

Water: The Most Important Nutrient

By Richard Barczewski
University of Delaware
NEWARK, Del. — While eating lunch recently in a local restaurant, I ran into a friend who happens to be in the feed business. This particular individual told me

that he regularly reads this column and would like to see more information on feeds and feeding.

Since I needed a topic for this week and thought we all could use a refresher on nutrition, I decided to write a few lines on the subject.

The word "nutrition" has struck

fear in the hearts of many livestock producers who are used to buying their feed ready mixed at a local feed store. Hand calculating a ration for protein, energy, calcium, phosphorus and other nutrients can be a monumental task. Once you un-

derstand the importance of the various nutrients and their effect on pig performance, perhaps this task will be easier to bear.

For now, though, let's keep it simple.

Pigs need a whole host of nutrients for normal growth and well-being, including water, energy, protein, minerals and vitamins. Wild pigs are omnivorous, that is, they eat a wide variety of foods from both plant and animal sources. As a matter of fact, their digestive system and eating habits are more like those of humans than any other domestic animal species.

In commercial operations today, hogs are fed diets consisting of cereal grains, a protein supplement (soybean oil meal, peanut oil meal, fish meal, linseed oil meal and the like), mineral and vitamin supplements, and salt. These ingredients are blended together to ensure that every bite is as nutritious as the last.

Perhaps the most important nutrient of all is water. Because of its availability and low cost, most producers don't even consider water a nutrient. But actually, it's the single most essential one. Pigs can live a lot longer without feed than water.

To optimize productivity in your swine operation, provide your hogs with free-choice water. Failure to do so will only result in reduced growth rate and feed efficiency, decreased sow milk production and, ultimately, reduced profitability.

Generally speaking, pigs will drink about one quart of water for every pound of dry feed they eat. Lactating sows require more water since the bulk of their excreted milk is water.

What factors affect a pig's water needs? Environmental temperature and the productive stage of the animal are the major ones. Higher temperature, especially during summer months, will increase a pig's water requirement.

Providing unlimited fresh, clean water is essential in keeping consumption at maximum. Bowl type automatic and nipple waterers are two of the best ways to do this. The nipple waterer has the advantage of being cheaper and cleaner. Provide at least one waterer for each 20 to 25 pigs to ensure adequate consumption.

In conclusion, water is essential for optimum production and profitability in a swine operation. Don't overlook it. Fail to provide adequate water and your profits will go down the drain.

NEW STEEL UNDERGROUND FUEL STORAGE TANKS

Capacity (Gallons)	Diameter	Length	Gauge (Thickness)	Weight (Pounds)	Price FOB Quarryville
285	3'0"	5'6"	12	277	149.00
550	4'0"	6'0"	10	537	225.00
550	4'0"	6'0"	7	738	280.00
1,000	4'0"	10'8"	10	845	380.00
1,000	4'0"	10'8"	7	1,158	440.00
1,000	5'4"	6'0"	7	1,059	445.00

Tanks are fabricated in strict accordance with the specifications of Underwriters' Laboratories, Inc. Exteriors of underground tanks are coated with black asphaltum paint. Exteriors of above ground tanks are coated with red primer

NEW STEEL UNDERGROUND sti-P3 FUEL STORAGE TANKS

Capacity (Gallons)	Diameter	Length	Gauge (Thickness)	Weight (Pounds)	Price FOB Quarryville
550	4'0"	6'0"	7	831	555.00
1,000	4'0"	10'8"	7	1,266	820.00
1,000	5'4"	6'0"	7	1,164	820.00
1,500	5'4"	9'0"	7	1,577	1,100.00
2,000	5'4"	12'0"	7	1,914	1,248.00
3,000	5'4"	18'0"	7	2,657	1,670.00
4,000	5'4"	24'0"	7	3,403	2,080.00
5,000	6'0"	23'10"	1/4"	5,508	3,090.00
5,000	8'0"	13'4"	1/4"	4,800	2,660.00
6,000	6'0"	28'10"	1/4"	6,239	3,535.00
6,000	8'0"	16'2"	1/4"	5,500	3,000.00
8,000	8'0"	21'6"	1/4"	6,927	3,660.00
10,000	8'0"	26'10"	1/4"	8,357	4,310.00
10,000	10'0"	17'0"	1/4"	7,446	4,020.00
10,000	10'6"	15'9"	1/4"	7,412	4,070.00

The sti-P3 tanks bear Underwriters' Underground Label. sti-P3 Label, 30-year limited warranty. The sti-P3 tanks are equipped with sacrificial galvanic anodes, urethane paint and dielectric bushings. The sti-P3 are equipped with the Protection Prover II (to monitor anode voltage)

USED STEEL STORAGE TANKS

From 275 to 30,000 Gallons At .05¢ to .06¢ Per Gallon

USED UNDERGROUND FIBERGLAS STORAGE TANKS

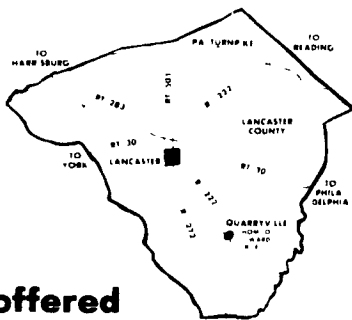
6,000 Gallons At 12¢ Per Gallon

NEW GASBOY AND FILL-RITE FUEL PUMPS

Available At Below Factory List

LOW PRICE PROTECTION POLICY:

Within 30 days of purchase if someone advertises or offers at a lower price the same tank you have already purchased from us, let us know, because we'll pay you the difference!



An Additional 1% DISCOUNT is offered if paid by Cash Money or Certified Check

HOWARD E. GROFF CO.

Over Forty Years of Reliable Service
Fuel Oil, Gasoline, and Coal
111 E. State Street, Quarryville, PA 17566
Phone: 717-786-2166
HOURS: Mon.-Fri.: 8 AM - 4 PM

Cornell Extension to Hold Swine Housing Conference

ITHACA, NY — Swine producers in New York and other states in the Northeast who are interested in remodeling or expanding their facilities are being invited to a "Swine Housing and Facilities Conference," July 18-19, at the Ontario County Cooperative Extension Center in Canandaigua, NY.

The main speaker at the Canandaigua conference will be Daniel J. Meyer, a nationally

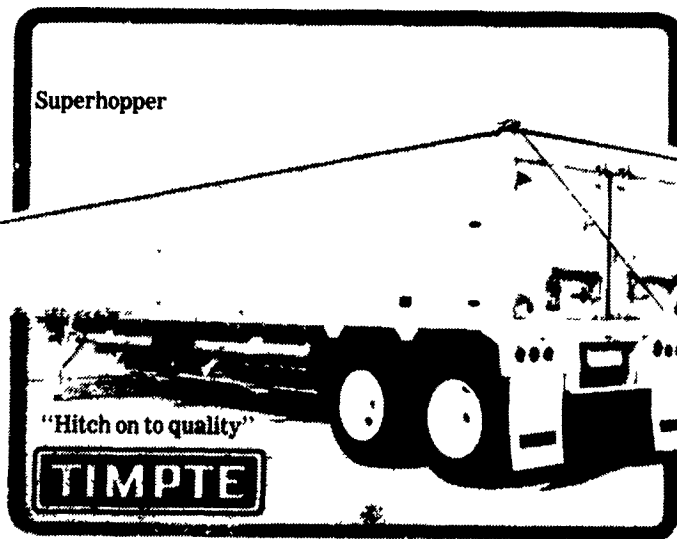
known expert on swine housing.

The conference, which is free to all participants, will focus on remodeling swine and dairy facilities, basic requirements and layouts for swine housing and facilities, manure handling systems, heat exchange, and ventilation, among other topics.

For more information about the program, contact Tro Bui, Department of Animal Science, Cornell University, phone: (607) 255-4505.



BUY A 1986
TIMPTE
LIGHTWEIGHT
GRAIN HOPPER
NOW



Got Grain? Then get the trailer that is TimpTE tough... the Super Hopper. It's not only built to take it...it's also built to cut fuel costs. The Super Hopper is lightweight and aerodynamically designed to reduce wind drag. When there's grain to be hauled, TimpTE does the haulin' best and pulls a lot easier than the rest.

TWO IN STOCK FOR IMMEDIATE DELIVERY
Call For Super Deals

M.H. EBY, INC.

P.O. Box 127 Blue Ball, PA 17506
(717) 354-4971