONTROL BARN	AQUAKAT BARN
<b>Demeanor/Disposition</b>	jittery, nervous, irritated, jumping up on one another	calm, appeared relaxed, contented, ≈ 30% sitting on haunches looking at us
<b>Hide Coloration</b>	grey	pink
<b>Tail Biting / Scratches</b>	yes, easy to spot evidence of both	no tail biting evident, one scratch
<b>Coughing</b>	high incidence, various animals	1 coughed in back of barn after 5 min.
<b>Odor</b>	strong, prevasive swine house odor	noticably fresher smelling
<b>Slurry Condition (thru slats)</b>	still, nothing evident	bubbling, active

