

## AMINO ACIDS

The amino acid markets are relatively stable overall with only minimal changes seen over the past several weeks. Supply continues to outpace demand given lower feed demand with no indications of this trend changing in the near future.

Threonine and valine are the outliners with tighter supply basis import issues being experienced by Asian producers. Multiple major producers are unable to import currently thus tightening market supply and keeping prices firm. No timeline has been offered as to when this situation will be resolved.

Price indications show stable to a weaker trend predicted through mid-year.

INGREDIENT	Price Trend: 1 Month	Price Trend: 3 Month	Supply Availability
LYSINE	→↓	→↓	GOOD
THREONINE	→↑	<b>→</b>	GOOD
METHIONINE	<b>→</b>	4	GOOD
TRYPTOPHAN	<b>→</b>	<b>→</b>	GOOD
VALINE	→↑	→↑	GOOD

## **DAIRY POWDERS**

Conditions have shown little change with supply outpacing demand. With continued sluggish buying from international markets price trends remain stable to weak. Indications are this trend will continue through at least the first half of 2023.

INGREDIENT	Price Trend: 1 Month	Price Trend: 3 Month	Supply Availability
WHEY PERMEATE	<b>→</b>	<b>→</b>	GOOD
LACTOSE	<b>-&gt;</b>	<b>→</b>	GOOD
WHEY	<b>-&gt;</b>	<b>→</b>	GOOD





## **VITAMINS**

Overall quiet market conditions continue to be the trend with vitamins. Price conditions are riding the same trend of steady to weak for the past several months. Supply remains steady allowing buyers to purchase on an as needed basis.

Outside of a supply disruption, experts predict prices to remain stable for the foreseeable future.

INGREDIENT	Price Trend: 1 Month	Price Trend: 3 Month	Supply Availability
VITAMIN E	<b>→</b>	<b>→</b>	GOOD
VITAMIN A	<b>→↓</b>	<b>→</b>	GOOD
CAL PAN	<b>→ ↓</b>	<b>→</b> ↓	GOOD
NIACIN	<b>→</b>	<b>→</b>	GOOD
D3 500	<b>→ ↓</b>	<b>→</b>	GOOD

## **MINERALS**

With metal supplies of copper and zinc decreasing, prices of their byproducts have stabilized to even higher especially with copper sulfate. Greater demand in the consumer sector have caused raw metal supplies to decrease. Experts predict prices to remain variable for the short term.

Monocalcium phosphate prices look to be stable through the quarter. Prices globally have weakened given lower demand. With spring planting coming up, demand for fertilizer use will tighten supply.

INGREDIENT	Price Trend: 1 Month	Price Trend: 3 Month	Supply Availability
MONOCALCIUM PHOSPHATE	$\rightarrow$	<b>→</b>	GOOD
COPPER SULFATE	<b>→</b> ↑	<b>→</b>	GOOD
ZINC SULFATE /OXIDE	<b>→</b> ↑	<b>→</b>	GOOD