

WHEY, WPC 34%, LACTOSE & CASEIN

Prices represent carlot/trucklot quantities for domestic and export sales packaged in 25 kg. or 50 lb. bags, or totes, spray process, dollars per pound.

DRY WHEY- CENTRAL

Dry whey prices moved up on the top of the range but held steady elsewhere. There was some early week spot market movement, even as most contacts are reporting expectedly slow buying and selling activity. Dry whey remains somewhat tight, although slower demand is keeping the market somewhat balanced. That said, there are buyers looking to add to their stocks if the prices are favorable. Even as milk has been available ahead and during the holiday week, a growing number of cheese plants are taking time off. Animal feed whey was a bit busy early in the week, as prices increased on the bottom and top ends. Contacts suggest other feed options are becoming harder to find. A number of milk replacer/feed grade whey trades took place, but more often partial or less-than-load deals were reported, most around the top of the current price range. Although CME dry whey markets are sliding, trading in the Midwest is maintaining some stability, due to the limited inventories regionally.

Prices for: Central U.S., All First Sales, F.O.B., Extra Grade & Grade A, Conventional, and Edible Dry Whey
Price Range - Animal Feed; \$/LB: .3000 - .3550

Prices for: Central U.S., All First Sales, F.O.B., Extra Grade & Grade A, Conventional, and Edible Dry Whey
Price Range - Non-Hygroscopic; \$/LB: .3600 - .5100
Mostly Range - Non-Hygroscopic; \$/LB: .4400 - .4700

DRY WHEY- NORTHEAST

Eastern dry whey prices slid down on the bottom half of the range, but held steady on the top of the price series this week. Trading activity is steady to lower on a short holiday week. Additionally, some manufacturers do not have available loads to offer on the spot market. Production schedules are steady to decreased at this time, due to seasonally lower milk volumes clearing into Class III. Dry whey supplies are steady to fairly balanced, as the majority of loads are committed to contracts. There is good demand for specific brands currently. Moreover, some traders purchased certain dry whey brands from resellers at higher prices. Current market conditions are fairly stable this week.

Prices for: Eastern U.S., All First Sales, F.O.B., Extra Grade & Grade A, Conventional, and Edible Dry Whey
Price Range - Non-Hygroscopic; \$/LB: .4625 - .5025

DRY WHEY- WEST

Western whey prices fell back at both ends of the range, but held steady on the mostly price series. While whey is moving well through existing contracts, some buyers are holding off on spot purchases and contracting for Q1 business. End users want to get a read on market direction before making any commitments. The strong U.S. dollar and lingering trade issues have stymied international buyer interest for the time being. Whey inventories across the industry remain tight, aside for a few manufacturers that have limited availability. Dry whey production is steady to lower. A few processors, seeing the firming trend for higher whey protein concentrations, have diverted some of their attention to making those products instead of dry whey.

Prices for: Western U.S., All First Sales, F.O.B., Extra Grade & Grade A, Conventional, and Edible Dry Whey
Price Range - Non-Hygroscopic; \$/LB: .3750 - .5100
Mostly Range - Non-Hygroscopic; \$/LB: .4250 - .4875

WHEY PROTEIN CONCENTRATE

Whey protein concentrate 34% prices held steady amidst light spot trading this holiday week. Apart from favorite brands, demand is generally uninspiring. A few manufacturers that make brands that are highly sought out by buyers suggest they have seen increased demand as one year comes near the end and a new year is right around the corner. WPC34% continues to move well through current contracts. The pull is enough to keep inventories in check. WPC34% supplies are somewhat limited, but sufficient to meet most end user demands. WPC34% production is steady.

Prices for: Central and Western U.S., All First Sales, F.O.B., Extra Grade, Conventional, and Edible Whey Protein Concentrate
Price Range - 34% Protein; \$/LB: .8300 - 1.0475
Mostly Range - 34% Protein; \$/LB: .8375 - .9275

LACTOSE

Lactose prices are unchanged. Higher mesh lactose and lactose used in infant formula applications typically are sold at prices at the top of the range and mostly price series. Demand is steady and there has been buyer interest for establishing Q1 contracts. A few manufacturers are working to get offers out early in advance of the yearend holidays. Production is steady and is keeping pace with orders. Inventories are tight to comfortable.

Prices for: Central and Western U.S., Spot Sales And Up to 3 Month Contracts, F.O.B., Conventional, and Edible Lactose
Price Range - Non Pharmaceutical; \$/LB: .3000 - .4500
Mostly Range - Non Pharmaceutical; \$/LB: .3100 - .3900

Secondary Sourced Information:

At the GDT Event 224 on November 20, the lactose price for the January contract period was \$0.4173 per pound, up 1.1 percent.

CASEIN

Rennet casein prices are weaker at the low end of the price range, steady at the top. Some New Zealand manufacturers are continuing to maintain range top pricing levels with varied customers who have strong sourcing preferences. Acid casein prices are steady. Production in Oceania is steady. It is far enough into the season that more milk is flowing toward casein than during recent months. Most production in the EU is committed through the year and into Q1 2019.

Prices for: Spot Sales And Up to 3 Month Contracts, Free on Board - Warehouse, Non-Restricted, All Mesh Sizes, Conventional, and Edible Casein

Acid; Price Range - \$/LB: 3.0600-3.1900
Rennet; Price Range - \$/LB: 2.2625-2.7500

Secondary Sourced Information:

Casein and caseinate exports from the EU January-September this year are +14.3 percent compared with the same period of 2017, according to Eucolait. Main export destinations January-September 2018 and percentage of total exports are:

Country	Percentage
United States	29.6
Mexico	13.3
Russia	6.6