

US Whey Permeate Production Increasing; Several Constraints Hampering Growth

Shell Beach, CA—Production, markets and constraints to growth for whey permeate were detailed here last week at ADPI's Dairy Ingredient Seminar by Veronique Lagrange of the US Dairy Export Council (USDEC).

Production of whey permeate is not reported to USDA, LaGrange pointed out. Production should somewhat "mirror" output of higher value protein concentrates, but no one knows for sure how much of that is dried and processed into an ingredient.

She provided estimates; her production data relies on industry sources, because there are no official sources anywhere in the world.

US whey permeate capacity is estimated at between 405,000 and 410,000 metric tons (893 to 904 million pounds), but not all capacity is being utilized all the time, so production last year was estimated at 331,000 metric tons (730 million pounds), Lagrange said.

Also, some suppliers of permeate have the option of selling for lactose production or just drying their product. Recent high lactose prices have made lactose production more attractive, whereas in some recent years permeate production was more attractive, mostly because permeate typically offered a higher yield, fewer disposal issues and higher returns, Lagrange said.

USDEC estimates that US production of whey permeate has grown from 217,727 metric tons (480 million pounds) in 2006 to an estimated 331,126 metric tons (730 million pounds) last year. USDEC estimates

that whey permeate output may reach 350,000 metric tons (772 million pounds) this year.

As far as utilization is concerned, just six years ago, only about 4 percent of the whey permeate was used in food, with 96 percent used in feed, Lagrange noted. By last year, 13 percent of the whey permeate was used in food.

Of the estimated total whey permeate capacity in the US, over two-thirds of the product is food grade, and one-third is feed grade. Yet a significant portion (over 70-80 percent) of US whey permeate is sold for animal feed, Lagrange said.

Up to one-third of US whey permeate production is exported, half of it in blends, Lagrange said. But there is "no reliable export data"; it is reported as whey or lactose or other HS codes are used.

China "dominates" the whey permeate export markets, she added. Right now, China is only a feed market.

As far as domestic food utilization is concerned, whey permeate is still used as a low-cost filler; it's an alternative to lactose, whey powder, maltodextrins and dextrose, and features excellent bulking, competitive pricing, and is a good browning agent and flavor enhancer, Lagrange said.

She cited a number of current application examples, including powdered drink mixes, snack food coatings, prepared meals, dry sauce mixes, baked goods, crackers, savory spreads, and confectionery spreads.

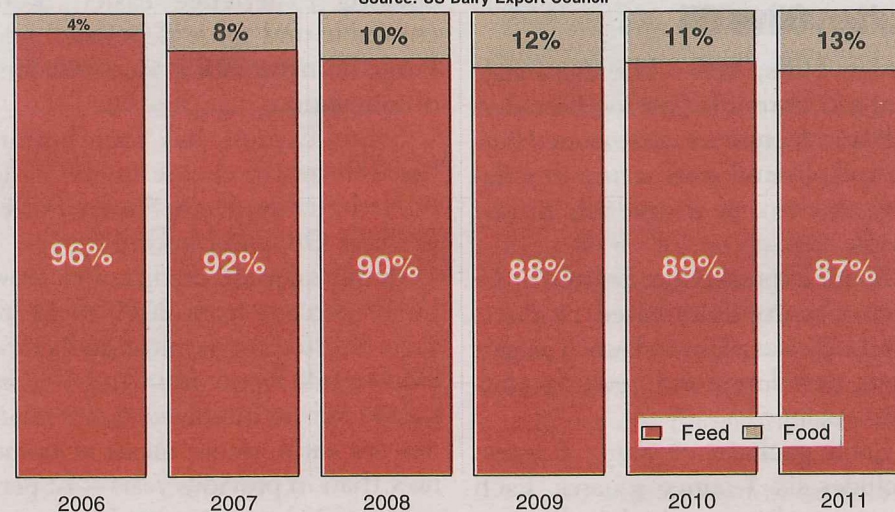
Constraints To Growth

Turning to constraints to growth for whey permeate, from domestic end-

WHEY PERMEATE UTILIZATION

Percent: Food vs. Feed

Source: US Dairy Export Council



users, USDEC has heard about differences and inconsistency in composition and performance within/between supply sources, Lagrange said.

Many companies like to have more than one supply source for an ingredient; they don't like being tied to one single source. Therefore, they would like to have at least two suppliers with comparable products, but this is "difficult to find," Lagrange said.

Also, a lot of the permeate is sold by traders who tend to sell products from various sources and maybe aren't aware of the differences that exist between the different types of permeate, she added.

USDEC has heard from end-users, particularly in the Northeast, that they want kosher or halal certification, but they can't find enough consistent supply of product with those certifications.

Labeling is another constraint to growth, Lagrange continued. Many end-users prefer the term "modified whey" over other terms such as "permeate" or "dairy product solids."

Internationally, whey permeate is still considered an animal feed product, Lagrange noted. There are also many countries where cost-competitive "fillers" are available.

Limited R&D know-how is another constraint to growth, Lagrange said. A number of end-users internationally would use permeate but they don't have the R&D capability to control the variability in whey permeate products.

And trade barriers are also constraining the growth of whey permeate exports.

"It would be nice to have one standard for food" and one standard for feed, Lagrange said. The Europeans are working on this; "they are pushing for the creation of a Codex standard." She urged the US industry to work "very closely" with them to make sure Codex doesn't exclude US products.

In closing, Lagrange said a large proportion of the whey permeate supply could be used in value-added food and nutrition products. She sees "great potential" for new nutrition segments in coming years. **FR**