

Feeding By-Products Benefits Hog Producers, Environment

UNIVERSITY PARK (Centre Co.) — Months of depressed hog prices have prompted some Pennsylvania swine producers to adopt a feeding strategy that reduces costs and makes use of food processing wastes, said a swine specialist in Penn State's College of Agricultural Sciences.

"Several producers are feeding their hogs food processing by-products to help reduce feed expenses," said Dr. Kenneth Kephart, associate professor of animal science. "This practice cuts costs and helps reduce the volume

of useful materials ending up in the state's landfills."

Pennsylvania's 2,333 food processing operations generate an estimated 4.8 million tons of solid waste annually. As disposal costs skyrocket, the industry is doing everything possible to reduce waste.

"Studies show that swine can safely and profitably consume food wastes and other by-products if their nutritional value is known," Kephart said.

"Many by-products, such as outdated bread or broken candy

bars, may not meet rigid quality control standards set by food processors but are perfectly safe in animal rations. If by-product feeding programs are well managed, they are perfectly safe for both the animals and the people who eat their meat." Bakery by-products, such as broken cookies, pretzels and stale bread, can be used as a corn substitute in a hog's diet. "The nutritional value of most of these by-products equals or exceeds that of corn, which is the major source of energy for hogs and constitutes about 60 percent of

feed costs," Kephart said. "Most bakery wastes generally can be substituted for grain pound-for-pound as long as producers pay close attention to salt levels."

Milk by-products, such as liquid whey, can supply both energy and protein. "Hog producers generally use soybean meal as a protein source, which constitutes about 25 percent of the cost of feed," Kephart said. "Producers can greatly reduce or eliminate the costs of supplemental protein by using milk by-products."

Food processing by-products can be very inexpensive. Processors desperate to beat soaring disposal costs often give them to producers for nothing, but transportation, handling and storage

concerns can make their use impractical.

"Milk by-products, for example, contain a lot of water and are very heavy, which boosts transportation costs," Kephart said.

"Milk by-products also spoil rapidly if not refrigerated, so they must be used within a day or two. Most bakery wastes are fairly dry, but some contain enough moisture to cause spoilage if not used in a week or two.

"By-product feeding is a complex proposition," Kephart said. "It's not something any producer should jump into haphazardly. Factors such as nutrient content, palatability, and effects on performance need to be carefully considered."

Export Markets

(Continued from Page D5)

(Angola, Benin, Burkina, Cameroon, Canary Islands, Cape Verde, Congo, Cote d'Ivoire, Djibouti, Gabon, Ghana, Guinea, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Tanzania, Togo, Zaire)

CARIBBEAN 1,500
(Bahamas, Dominica, Dominican Republic, Guadeloupe, Martinique, Netherlands, Antilles, St. Lucia, St. Vincent, Trinidad and Tobago)
CENTRAL AMERICA 500
(El Salvador, Guatemala, Honduras, Nicaragua)

PERSIAN GULF 5,000
(Bahrain, Kuwait, Oman, Qatar, United Arab Emirates)
EURASIA 5,000
(Russia, Byelarus, Kazakhstan, Moldova, Uzbekistan, Turkmenistan, Ukraine, Armenia, Kyrgyzstan, Azerbaijan, Tajikistan, Georgia)

Quantities Of U.S. Cheddar Cheese Eligible For Shipment With Bonuses To Eligible Countries Under The DEIP

Country/Region	Allocation (MT)	Country	Allocation (MT)
Algeria	2,000	Egypt	500
Malta	300	Morocco	500
Turkey	100	Bahrain	100
Cyprus	200	Jordan	100
Kuwait	100	Oman	100
Qatar	100	Saudi Arabia	500
United Arab Emirates	100		

MILK AMERICA'S HEALTH KICK

WANTED in large quantity

Non-Toxic Soybeans, Corn and Speltz
Price is \$12 per bu. \$3.00 per bu. 10¢ per lb.
including low years

Toxic free Speltz demand is growing fast. Makes better food and feed than other grains. More protein and other nutrition. We could have used a million pounds more this season. We are sold out. Majority is exported for flour. Use our Nutri-Carb fertilizer on this year's crop. than quickly plant Speltz without any fertilizer at wheat planting time. Yield is generally over 100 bu. per acre, sometimes 150 bu. and plenty straw. Nutri-Carb is good for all crops including hay, pasture, orchards and vegetables. Spreading service available.

A Md. Cannery Wants 3 Year Organic Sweet Corn In Large Quantity. Also Peas

The organic market is developing fast. People are wising up to the damage of chemicals. Get ready without delay. Our Nutri Carb fertilizer makes non toxic crops in one season if applied early. And it puts so many minerals in the feeds that some farmers don't put extra minerals in the dairy feed. The cows do better that way than by computer recommendations with chemical grown feed. No need for spraying alfalfa, and the fertilizer is good for 5 years. We wean the farmers, put them on easy street. Therefore we need customers to replace them. How about you? We want to make you happy too. Free literature. Very reasonable prices in bulk.

ORGANIC CENTER

217 S. RAILROAD AVE.
NEW HOLLAND, PA. 17557

717-354-7064 Call around 7 to about 8:30 AM for owner



Vermeer SW25-FL Silage Wrapper

Wrap Up Bigger Profits With High-Moisture Bales.

Introducing an entire system designed specifically for harvesting high-moisture hay and silage:

- Vermeer Gator Mowers ... capable of cutting through virtually everything, from wet trampled hay to fire anthills
- Vermeer 504 Silage Baler ... the only baler in the field today specifically designed for high-moisture baling, and able to handle the extra weight
- Vermeer Silage Wrappers ... seal the freshness and nutritional value of balage and silage within a tightly stretch-film-wrapped package, one that's resistant to weather conditions and rodents

Vermeer 504 Silage Baler

The Bottom Line ...

- (1) valuable, highly palatable hay packages — individually wrapped — that feed out fresh and improve the health and performance of your herd,
- (2) increased milk production and greater weight gains for your dairy herd and beef cow operations,
- (3) a reduction in the costs of livestock inputs directly effecting your profit margins, less storage and equipment expense. Discover the savings, the quality, the improved livestock performance!

TRIPLE H EQUIPMENT

Wakefield, Pa.
717-548-3775
or 717-548-2094

"The Hay People"

Vermeer

WRITE OR CALL TODAY

SILAGE BALEING

for a free video on the Vermeer Silage Baling System ... and discover the new profit potential of high-moisture, high-protein balage.

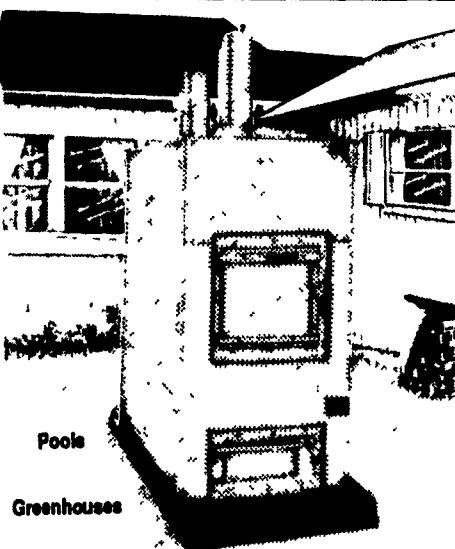
EXPECT THE BEST

For More Information Contact:

Lois Foy Home Pro-Kare, Inc.

3293 N George St., Emigsville, York, PA 17318

(800) 582-7554, 717-764-4359 or 259-9929



Ideal For New Construction And Existing Homes

- * FURNACE SITS OUTSIDE - 10'-100' from home/business/barn.
- * CONVENIENT - Load every 10-12 hours. Burns logs up to 16" in diameter & 30" long. Stops most log splitting.
- * THERMOSTAT CONTROLLED - Even heat.
- * EASILY CONNECTS to forced Air/Hot Water System. Needs no chimney or water heater. Heats domestic hot water year round. Warm months of the year firing every 6 to 10 days.

Allergies Caused By Indoor Burning Of Wood & Coal!
Keep Fire Damage & Dirt Outside

UL LISTED ALL STAINLESS STEEL CONSTRUCTION
ANY SIZE TO MEET YOUR NEED