

# Grange offers HMO

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insurance. With standard insurance plans, participants pay a premium to cover the cost of hospitalization. An HMO is formed around the belief that encouraging participants to visit doctors regularly for health maintenance reduces the need for costly hospitalization.

While conventional medical insurance does not cover visits to a doctor's office or many tests done in a doctor's office and does not cover such expenses as care during pregnancy, an HMO does. In addition, an HMO pays for hospitalization and surgery.

The advantages of an HMO include: comprehensive coverage for all medical care with little or no out-of-pocket expense to the participant, no waiting period before participants become eligible, and coverage that emphasizes preventive health care.

The disadvantage to an HMO is that participants are required to see doctors who are approved by the plan, and to be hospitalized only at participating member hospitals (except in emergencies).

Although there are some variations between the Geisinger and HealthAmerica plans, in general the plans cover: doctor's office visits; visits to specialists; hospitalization; most or all costs

associated with surgery; gynecological exams and tests; physical exams; pregnancy and childbirth care; childhood health care; most or all laboratory testing; emergency ambulance services or those required by a doctor's order; most therapy and rehabilitation services; medically required home health care services; and mental health and alcohol services, with some limitations.

Under the plans, participants have some choices of coverage. HealthAmerica offers three supplemental riders that deal with prescription drugs, medical appliances, and mental health drug/alcohol services. Geisinger's plan options include prescription coverage and emergency room copayment.

What does all this cost? The premiums are comparable to conventional health care insurance. Although there are some variations in cost depending on the county where the participant lives, coverage for a family ranges between \$400 and \$525 per quarter. For an individual, the coverage is between \$150 and \$225 per quarter. For an individual who is eligible for Medicare, the individual coverage ranges between \$100 and \$180 per quarter.

The HMO plan is now available

ITHACA, NY - A scientific recipe leading to production of high-quality silage—usually a hit-and-miss creation on the farm—may be available soon. Silage, along with hay and grain, is fed to dairy cows and its quality has a major effect on milk production.

Ronald E. Pitt, associate professor of agricultural engineering in the New York State College of Agriculture and Life Sciences at Cornell University, has developed a computer model that can identify factors responsible for success or failure of producing quality silage.

Silage is composed of corn, legumes such as alfalfa, or grasses; it must undergo fer-

mentation in a silo to retain its nutritive value during long-term storage. Inadequate fermentation results in diminished nutrient levels, particularly protein, and even spoilage. When silage is unusable, farmers are forced to purchase expensive substitutes.

Silo design, outdoor temperature, the moisture content of silage materials when they are placed in silos, the types of crops used, the degree of silage compaction inside the silo, and a host of other factors determine whether the environment is right for bacteria that do the fermentation. These bacteria convert sugars in silage materials into acids, which in turn inhibit yeasts, molds, and enzymes that lead to deterioration and spoilage. To succeed, the beneficial bacteria must multiply quickly to outnumber harmful bacteria, which thrive in wet, warm environments.

"The computer model helps identify and understand everything involved in the fermentation process," says Pitt. "It can predict, for example, whether adding commercially available silage bacteria or organic acids will have a beneficial effect and, if so, under what conditions."

By drawing upon information

from more than a thousand research articles on silage, the model can simulate the details of complex biological changes involved in fermentation—all on a computer. Physical experiments, in contrast, take a minimum of several months, and the information from such tests is limited, Pitt notes.

Results so far, Pitt points out, show that farmers are adding insufficient amounts of commercial bacteria, resulting in a loss of both money and time.

Another finding is that the numbers of naturally occurring beneficial bacteria are lowest after cool, rainy weather, and crops cut then may yield poor-quality silage.

"Weather can be a big obstacle in silage production," he observes. "If a system were developed that could succeed in using crops with an 80 percent moisture content, rather than the typical 50 to 65 percent, the whole process would become less weather dependent."

One way this could be done is by accelerating the fermentation process with the addition of carefully calculated quantities of commercial bacteria or organic acids. Thus, the moisture-loving "bad" bacteria would not gain the edge.

Wet forages discharge a sludgelike liquid through the sides of silos, causing a pollution problem in barnyards. But Cornell's Pitt thinks there may be a solution to this—and a bonus.

"The nutrient-rich juices could be captured by installing drainage slots and a holding tank and possibly be recycled into feeds for nonruminant animals or into fertilizer for crop production," he says.

Pitt's computer model is part of a large Northeast regional project on forage and dairy systems; the project involves researchers from Cornell, Pennsylvania State University, the University of Maine, the University of Vermont, and Michigan State University. Working with Pitt at Cornell are Robert A. Milligan, associate professor of agricultural economics; Charles J. Sniffen, associate professor of animal science; and Gary W. Fick, associate professor of agronomy.

# Scientists cook up silage 'recipe'

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# Young Farmers

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der, Middle Creek consists of 5,000 acres of land set aside for the protection and management of wildlife.

• Espenshade Greenhouses. This thriving business has 12 greenhouses on five acres, and sells perennials, annuals and vegetable plants, both retail and wholesale.

• Len-Lyn Farms. Galen Crouse and his sons farm 315 acres and milk 50 cows on their facility in the village of Schoeneck, near Ephrata.

The tour will visit the first five stops Friday afternoon, and the last three on Saturday morning. Buses for the Friday tour will leave the school at 11 a.m. Friday, although a second bus will depart from the school at 12:30 p.m., for latecomers and those who are not interested in touring the Green Dragon.

The Ladies Tour will feature stops at the Mildred Wissler home and the Ephrata Cloisters.

For more information or late registrations, contact Vernon J. Leininger, RD 2, Denver, PA 17517. He can be reached at (215) 267-7120 or 267-7511.



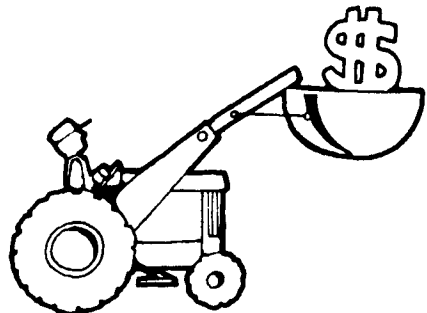
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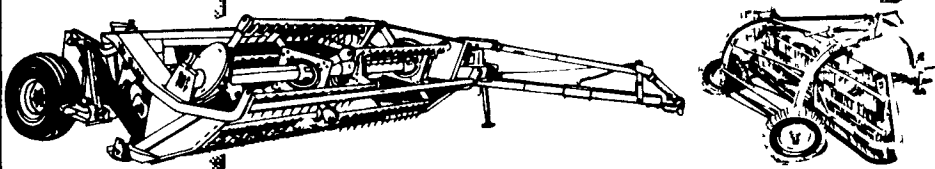
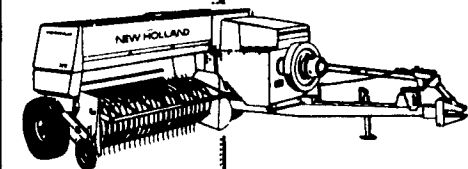
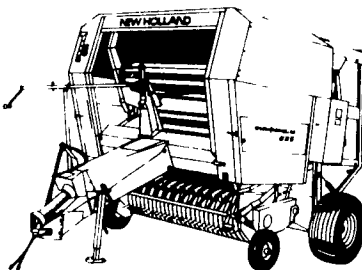
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