GIVE WATER ITS DUE IN PORK PRODUCTION

Water is the most consumed nutrient, but its importance is often overlooked.

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Although water is by far the most consumed nutrient in pork production, it almost always gets the least amount of attention.

Issues relating to water can have significant, usually negative effects on animal vigor and performance. To avoid these impacts, check water quantity and quality on a regular basis and correct deficiencies. Becoming proficient at identifying, troubleshooting, and treating water issues is paramount to good animal husbandry and performance.

HOW MUCH IS ENOUGH?

How much water is sufficient for pigs? The correct answer is: it depends.

The stage of production and size of the animal will have significant impacts on the water quantity needed.

When pigs are farrowed, their bodies are made of about 70% water.[1] Mature market pigs' bodies have less by comparison; about 55% of their body weights are water. Much of this difference is due to the fact that lean muscle is approximately 75% water, while fat tissue only contains 20% water.[2]

Water quantity adjustments will need to occur in each growing stage. Nursery pigs should have a flow rate from water cups or nipples of 1 cup/minute, with no more than 10 pigs per waterer. Finishing pigs and breeding animals should be receiving 4 cups/minute from nipples or water cups, with 12-15 pigs per waterer in ideal conditions.

1. Bierlein, Becky. "How to minimize nursery fallouts." *Pork Magazine.* Nov./Dec. 2013.
2. Almond, G. W. "How Much Water Do Pigs Need?" *North Carolina State University.* 1995.

FACTORS AFFECTING WATER QUANTITY

Many other factors can impact how much water pigs need. The following list outlines some factors affecting water quality.

- Ambient temperature: Pigs require more water during hot summer temperatures. Additionally, they will change feed and water intake patterns to minimize excess metabolic heat production during the heat of the day by eating during the cooler periods of the day.
- Diet: When diets contain increased crude protein and salt content, pigs will consume more water. Their bodies require the additional water to deaminate, or break down, and dispose of excess amino acids or to maintain fluid equilibrium by removing extra salt.
- Housing: Increased pen density or competition at waterers will minimize the capability of pigs to increase water intake as needed.
- Disease status: Pigs that are exhibiting diarrhea due to disease challenge will require much greater levels of water and electrolytes to maintain water equilibrium. At the same time, their desire to consume adequate levels of water will often decrease.
- Flow rate: Having a water flow rate that is less than optimal will very likely limit the pigs' ability to properly consume adequate levels of water. Conversely, especially with young pigs, if flow rate is too high, water consumption could also be reduced if the waterer sprays pigs, frightening them.
- Water temperature: During hot weather, providing cool water will increase water consumption in pigs.
- Productivity: Lactating sows are supporting much larger litters and, thus, producing much more milk than in years past. To keep up with milk production, sow water consumption is greater and of even more importance. Sows cannot produce adequate levels of milk for their offspring without adequate water intake.

Maintain overall health and performance of pigs in all production stages by providing the right amount of water at the right time.

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