Buffers said to work best when fed properly

PISCATAWAY, N.J. -Modern dairymen are turning to high energy rations to push cattle to their genetic potential.

But along with this switch to higher energy feed has come an increase in rumen acids present in the dairy cow's digestive systems, especially among those fed ensiled forages and high concentrate levels.

Dairy cows with too much acidity sometimes experience depressed butterfat tests, reduced feed intake, lower milk production and more infertility, says Dr. Richard Adams, a dairy nutritionist at Penn State.

Buffers have been fed in widely varying amounts both in research trials and on the farm. However, they appear to work best when fed at certain levels.

One such buffer which has been effective in balancing rumen pH is sodium bicarbonate, a compound which occurs naturally in cows' saliva. Not enough saliva is secreted to neutralize the excessive acids produced during rumen fermentation when low-fiber, high-energy rations are fed. In these cases, supplemental feeding sodium bicarbonate

should be tried, Dr. Adams sometimes occur in cattle savs.

Dairymen deciding to feed sodium bicarbonate should supply it at a level equal to 0.60 per cent of dry matter intake when conditions roughly equal to 1 to 1.5 per cent in a concentrate mixture or finished feed," Dr. Adams explains.

Milk production, butterfat test percentage, dry matter intake and 4 per cent fatcorrected milk may improve separately or in combination roughage dry matter. when buffers are added to problem rations in proper amounts.

Some rations are more acid-producing than others. Dr. Adams lists several rations in which buffer feeding may be helpful.

Excessive

fed a total ration containing concentrates and corn silage at a level over 40 per cent of total dry matter intake.

Cows fed less than two pounds of forage dry matter warrant its use. "That's per 100 pounds of body weight may be more susceptible to excessive acidity. Buffers may also be of value when forage substitutes - high-fiber feeds like wet brewers grain provide approximately 20 to 25 per cent of the usual

> High producing cows consuming concentrates at a level exceeding two per cent of their body weight and those suffering from hot, humid weather may also become hyperacidic, especially when little or no

alfalfa or other legume phosphorus in the ration's forage is fed.

Dairymen should consider feeding sodium bicarbonate in combination with other buffers such as magnesium oxide and calcium carbonate, he adds. Recent university and industry research has revealed increases in fat-corrected milk when sodium bicarbonate is fed with magnesium oxide.

Calcium carbonate may neutralize acids in the lower digestive tract in contrast to sodium bicarbonate's neutralizing effect in the rumen. Fed in combination, the buffers may correct acid imbalances throughout the digestive system.

Calcium carbonate should be supplied at a level needed of lactation. Dairymen may to provide calcium at 1.8 to want to limit feeding to early 2.0 times the amount of lactation cows.

combined forage and concentrate dry matter. Normally, 1 to 1.5 per cent calcium carbonate in a concentrate when fed with low-calcium roughage is sufficient.

To get maximum benefits from magnesium oxide, one should feed enough of it to provide magnesium at a level equal to 0.2 to 0.24 per cent of the ration's dry matter. This often requires supplying magnesium oxide at a level equal to 0.3 or 0.5 per cent of a concentrate or finished feed, Dr. Adams advises.

Responses to buffers may be greatest when cows are in their first four to eight weeks

COMPLETE DISPERSAL **SATURDAY, JUNE 2**

11:00 A.M. **LESTER & PATRICIA HOLMES** Fulton, NY

We have been commissioned to sell at Public Auction to the highest bidder at the farm located on Honey Hill Rd., 1 mile north of Fulton, NY, Oswego Co., off Rt. 48. Watch for auction arrows.

9 HORSES

1 registered 5 yr. old Perchon stud, well broke, sired by College King, 1 registered yearling Perchon mare, 1 yr. old Perchon Stud colt, 3 yr. old Belgian gelding, 13 yr. old Belgian mare in foal. 1 yr. old Belgian colt, nice disposition, 2 other yearling fillies and matched pair of pulling ponies, well broke and gentle.

FARM EQUIPMENT & TRUCKS

Stillham 4 horse trailer, excellent condition, MF 35 diesel tractor, rotary brush cutter, 3 pt. back blade, 2 bottom trailer plow, 3 section harrows, NH 67 baler, flat rack wagon on 6 ton gear, post hole digger, lime sower. Fisher snowplow with special hookup for Ford 250, 7 ft. V blade, Fisher snow plow, Dodge pickup truck, Diamond Reo 10 wheeler dump truck, 2 sets Fruehauf axles with brakes, springs and wheels, quantity of 10:00x 20" tractor tires and tubes, 1960 Buick electra, steel hauler's tarps, 16x35 vinyl tarp, MF 7 hp. garden tractor with mowers, 2 old school busses for storage use, Mobile home frame with tandam wheels and tires, etc.

HORSE DRAWN **EQUIPMENT & TACK**

Sulkey plow, sulkey cultivator, NI manure spreader, heavy duty bob sled, land roller, 2 row corn planter, JD mower, disc dump rake, 2 sets heavy work harnesses, collers, 2 & 3 horse hitch wiffel trees and eveners, Nichol plated parade western saddle with breast collar, army saddles, single harness with breast collar, neck yokes, buggy wheels and much more.

SHOP TOOLS

4 ton porta power bench grinders, air compressor, air grease guns, paint sprayer with regulator, MC chain saw, jig saws, body grinders and sanders, chain ws, Homelite portable pump, work benches, bumper jack, reapers, welding benches, 2 wheel hand trucks, hydraulic jacks, air impact wrenches, anvil, timing lights, dwell meters, alignment gauges, head light aimers, GE mobile radio, file and storage cabinet, air drill, intercome system, 6 ton jack stand, shop stove, water pumps, plumbing tools and accessories, paint, large assortment nuts, bolts and much

HOUSEHOLD

T.V., large wood cook stove with bread warmer, recliner chairs, convertible davenport, arm chairs, early American couch, Hoosier cabinet, rocking chair, lawn chair, Franklin wood stove, picnic table, portable air conditioner, lamps, tables, crocks, etc.

Reason for sale — Holmes are moving out of state.

Owners LES & PAT HOLMES

Terms: Cash or one-way checks. Lunch Available Order of Sale — Household Goods, Shop tools, horses and equipment.

Sale conducted by **Camillus Livestock Sales** Rudy Karasek, Manager 315-672-8612 Dick Allen, Auctioneer 315-488-1280

Consignment by Neighbor

Late model Fox chopper with 2 row corn and pickup head, good condition.

Come Early to register as we will sell by sale number.

ESTATE OF EDWARD STOVER SR.

PUBLIC SALE

OF VALUABLE PERSONAL **PROPERTY INCLUDING OUTSTANDING ANTIQUE FURNITURE AND FARM MACHINERY SATURDAY, JUNE 9,**

TIME: 9:00 A.M.

DIRECTIONS - 1 MILE SOUTH OF HUM-MELSTOWN, PA. ON HUMMELSTOWN MIDDLETOWN RD.

ANTIQUES

Steinway rosewood grand piano, walnut high back bed w/carving and marble top bureau, walnut high back rope bed, walnut Empire bureau w/marble top & mirror, 3 pc. oak bedroom suit w/3 matching chairs, 2 Victorian side chairs, Victorian needlepoint chair, 7 pc. mohogany dining room suite, large Chestnut corner -175 yr. old cupboard, lg. roll top desk & chair, slant top desk, Mission furniture inc. table, love seat. rocker. chair, oak wardrobe, oak chest of drawers, oak stand, old bed, oak captain's chair, leather seat rocker, camel back trunk, blanket chest, wind-up victrola, wicker arm chair, plank bottom chairs, straight back chairs, 2 lid wood box, benches, ext. table, high fern stand, other stands, occasional tables, pictures, antique mirror, large & small safe.

Antique pitcher & bowl set, 2 piano stools, 3 lg. jugs, 15 crocks, M.S. Hershey plate, lg. bread basket, other baskets, wicker hamper, antique play pen, rockers, valet chair, 12 cu. ft. gold refrigerator, Zenith color TV, recliner rocker w/ottoman, studio couch, uph. chairs, 110 volt air conditioner, cash register, stained glass windows, old side sadle, other sadle, lots of harness, pudding pans, cookie cutters, 12 milk cans, iron kettles. calf scales, cross cut saws, meat saws, buck saws, lantern, sickles, lawn furniture, calf muzzles.

277 New Holland baler, 2 Row Corn Planter, like new, 9 ft. Ford Disk, Inter Bush Hawk Mower: 3 pt. hook up, 3 pt. hitch New Idea rotary mower, Int. 56 silo blower w/3 10' sections & telescope section, New Idea manure spreader, Farmall 540 tractor, Farmall "H" tractor, Ford 3 pt. hitch 3 bottom plow, 2 pt. hitch scraper, Ford 3 pt. hitch cultivator, Int. corn planter 3 pt. hitch, drag elevator, New Holland 275 baler with thrower, New Idea 12' disc, Hesston 7' hay bine, Belt Harvest Handler 10' grain elevator, 2 McCurdy grain bins on running gear, New Holland 256 hay rake, hay wagon w/racks, Int. 7' trailer mower, single round back horse sleigh, 500 gal. Esco milk cooler, 2 DeLaval milker unit, 2 40 lb. stainless milk buckets, stainless strainer, stainless double tubs, rubber tire wheel barrow, 2 door metal cabinet, grain cradle, 200 bu. speltz, some loose hay & straw, lumber, gas burner, barn hinges, 3 prong fork, wooden porch posts, 1974 RAMBLER MATADOR, many other items too numerous to mention.

Conditions of sale will be made know at time

MRS. KATHRYN SANTARELLI **MR. JOHN E. STOVER** MRS. SARA E. MILLER MRS. MARTHA E. GARVER MR. EDWARD E. STOVER JR.

Administrators

2 forms of identification will be required. Refreshments will be available on premises by Stoverdale Church.

Paul E. Clouser, Esq., Atty. **Gerberich & Hess, Auctioneers** Not Responsible for Accidents

Dairy 4-H meets

STOUCHSBURG - The Stouchsburg 4-H Dairy Club met at the home of Dennis Sattazahn on may 18, with 13 members present.

A few members described parts of a cow and then club members judged two classes of cows.

THe 4-H club attended the St. Johns Church as a grour for Rural Life Sunday.

The next meeting will be held at the home of George Troutman, Jr., on June 22.

WHITERIDGE FARM

COMPLETE HERD DISPERSAL



Located at Snedekerville, PA, 8 miles north of Troy, PA, Bradford Co., 16 miles south of Elmira, NY on Rt. 14.

SATURDAY, JUNE 2

1:00 P.M. **60 HEAD CHOICE** DAIRY CATTLE SELL 60

41 Registered - 3 L.D. Grades - 16 Grades All home raised, all ABS sired, DHIA records.

Catalogs. Interstate tested. Terms — Cash or good check sale day.

ROBERT B. & MARTHA B. WHITE

D. O. Rockwell & Associates, Sale Managers Troy, Pa. Phone 717-297-3460

REGISTERED **GUERNSEY SALES SATURDAY, JUNE 2**

Three Sales in One!

Brownbrooks Dispersal — Dale and Linda Graves Owners, 32 Head, Owner Sampler Records, All over

Annual Finger Lakes Calf Sale — 16 selected calves from dams up to 16,000 lb. records by such sires as Dari Fayvor, Austin, Choice.

Regular Cortland Guernsey Sale - Mostly fresh or close young cows and bred heifers.

A great opportunity to select top breeding with high production.

Sale to be held at Cortland Sales Pavilion, Cortland, NY. Located just off Interstate 81, Exit 10 on Rt. 41 toward McGraw.

Most all tested for immediate interstate shipment. Lunch and Trucking Available.

Sale managed by **Cortland Guernsey Sales** A. V. Zogg Jr., Auctioneer

Barn Ph: 607-836-6661 **Ed Townsend-Catalogs** 4429 Sunset Dr. Syracuse, NY 13215

Assisting: Wm. Cochran **American Guernsey Cattle Club**

315-492-2578 Pedigrees: H. Jospendergast Cobleskill, NY 518-234-7317