

Enzyme treated milk products proposed for meat extenders

WASHINGTON, D.C. — Two milk products—sodium caseinate and calcium-reduced dried skim milk—would be treated with the enzyme rennet and used as binders and extenders in certain meat and poultry products, under a proposal by the U.S. Department of Agriculture.

The two milk products, without the enzyme treatment, are already approved for this use.

Rennet is a natural product which has been used for many years in making cheese. According to Lou Gast, deputy administrator for compliance of the department's Food Safety and Quality Service, rennet does not alter the nutritional character of these binder-extendors.

The binder-extendors are the result of recent technological innovations, Gast said, and are said to improve product texture.

For the enzyme-treated binders and extendors to perform the function of holding together finished products, calcium lactate must be added to the meat or poultry mixture before cooking. Calcium lactate is a binding agent which is generally recognized as safe by the Food and Drug Administration.

The enzyme-treated calcium-reduced dried skim milk would be permitted in sausage, imitation sausage, nonspecific loaves (luncheon loaf, honey loaf, etc.), soups, stews, and such poultry products as chicken frankfurters.

Enzyme-treated sodium caseinate could be used in all of these products except sausage. Federal regulations limit the amount of water which may be added to sausage, and the presence of sodium caseinate in these products would make it difficult to measure added water.

Experiments compare potato varieties

UNIVERSITY PARK — Pennsylvania potato growers are searching for the ideal variety, one that produces superior yields while being high in total solids (specific gravity) as needed for the processing industry.

Some of the best varieties for Pennsylvania were described August 2 during meetings of the American Society for Horticultural Science at Columbus, Ohio. Presenting the results of a study in Somerset County, Pa., was Jack E. Staub of Bountiful, Utah, graduate assistant in horticulture at Penn State.

Best average yields from research plots in Somerset County came from plantings made May 15, Staub pointed out. However, the highest specific gravities were achieved with potatoes planted May 1. Other planting dates in the comparisons were June 1 and June 15.

Varieties compared were Norchip, Atlantic, Katahdin, Kennebec, Penn 71, and Buckskin. Three varieties

with the best yields — Penn 71, Kennebec, and Katahdin — were poor in specific gravity. Nonetheless, Penn 71 and Kennebec made acceptable yields when planted May 1 and had acceptable specific gravities as well.

Based on these trials, Staub and faculty associates at Penn State are recommending that potato varieties with both high yields and adequate specific gravity be developed as soon as possible. The findings are similar to earlier potato comparisons in the Commonwealth.

Norchip and Buckskin were relatively low yielding in the trials. At the same time, their specific gravities were higher, on the average,

than the other varieties with the exception of Atlantic.

"Undoubtedly the most discouraging results in these tests were the low specific gravities of high-yielding varieties," Staub commented.

While the new variety Atlantic produced good yields and had excellent specific gravities, caution was advised. Storage quality, vital in the processing industry, was rated very poor for Atlantic from May plantings and only fair from June plantings. Storage of all other varieties except Norchip was good at all planting dates.

Future tests of Atlantic's storage abilities are needed, Staub affirmed, when a sprout inhibitor and

Fusarium control treatments are used.

The test results are pertinent for potato growing areas in Cambria as well as Somerset County, it was pointed out. Associated with the project were Dr. Richard H. Cole, Extension specialist in potato production, and county agents James A. Bochy and Herbert C. Terndrup of Somerset and Cambria counties, respectively.

Following storage at 50° Fahrenheit, all the varieties produced potato chips with good color except Katahdin. In baking and boiling comparisons, Atlantic was the best baker but the only poor boiler. The only internal quality problem was noticed with Atlantic.

Berks Co. hosts conserve energy tour

LEESPORT — "Conserve Energy" will be the theme of this year's Conservation Tour, which is sponsored by the Agricultural Conservation Stabilization Service, Berks County Conservation District, Bureau of Forestry, Cooperative Extension Service, Farmers Home Administration, and Soil Conservation Service. The bus tour will be held on Friday, September 14, 1979. The tour will highlight

various agricultural and energy conservation practices. Among these will be a solar grain dryer, located on the farm of Winfield J. Finkbinder, Jr., and a wind propelled electric generator, on the Douglas McHirkam property. The Fred Bohn farm will display a number of conservation practices, including storage terraces. Other points of interest include the Donald Landis farm, various Farmers Home Ad-

ministration houses, and a large hog operation. Lunch will be served at the Trainers Midway Diner.

A limited number of tickets will be sold. Deadline for purchasing tickets is September 10, 1979. The cost of \$7.00 per person includes bus transportation and a buffet style luncheon.


Anyone interested in the "Conserve Energy" tour should contact the Berks County Agricultural Center at 372-4655.

Milker News

Pulse From Bodmin Dairy User's Reports Distribution Company:

AMERICAS INTERNATIONAL

DAIRY EQUIPMENT COMPANY
P.O. BOX 509 DELAVAN WIS 53415



Americas International is pleased to announce the addition of Bodmin Nu-Pulse Milkers to its growing line of dairy farm operation systems. Your milking problems could be just memories with the addition of Bodmin Nu-Pulse Milkers to your dairy operation. Happy users report a variety of benefits — increased comfort for cows — decreased mastitis problems and less time spent on milking. Bodmin's unique suction system will banish your fall-off worries and provide smoother, more even milk-outs. For more information about Bodmin Nu-Pulse Milkers read the reports below, then fill out and send in the coupon for more good news from Americas International.



"18 years without replacing a single part."

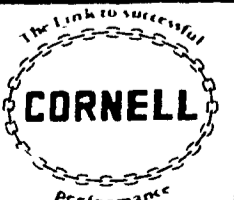
Frank Reichard, Barn Manager
Atlantic Breeders Cooperative
Lancaster, PA



"We checked out the competition carefully when we bought our first Cornell Barn Cleaner. We had to have a tough unit. All our runs are over 400 feet and serve up to 60 bulls. We chose Cornell because of its reputation for heavy-duty performance. That first unit is still working as hard as ever, and we've added three more over the years. In 18 years with Cornell Barn Cleaners, we've never replaced a single part."

Send for this FREE folder today!

Cornell Mfg Inc • Dept LF3
Box 18 • RD 2 • Laceyville PA 18623
Send me information on: Cornell Barn Cleaner
Cornell Conversion Kit Have rep call
I am a: Farmer Student
Name _____
Address _____
City _____ State _____ Zip _____



Barn Cleaners
with the
TOUGHEST link around!

LISTEN TO WHAT DAIRYMEN ARE SAYING ABOUT THE BODMIN NU-PULSE MILKER

Dick Krummen
R R 1
Curtiss, WI
(715) 223-2173
Former Delaval user
40 cows — 4 pipeline units
I used to milk with Delaval. Now with Nu-Pulse I have no irritation. The general "hoof of our herd is improved."

Laurence Shiller
419 N Hughes Rd
Woodstock, IL 60058
(815) 338-5243
Former Sta-Rite user
80 cows — 4 pipeline users
We were shut off Grade A market with high leucocyte levels when using the Sta-Rite milkers. We tried everything to solve the problems. Our Bodmins were installed with no drug treatment. A milk all were now coming way back up on production. It's all the fact that we have eliminated Bodmin really do pull the milk.

Ralph Schelske
R R 1
Reliance, SD
(605) 473-5253
Former Bou-matic user
80 cows — 4 pipeline milkers
We are using eight Bodmins in our double four parlor. We replaced our new Bou-matics with Bodmins because of fall off and leucocyte mastitis problems. Since using Bodmins we have virtually eliminated fall off and our leucocyte level are still dropping also like the maintenance of

Larry & Allen Doherty
6553 Van Dyke Rd
Brown City, MI 48416
(313) 346-2068
FORMER SURGE USER
72 cows — 4 pipeline milkers
I converted my installation from Surge to Nu-Pulse. Since using the Bodmins one man now does the work that formerly took two. We have a 17,000 pound herd average and are experiencing much better milk out. The cows are more content.

Owen Adrian
R R 1
Cassville, WI 53806
(608) 725-5298
Former Surge user
38 cows — 3 pipeline milkers
Formerly milked my cows with Surge units. They are so much more gentle on cows. We just broke in eleven first heifers — they never once kicked machine. We're getting better milk faster and all this with no irritation.

Basil Keller
R R.
Tenny, MN 56582
(612) 563-4902
Former Delaval user
30 cows — 3 pipeline milkers
Before installing my Bodmin milkers I milked with Delaval with lots of mastitis problems. The Bodmins are sure gentle on my cows. We have had only one cow with mastitis since April. Needless to say we are very happy with our Bodmin Milkers.

Hundreds of Installations in the U.S.A. - Thousands Worldwide

SEE US AT AMERICAS INTERNATIONAL DISPLAY AT AG PROGRESS DAYS

Distributed By:
Keystone Nu-Pulse
Cochranville, PA 19330
215-932-4700
Dealer Inquiries Invited
AUTHORIZED DEALERS

LANCASTER COUNTY
SULT'S REFRIGERATION SERVICE
Gordonville, PA
717-768-8555

LEBANON & BERKS CO.
CLYDE C. LUTZ
Ephrata, PA
717-738-1718

NORTHAMPTON & MONROE CO.
CALVIN GUM
Windgap, PA
215-863-4557

I WANT TO KNOW MORE ABOUT BODMIN NU-PULSE

Name _____

Address _____

City _____

State _____ Zip _____

Phone _____

Interested in Bodmin Milker
 Interested in Dealership