

New Bolton Center

(Continued from Page A32)

thesized compound similar in structure to vitamin D—may hold the answer for prepping that player for the coming game.

Although vitamin D does stimulate the absorption of Ca from the diet, as well as the mobilization of Ca from bone tissue to the blood, there are problems associated with injecting it into the cow. For one thing, vitamin D can be toxic. Since it is fat soluble, a buildup of vitamin D in fat tissue can actually overwhelm the cow's ability to regulate calcium level, says Moser.

And there's also the problem of lag time. Response to vitamin D injection can be delayed for as long as three to 10 days as the vitamin travels from the liver to the kidneys.

Using the vitamin D analog, on the other hand, has reduced this lag time to about 24 hours, Moser reports. And the synthetic compound is more water soluble than vitamin D, allowing it to leave the body more easily.

Dr. Moser points out that ongoing research in this area is a joint venture involving the Universities of Pennsylvania, Wisconsin and California. At present, New Bolton's project involves 100 cows representing eight to 10 herds in southeastern Pennsylvania.

Shipping Fever

Shipping fever is an expensive ailment. The total annual cost to agriculture runs \$400 to \$500 million, and dairy losses in Pennsylvania alone are estimated to be \$6.5 million.

"And there's a substantial loss in productivity, not just death loss," points out researcher Robert Dyer.

The disease commonly affects cattle three months of age or older, and dairy cattle are usually affected by a subclass known as enzootic pneumonia.

Dyer notes that shipping fever usually results from the

interaction of viruses, bacteria and stress. "There's no simple formula," he says. "We're not dealing with just one virus and one stress factor, but usually a combination."

Though vaccines and antibiotics are the commonly accepted means of dealing with the disease, Dyer stresses that these measures haven't proven to be very effective. Of the 30 viruses known to affect cows, vaccines are available for only four of them, he points out.

Taking a different tack, Dyer's research has involved developing techniques for collecting lung fluid and finding out what makes a cow's immune system tick. The ultimate goal of his studies is to get out of the realm of antibiotics by helping the immune system to fight the battle. "If we can boost resistance in the immune system, will we even need vaccines?" Dr. Dyer concludes.



Drs. Syed Kashmiri (left) and Phalguni Gupta with New Bolton herd declared a national resource.

Bovine Leukemia

Though there is no known cure for the fatal disease known as bovine leukemia, New Bolton researchers Phalguni Gupta and Syed Kashmiri are closing in on the development of an effective vaccine.

Bovine leukemia is a disease characterized by malignant transformation of lymphoid cells, says Dr. Kashmiri, and large, swollen lymph nodes are the first signs noted in cattle stricken with the ailment.

Two kinds of leukemias have been recognized, Kashmiri points out. The least common is the juvenile form that affects animals less than two years old. The adult form is found in animals over two to three years old, and is most common in the five to eight-year-old class. And it is in this latter form that a virus known to cause the disease has been isolated.

Anything that transmits blood—from insects to bad veterinary practice—is capable of spreading the disease, notes Kashmiri.

The light at the end of the tunnel, says the researcher, is a newly discovered protein that actually inhibits the growth of the virus. And current research at New Bolton centers around the development of a vaccine derived from this protein.

And Dr. Kashmiri points out that the outcome may well have implications for human health as well, since the viral agent is closely related to the causative agents for both human T-cell leukemia and Acquired Immune Deficiency Syndrome, more commonly known as AIDS.

Facilitating studies at New Bolton is a herd of dairy cows known to contain cows that are highly susceptible to leukemia, as well as others that are highly resistant to the disease. Recognizing the New Bolton cows as the only herd in the world containing both high- and low-risk subjects, the National Cancer Institute has declared the herd a national resource, and is providing funding for its maintenance.

BUYER'S CHOICE

3 WAYS TO SAVE!

<h3 style="margin: 0;">CHOICE #1</h3> <p style="margin: 0;">NEW, LOWER FINANCING RATES ON ALL NEW AND USED SPERRY NEW HOLLAND EQUIPMENT except combines which carry their own low financing rate. Rates effective until July 31, 1985.</p> <table style="width: 100%; margin-top: 10px;"> <tr> <td style="text-align: center; width: 50%;"> 0.0% APR financing for 12 months (monthly payments required) </td> <td style="text-align: center; width: 50%;"> 9.9% APR financing for 36 months (monthly, quarterly or semi annual payments required) </td> </tr> <tr> <td style="text-align: center;"> 5.9% APR financing for 18 months (monthly payments required) </td> <td style="text-align: center;"> 11.9% APR financing for 48 months (monthly, quarterly or semi annual payments required) </td> </tr> <tr> <td style="text-align: center;"> 7.9% APR financing for 24 months (monthly, quarterly or semi annual payments required) </td> <td style="text-align: center;"> 12.9% APR financing for 60 months (monthly, quarterly or semi annual payments required) </td> </tr> </table> <p style="font-size: 0.8em; margin-top: 5px;">* The above rate applies to the following new SP equipment: Balers, Bale Wagons, Forage Harvesters and Windrowers</p>	0.0% APR financing for 12 months (monthly payments required)	9.9% APR financing for 36 months (monthly, quarterly or semi annual payments required)	5.9% APR financing for 18 months (monthly payments required)	11.9% APR financing for 48 months (monthly, quarterly or semi annual payments required)	7.9% APR financing for 24 months (monthly, quarterly or semi annual payments required)	12.9% APR financing for 60 months (monthly, quarterly or semi annual payments required)	<h3 style="margin: 0;">CHOICE #2</h3> <p style="margin: 0;">FREE FINANCE (DEFERRED PAYMENT FINANCING) ON ALL NEW AND ELIGIBLE USED HAY AND FORAGE EQUIPMENT TO SEPTEMBER 1, 1985. AVAILABLE TO DESIGNATED USE DATES ON ALL NEW AND USED MANURE SPREADERS, GRINDER-MIXERS AND TUB GRINDERS.</p> <h3 style="margin: 0;">CHOICE #3</h3> <p style="margin: 0;">DIVIDENDS FOR CASH PURCHASES OF NEW EQUIPMENT. TAKE IT IN CASH OR AS A DEDUCTION FROM THE PRICE OF FORAGE EQUIPMENT, GRAIN WINDROWERS, SKID-STEER LOADERS, GRINDER-MIXERS, MANURE SPREADERS OR TUB GRINDERS.</p>
0.0% APR financing for 12 months (monthly payments required)	9.9% APR financing for 36 months (monthly, quarterly or semi annual payments required)						
5.9% APR financing for 18 months (monthly payments required)	11.9% APR financing for 48 months (monthly, quarterly or semi annual payments required)						
7.9% APR financing for 24 months (monthly, quarterly or semi annual payments required)	12.9% APR financing for 60 months (monthly, quarterly or semi annual payments required)						

ASK FOR COMPLETE DETAILS

Your **SPERRY-NEW HOLLAND** Dealer

C.E. WILEY & SON INC.

101 S. Lime St., Quarryville, Pa.
Phone (717) 786-2895

Our 78th Year Serving The Community

WESTFALIA HIGH TECH DAIRYING[®] CODATRON

Individualized computer feeding system

To be successful in dairying today you know how important it is to be in complete control of your feeding program and to have all the information possible on each and every cow. That's why Westfalia has developed the Codatron individualized computer feeding system.

With Codatron milk production and profits can be maximized while minimizing health problems thanks to an early warning system. And unlike many other units Codatron is an expandable system that won't become obsolete.

The feeding system is quality built and basically foolproof and automatic. You'll have dairy reports of herd conditions and performance. Ration adjustments can be made quickly and easily. You'll be alerted to problem cows fast.

The Codatron is available in two basic models. The F 26 with feeding capabilities to 999 cows up to 26 feeders, double ration capability with daily consumption reports. The Model L offers feeding plus breeding management capabilities.

And that's not all Westfalia's Codatron is designed for expansion into parlor data milk functions and home computer interfacing. Watch for new breakthroughs to be introduced soon!

Contact your Westfalia Sales Center today. Find out why Westfalia is truly the leader in high tech dairy equipment.

COMPUTER FEEDERS ARE HERE TO STAY!

WHAT HAVE YOU DONE?

FREE Consultation Plus

June Dairy Month Special Price

Call Us!

FISHER & THOMPSON ASSOCIATES

Milk Equipment Sales & Service
21 E. Woods Dr. Lititz, PA
CALL 717-627-1530

Amos Fisher 717-687-8871 Rick Thompson 717-627-1530
24 HR. SERVICE