



Farm News

By: Tom Mills
County Extension Agent
for Agriculture

Cut Large Round Bale Hay Losses

Some twenty years ago, hay harvest in square bales was the common practice and most barns were designed for humans moving small bales. Today Rockcastle County, like much of Kentucky, has adopted round bale hay as the principle harvesting method. Large round bales require tractors for moving and many barns do not allow access where square bales were once stored. Even when access is allowed, round bales just do not stack as efficiently.

A majority of large round bales are stored outdoors and face weather damage from the elements. Decisions now on where and how large round bales of hay are stored will determine how much and what quality this winter's feed supply will be. One should also look at the financial consideration for using round bales by measuring hay losses.

Studies on the weathering effects of hay stored in different ways show some interesting facts. A round bale that is 4.5 feet in diameter and 4 feet wide occupies a total volume of 64 cubic feet. Even though 4 inches is only 7% of the bale diameter, a weathered layer 4 inches deep over the entire surface of the bale, including ends, would contain 39% of the total package volume. Even a layer that was only 2 inches deep over the surface would occupy 22% of the bale volume. Losses on the ends of exposed round bales do not penetrate as far into the bale as on the outer circumference of the bale. When losses on the end of the bale are disregarded, a 4 inch deep layer contains 28% of the total bale

volume. Since the ratio of surface area to volume decreases with increasing bale size, larger round bales should have smaller storage losses on a percentage basis.

With these facts in mind, what can be done to save hay? Whenever possible, store hay inside. Better quality hay and alfalfa bales should be stored inside first. Long stem fescue will bale tighter and shed water better.

Bale storage sites should be well drained. Any method such as crushed stone, poles, tires, and pallets which will keep round bales off the ground will prevent damage from ground water. And don't forget the obvious. Store hay so that weeds and trees do not prevent good air movement for drying. Bale storage areas located under trees or allowed to grow up in weeds will have even higher losses than reported earlier.

New bale tarps are on the market that allow large stacks of hay to be covered. Special pockets allow pipes and ropes to secure the sides to prevent wind damage. Farmers find, with care, that bale tarps last up to 5 years and store hay just as well as barns. Tarps run just over \$175, and cover 54, 5'x4' bales. A 5 year tarp life would mean 65 cents per bale storage cost to prevent \$5. hay loss.

One might look at hay loss like a mowing machine or rake that left 25% to 30% of the hay in your field. Most farmers would not stand for a shoddy job, but accept large bale storage losses as unpreventable.

For more information contact the Extension Service at 256-2403.

Cooking can destroy nutrients

By: Hazel Jackson
County Extension Agent for Family & Consumer Science

Many fresh fruits and vegetables are more plentiful this time of year. Since fruits and vegetables are an important part of a healthy diet, don't let nutrients go in steam as you cook these foods. You can reduce nutrient loss by following some basic guidelines.

When foods are cooked at high temperatures for a long period of time, the greatest vitamin loss occurs, especially with some water-soluble vitamins, notably C and some B vitamins, that also are heat sensitive. So use fast-cooking methods such as microwaving and steaming.

Cooking vegetables in a microwave oven preserves nutrients because this method cooks rapidly and requires little or no added water. You can reduce nutritive loss by using the microwave oven to reheat leftovers or to cook frozen or canned foods.

Another way to reduce vitamin loss is to cook vegetables and fruits in as little water as possible. For this reason, steaming is preferable to boiling. Steaming foods helps retain nutrients because it requires a short cooking time and little water. Vegetables lose 50 percent less minerals during steaming than when boiled.

Stir-frying also destroys fewer vitamins than conventional frying, because you cook foods at a lower temperature and use less liquid.

If you decide to boil vegetables, remember Vitamin C, all B vitamins and many minerals leach into water so use as little water as possible. Don't dice or cut vegetables into tiny pieces because this increases the surface area, allowing more water-soluble nutrients to leach out. Wait until water reaches a full boil to add vegetables and put a lid on

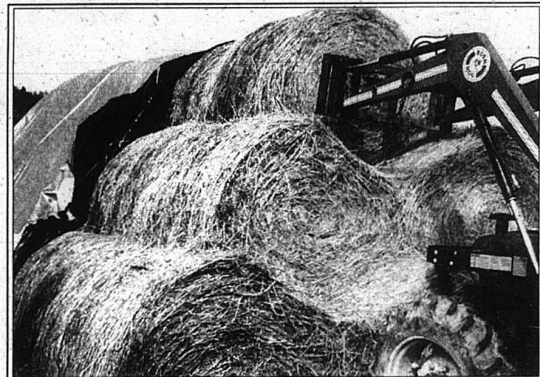
the pot or pan during cooking. This cuts cooking time and decreases time food is in the water, reducing nutrient loss.

You can use nutrients that are leached out by putting the water from boiling or steaming into soups, gravies and stews.

Cook vegetables whole and unpeeled. A major portion of the vitamins is in the peel of vegetables, such as potatoes and carrots. And avoid buying pre-cut produce because it's often peeled, which decreases its nutrient content. Pre-cut produce loses some vitamins because more surface is exposed to air.

To reduce nutrient losses, do not soak fruits or vegetables in water prior to cooking. And cook foods as close to serving time as possible because the longer food sits in liquid, the more nutrients are lost.

Total nutrient loss depends on several other factors, including how the food was handled and stored before you bought it and its freshness when purchased. To get the most benefit, buy only as much fresh produce as you'll use in a few days. Don't be tempted to buy wilted vegetables offered at a special low price. Buy fresh produce, or use frozen or canned products. For more information on family nutrition, contact your Extension Service at 256-2403.



Special hay tarps help farmers prevent weather damaged hay. Tarps are heavy weight material with UV protection to prevent sun breakdown. Special pockets on the edges allow pipes or rebar to be secured by plastic rope placed under bales as stacking takes place. The picture above is a tarp rolled back on two-year-old hay.



Mediacom's Summer Sizzler is Going On Right Now!

Lay Back In Your Recliner This Summer
Out of the Hot Scorching Sun and Let
Mediacom Take Care of ALL Your
Entertainment Needs!

Call 1-800-444-5353 to get a \$9.95 Install
*and half (1/2) off any level of service for the first month!

Mediacom
1-800-444-5353

*Some restrictions may apply - Expires 6-21-01



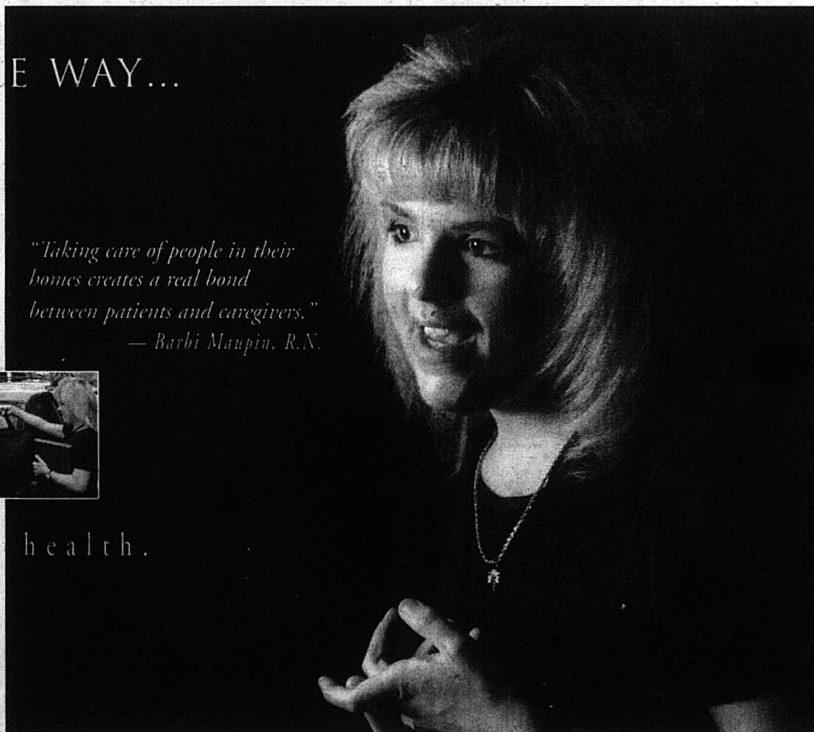
LEADING THE WAY...

Barbi Maupin, R.N. makes house calls. She's not a doctor, but as a Rockcastle Hospital Home Health nurse, she visits patients who need medical care at home. Barbi is just one of our many professionals who provide comprehensive, advanced care in your home, as well as clinical, educational, and support services. • Our staff is on-call around the clock so you can call any time and talk to a nurse. If needed, we will even visit your home at night or on weekends.



... for better health.

Call our office at 256-1808 for answers to your specific questions or to find out how to arrange for services.



"Taking care of people in their homes creates a real bond between patients and caregivers."
— Barbi Maupin, R.N.

ROCKCASTLE
HOSPITAL AND RESPIRATORY CARE CENTER, INC.
Accredited by the Joint Commission on Accreditation of Healthcare Organizations

Rockcastle Hospital Home Health.
Just another example of how we're leading the way to better health in our community.