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Dairy Forum 2016 Focuses on Milk Prices, Growth & Water

New Methodology to Measure Protein Content of Foods Based on Human Use

Dairy Forum, the annual meeting of the International Dairy Foods Association (IDFA), attracted over 1,000 attendees to Phoenix, Arizona the last week of January. Always one of the industry's premier events, Dairy Forum provides the dairy industry with excellent networking opportunities along with numerous presentations and panel discussions on timely topics. This edition of the Equity Newsletter focuses on four of the primary issues included at this year's gathering.

2016 Price Outlook

Kevin Bellamy and Thomas Bailey of Rabobank outlined the current world dairy situation along with Rabobank's projections for 2016. In their analysis, price recovery will likely happen this year but could be delayed until the fourth quarter. In response to last year's lifting of production quotas, European Union (EU) countries have put 15% additional milk on the world market. Although New Zealand production has declined due to lower pay prices and less favorable pasture conditions, China's imports have also declined due to building inventories from prior purchases. These combined factors have driven world prices down. Because the U.S. has been exporting 15% of its milk solids in recent years, domestic prices have followed world prices.

Rabobank expects that EU production will begin to taper off in response to the current lower prices, New Zealand production will decline even further, and China will finally work though its current inventories and increase its dairy imports. However, existing inventories in the major dairy producing countries will continue to make product readily available for the foreseeable future. Therefore, the analysts do not expect prices to improve until later in 2016.

Bailey outlined four challenges facing the U.S. in the near term. One, milk prices could erode

more if the existing butterfat premium in the U.S. market begins to disappear. Two, the drop in oil prices hinders the ability of oil producing countries to buy dairy products. Three, processing capacity is increasing and will bring additional product to the market. And four, the strength of the U.S. dollar makes American products expensive to importers, and the U.S. market attractive to exporters.

However, Rabobank believes the long-term outlook for dairy is bright as developing countries want to increase the amount of dairy in their diets. One benefit of the current low prices is that countries that have never imported dairy previously are buying product. These countries hold the potential to become long-term customers.

Growth Opportunities

McKinsey & Company presented new research focusing on growth opportunities and challenges for the U.S. dairy industry. Based on interviews with 33 dairy executives and surveys of 61 dairy companies, *Growth in an Evolving Dairy Market: Strategies for U.S. Dairy Companies* identified four areas U.S. dairy companies should consider for growth.

Two of these areas are of particular interest to Jersey producers.

1. Global Growth: Some companies will aggressively pursue markets outside the United States. Consumption in emerging markets is growing seven to eight times faster than the domestic market. The share of U.S. production that is exported has grown steadily over the past decade; however, it continues to lag behind other dairy exporting countries. One example cited is that the top five U.S. dairy companies realized 95% of their

revenue from the domestic market. while the top five EU dairy companies only had 51% of revenues from their home countries.

Exports are particularly important to Jersey producers because the U.S. exports consist of milk solids. Jerseys are efficient producers of milk solids.

2. Innovation: The preferences of Millennial consumers are evolving quicker than ever before. Employing effective consumer insight will enable companies to bring innovative products to the market that appeal to these consumers, with particular focus on providing dairy's nutritional benefits. The extra protein and calcium provided by Jersey milk should be attractive to dairy product innovators.

The complete report is published on IDFA's web site. Use this link: http://goo.gl/FkLRqH.

Water in Food Production

A panel discussion focused on the issue of water in food production. Water scarcity is becoming more prevalent worldwide. Depletion of the world's 37 largest aquifers has been ongoing since 2003. Declining water quality is compounding the impact of water scarcity.

The panelists offered several suggestions aimed at tackling the issue. Companies should create a business value to cleaning any water that is returned to the environment. Water savings and reductions on farms is imperative. Approximately 70% to 80% of developed water is used by agriculture. Proactive water management strategies need to be implemented instead of drought-reactive strategies.

Within the dairy industry, the water issue plays to one of the strengths of the Jersey breed. The sustainability research completed by Dr. Jude Capper and Dr. Roger Cady found that when milk is used for cheese production, on-farm use of water is 32% less for Jersey herds than for Holstein herds.

New Protein Quality Measurement

The Food and Agriculture Organization of the United Nations (FAO) released a report recommending new methodology to assess protein quality. The Digestible Indispensable Amino Acid Score (DIAAS) is to replace the Protein Digestibility Corrected Amino Acid Score (PDCAAS). While the PDCAAS method measures amino acids, its results are limited by the fact that it truncates any scores above 1.0 down to 1.0. It also does not differentiate between protein digested by the body and protein consumed by bacteria in the intestine. The DIAAS method more accurately identifies the amino acids actually used by the body. In addition, its reporting system does not limit scores to 1.0 on the top end.

Dairy ingredients score extremely well using the DIAAS method and differentiate themselves from other protein sources. The table below lists several common food proteins as measured by both methods.

Food Source	DIAAS	PDCAAS
Whole Milk	1.32	1.00
Whey Protein Isolate	1.25	1.00
Whey Protein Concentrate	1.10	1.00
Beef	1.10	0.92
Soy Isolate	1.00	1.00
Chickpeas	0.66	0.78
Kidney Beans	0.51	0.68

Widespread adoption of the DIAAS methodology should increase the demand for dairy protein both domestically and internationally. Jersey producers are situated perfectly to meet the additional demand for dairy proteins.