Market Matters

Demand for Whey Products Looks Bright

Demand for whey proteins has skyrocketed over the past two decades, driving the value of these products higher. The whey stream, a byproduct of cheese making, was once worth little and used primarily as animal feed. But over the past couple of decades, diversification of whey products grew along with demand for these products. Today, major whey ingredients include sweet whey powder (SWP), demineralized whey powder, which is overwhelmingly produced by EU member states, whey protein concentrate (WPC) with various protein concentrations, whey protein isolate (WPI), and whey protein hydrolysate (WPH). Each of these products has its own growing market.

Given today’s heightened global focus on health, nutrition, convenience, and protein, demand for whey products will continue to grow, particularly in the developing world where migration from rural areas to cities continues. As people in the developing world move into desk jobs as opposed to farm labor, they become more dependent on gyms for exercise and whey-based products for muscle recovery, as well as healthy snack products and convenience foods for nutrition. These trends will continue to boost demand for sports and lifestyle nutrition products, which primarily use WPC-80 and WPI.

Driven by Sports and Lifestyle

The global protein supplement market of which sports and lifestyle nutrition is a key part is projected to grow to $21.5 billion (U.S.) by 2025, up from $14 billion in 2018. The whey protein segment of this market accounts for nearly 57% of the total, according to Grandview Research. Moreover, the global health club (gym) industry, which generates $84 billion a year, is also growing, according to the IHRSA 2015 Global Report. While some health club markets, such as Australia and New Zealand are considered mature, with penetration rates of 14.8% and 11.4%, respectively, others such as China and India have penetration rates of just 0.4% and 0.13%, respectively. The upside potential in Asia for sports nutrition is huge.

Infant formula is another major market for whey proteins, specifically WPC-35-80 and demineralized whey powder. Demand for whey-based infant formulas is particularly strong from China.

Other major markets for whey proteins include recombined milk products, chocolate, and bakery goods. SWP and WPC-35 are used to make affordable recombined milk product replacements, particularly for markets in Southeast Asia and Africa. In Europe, some chocolatiers are using SWP as a lower-cost alternative to skim milk powder (SMP), particularly for milk chocolates and chocolate spreads. Bakers also have an opportunity to substitute SWP for SMP based on competing values.

Estimated growth in health and Wellness foods (2015 vs. 2016)

Source: Euromonitor

Over the past several years, the gap between whey protein values and milk proteins has narrowed due to several trends. At times, WPC-35 has even carried a premium to SMP, which has spurred some manufacturers of meal replacement products to switch from WPC-35 to milk proteins. Moreover, for some product lines, such as recombined milk products and lifestyle nutrition products, processors can readily substitute milk proteins for whey proteins. Buyers of dairy proteins can take advantage of these opportunities and shift formulations to reflect changing values. This ability to reformulate tends to either pull or weigh on each of the protein classes. While temporary setbacks and shifts can occur, consumers’ predilection to choose high-protein snacks and grab whey-based sports nutrition and lifestyle products after a workout have long-term staying power—and that means demand for whey proteins will continue to increase.
**Hoogwegt Forecast**

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<th>U.S. Average Prices</th>
<th>EU Average Prices</th>
<th>Oceania Average Prices</th>
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U.S. prices stated ex-works / incl. expected CWT subsidy where applicable; world prices stated FOB main port; EUR/USD: this week 1.125

**World Comment**

Global milk production still lingers around 0% y-o-y. And although milk prices are profitable in most regions it is not expected that in the second half of this year milk production will grow much above 1%. This is below the consumption growth we have seen in recent history. However, buyers do not seem convinced this will result in much higher prices and are in no rush to cover forward. Maybe due to various holidays, market for almost all commodity milk products have been very calm in recent weeks. This has resulted in stabilizing prices in the Northern Hemisphere after a bullish period. In Oceania prices have moved even down in the last GDT, bringing most prices roughly back on par with EU and USA. Butter market has been the most volatile recently, with big fluctuations in price as well as big differences between origins. European butter is competitive on the world market, more or less on par with Indian and East-European origins and trading at the lowest level in almost 2 years. The coming month will play a determining role in how prices will develop for the rest of the year. Because many buyers still need to cover a decent portion of their Q3 needs and a lot uncertainty around the weather will have disappeared. Although fundamentally there seems to be room for increasing prices, a less than expected demand from the 2 main dairy importers in the world, Algeria and China, combined with a better than expected milk production could still result in easing prices.

**Bring it Home**

Supply Development to Determine Market Stability

Major developments affecting cheese prices and returns to cheese processors, primarily in Europe and the United States, will be key to assessing the supply of whey proteins in the future. Moreover, cheese output is expanding at 2% per year and whey protein demand has been growing at 6-7%. While processors will want to supply growing demand for whey, they will be reluctant to do so if it means compromising cheese returns. Thus, whey supplies will likely only expand if cheese demand dictates.

More immediately, the gradual clearance of EU SMP stocks, from both government storage and private holdings, will be one of the key determinants driving the value of dairy proteins higher. Improving milk protein prices will, in turn, support rising prices for higher-protein whey products. Expectations for EU and U.S. milk production and demand from China will also play a critical role in the short-term outlook for whey.

We witness cheese capacity increase in both Europe and the United States; the main cheese producing regions. The complementary increase of liquid whey is resulting in additional WPC and WPI production while whey powder production is expected to stay at todays levels for the period 2019-2021.

Demand for lower-protein products has also grown, but supply has not. Through 2018, the value of SWP on a protein basis was in parity with higher-protein WPC and WPI products, eroding returns on these products. However, the recent plunge in SWP prices could help returns recover on higher-protein products provided demand expands. That said, with new supply primarily in WPC-80 and WPI, prices for the lower-protein products—SWP, WPC-30, WPC-35, and demineralized whey powder—could again close the gap on the higher-protein products as demand expands.

**Did You Know?**

China’s demand for SWP declined in the past 12 months due mainly to an ongoing trade dispute with the United States and an outbreak of African swine fever in China. As a result, first-quarter 2019 whey products from major cheese-producing countries fell 11% year over year, putting the rolling annual volume of trade at its lowest since December 2017.

Combined EU and U.S. cheese output grew 2.1% per year from 2013 to 2018, slowing to just 1% this year through March 2019. Slow milk supply growth through the end of 2019 will limit additional supplies of cheese and whey products.

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Dairy Ingredients
Dairy Proteins
Cheese
Liquid Dairy