



OPINION

Bring On The Carbonated Milk

Cows have seen many things happen to their milk over the last 100 years. It's been bottled, pasteurized, homogenized, fortified, skimmed, powdered and flavored, to name a few.

Now, carbonated milk drinks are being developed for the market. U.S. Department of Agriculture scientists are finding new ways to make drinks using powdered milk and filtered apricot juice.

"We made them in the laboratory and they need to be improved for commercial sales, but they taste great," says USDA's Ranjit S. Kadan, who developed them. "You get that tingling, refreshing sensation of carbonation that you get in soft drinks, and you're also getting calcium, protein and vitamin C from the milk and juice."

He adds: "Carbonated milk would be a big help for children, who need calcium to develop their bones."

Kadan, a food technologist for USDA's Agricultural Research Service, makes the drinks by bubbling carbon dioxide gas through a mixture of water, powdered nonfat dry milk, flavoring or apricot juice and other ingredients. The mixture is kept under pressure and bottled right away so the carbonation doesn't escape.

In tests last year, Kadan made a strawberry-flavored milk that stayed fresh up to six months under refrigeration. His milk-and-juice drink lasted two to three months.

"We've shown that you can make a carbonated drink in which the powdered milk stays suspended and doesn't separate in the mixture," Kadan says. "Commercial companies would have to refine the process and add other

flavors before you'll find it in the supermarket."

Kadan used strawberry flavoring he bought in a local supermarket. The apricot juice was filtered using processing methods adapted by Charles C. Huxsoll and colleagues at the USDA agency's Western Regional Research Center in Albany, Calif.

Hopefully, Kadan says, carbonated milk beverages will spur consumption of milk. Between 1975 and 1985, per capita milk consumption in the United States dropped 12 percent, according to the Milk Industry Foundation's 1987 Fact Book. During the same time, per capita consumption of soft drinks increased 68 percent.

This means that milk, a valuable source of calcium, is being underutilized. A cup of two-percent milk contains 297 mg of calcium — more than one-third of the recommended 800 mg per day for adults and young children. Most soda contains no calcium.

Aside from its nutritional advantages, Kadan says, carbonated milk also would help spur commercial use of powdered, or nonfat dry milk. The federal government buys surplus nonfat dry milk, American cheese and butter. Last year, the powdered milk surplus was 556 million pounds and is estimated at 400 million to 600 million for 1988.

"If our new drinks captured three to five percent of the carbonated drink market, they could wipe out the powdered milk surplus," says Kadan.

That would be good news for dairy farmers. So bring on the carbonated milk and give consumers some good nutrition while they quench their thirst.



NOW IS THE TIME

By Jay Irwin
Lancaster County Agriculture Agent

To Cull Layer Flocks

With low egg prices over the last several months and the future prices not much better, we must look to areas that can reduce expenses.

The almost lost art of culling is one area that should be considered. Nearly every flock, regardless of size, could cull 6 to 8% of their birds. These low producing or non-producing birds are eating valuable feed and taking up space.

Severely cull every flock over 7 months of lay. Remove all sick and weak layers, as well as culling out healthy birds that have small, pale or shriveled combs AND cull all birds with a small, dry yellow inactive vent. This should remove all birds laying one to 30 percent production.

Layers producing 0 to 30 percent do not earn a profit; these layers only put excess eggs on the market **SO CULL THEM OUT.**

Egg prices may rise if enough eggs from poor layers are removed from the market. Ag economists say if 2-3% of all eggs are removed from the marketplace, egg prices will go up significantly.

To Use Respirators

A great many different types of chemicals and pesticides are used on farms today to control the numerous pest problems. This includes mixing, handling and applying the various materials. We urge farmers to invest in respirators to meet safety measures under today's farming procedures. These are needed for handling and applying various spray materials, and when using solvents that give off fumes.

In addition, farmers working in dusty places, in manure storage tanks, and in silos should wear one of the protective devices. Dusts, molds and fumes are hard on lungs

Sunday, June 5

Annual Rose Show, Lancaster Farm & Home Center, 1 to 7 p.m.

Monday, June 6

Eastern Shell Egg Quality School, Ocean City, MD, 5:00 to 9:00 p.m.

Carpet Care Inservice, Penn State University, 1 p.m.

Economic Development Work, Penn State University, through the 8th.

Tuesday, June 7

Berks County Carcass Contest, Peters Brothers Lenhartsville, 6:30 p.m.

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and require protection to reduce injury. The canister type respirators are suggested because they cover the entire face. Don't expose yourself to permanent lung injury when protection is available.

To Prepare Grain Bins

We are approaching barley harvest season with wheat not far behind, so I would like to remind our grain producers that now is a good time to clean up your grain bins in preparation to harvest. First, clean out all the old grain, sweep down all the sidewalls and floors making sure to remove old grain lodged in the cracks.

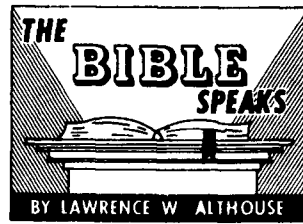
Next, spray the floor and walk with a residual insecticide. Malathion and Methoxychlor are still very effective — follow the label for directions. Finally, prevent birds and rodents from entering the bin. Repair holes with metal or other rat-proofing materials. Clean up all spilled grain around the bin to discourage the various

pests from the area.

To Move Livestock Carefully

Hot weather requires some special handling of livestock if losses are to be kept to a minimum. When temperatures and humidity both reach 80° F., livestock suffer the same as human beings. Fat animals suffer more than breeding animals, and fat hogs can stand the least amount of heat and humidity.

We suggest that livestock be moved during the early morning hours, and be hauled on trucks bedded down with wet sand. A minimum of stress and excitement will also reduce the danger of heat exhaustion. Trucks should be either open-sided or have good ventilation during hot weather. Losses during breakdowns can be reduced by having a standby truck available on short notice. Livestock are valuable; let's do all we can to reduce stress during hauling.



Background Scripture: Exodus 1:1 through 2:10.

Devotional Reading: Exodus 1:15-22.

The story of Moses' birth and infancy is one of naked power vs. compassion. The power of the Pharaoh seems virtually limitless. With a word he was able to enslave the Hebrew people. With another, he commanded the death of every newborn Hebrew male. His word was law and no one, particularly the Hebrews, had any power or leverage to thwart him. What could the Hebrew people do in the face of such sweeping, absolute power?

Throughout history there have always been men like Pharaoh whose power seemed invincible — Alexander the Great, Atilla the Hun, Ghengis Khan, Napoleon, Hitler, Stalin, to name just a few. Millions of people have been at the mercy of men such as these.

The mighty Pharaoh stands in stark contrast to the other characters in this story of Moses. First, there are the lowly Hebrew midwives. They have no power at all, for they are both Hebrews and women and their profession is a humble one. They could not oppose Pharaoh's plan to kill newborn Hebrew boys. So, it would appear once again naked power has carried the day.

POWERLESS WOMEN

But that isn't what the writer of Exodus tells us. Instead, he relates how these humble, powerless women reacted to the Pharaoh's command: "... the midwives feared God, and did not do as the king of Egypt commanded them, but let the male children live" (1:17). They may have feared the temporal power of the Pharaoh, but they feared the judgement of God even more. They could not

fight him, but neither would they obey his command.

Finding out about their disobedience angered the Pharaoh and he responded with yet another display of power, commanding the Egyptian people that henceforth "Every son that is born of the Hebrews you shall cast into the Nile..." (1:22). Surely, the Egyptians would not disobey him! Certainly the fate of the Hebrew people was now sealed!

The mother of Moses was also powerless. She knew she was going to lose her son, Moses. So, she did the kind of thing that perhaps only a mother would do: she put her son into a basket among the reeds of the Nile. It was not an act of naked power, but of desperate mother love. But by this act she was able to thwart the power of the Pharaoh.

MEEKLY ARMED

Other "powerless" people played a role. Moses' sister, Miriam, watched the infant Moses from afar to make sure nothing happened to him. Nothing very powerful about that! Pharaoh's daughter found the child and, although she recognized that the infant was a Hebrew — condemned to death by her father, the Pharaoh — she "took pity on him" and saved his life. Once again, Moses' sister, Miriam, did what little she could do, suggesting to Pharaoh's daughter that she find a Hebrew nurse for the infant. And Moses' real mother, unselfish and thinking only of her son's welfare, accepted the task of raising her own son for the Pharaoh's daughter: "So the woman took the child and nursed him. And the child grew, and she brought him to Pharaoh's daughter, and he became her son" (2:9b,10).

Three powerless women, armed only with love and tenderness, were able to defeat the awesome power of the Pharaoh... because they were working, albeit unknowingly, with the will of God.

Thus it was and still can be today.

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Farm Calendar

Saturday, June 4

Bucks/Montgomery Wool Pool, Delaware Valley College, Doy-lestown, 7:00 a.m. to 4:00 p.m.
Chester County Dairy Princess Pageant, Spadzman Building, Brandywine Hospital & Trauma Center, Coatesville, 7:30

p.m.

Tioga Dairy Princess Pageant, Mansfield High School, Mansfield, 8:00 p.m.
Cecil County 4-H Breeders Fair, Cecil County Fairgrounds.
Rose Show, Lancaster Farm & Home Center, 1-7 p.m.

FARM FORUM OUR READERS WRITE

Editor,

This year has been an exciting year for me. I know your paper has done many articles on the Dairy Princesses, but now are focusing on the new one coming in. I thought this article could be one

last tribute to the 1987-1988 Dairy Princess.

FAREWELL FROM A DAIRY PRINCESS

As many Dairy Princess
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