

FOOD AND NUTRITIONAL

Supply Chain Outlook 2022

JULY - ISSUE 18



*the*WrightGroup™

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ECONOMY

- RUSSIA / UKRAINE WAR STILL ONGOING
- SIGNS OF RECESSION

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Pricing Trends Key

- Price Increase 
- Price Increase Due to Current Events 
- Price Stable 
- Price Decrease 

Economic Update

The U.S. Bureau of Labor Statistics reported the latest CPI (Consumer Price Index) in June inflation up slightly to 8.6% from 8.3% in May and further predicted inflation for 2022 overall of around 6.5%, the highest level recorded in almost 40 years. The eurozone reported inflation at around 9%, which is the highest rate since the euro was established in 1999 and is expected to be 6.8% overall for 2022. The dollar is at a five-year high against the euro & is almost at parity for the first time since the year 2000. The World Bank forecasts +2.5% growth for the U.S. in 2022 and +4.3% for China. First quarter GDP was -0.4% with +0.1% predicted for Q2. The IMF has revised its forecast for China down to only +4.0%. China still claims it will hit +5.5% this year, but this is highly unlikely. Unemployment is at 3.6% and may increase slightly to 3.8% by year-end. There are still 11.4 MM job openings despite record job growth as the constraints around Covid have generally lifted. Even with 5.2% wage growth so far this year, workers are still running behind inflationary pressures. The good news is that there is still a large cushion of savings in consumers' hands due to stimulus payments and "doing without" during the pandemic which may help the economy avert a serious recession in 2023, though most economists still see a slowdown coming as the Fed raises rates to cool demand. In the longer run, this reduction of demand should help end our supply chain crisis.

According to AAA, the national gas price average is now over \$5/gal nationwide with average prices possibly reaching \$7-8/gal in California and Southwestern states by year-end. FED officials have indicated they are ready to implement sharper rate hikes in the coming months to curb inflation rates with the next increases expected to be 75 basis points each in June and July. This will help cool inflationary pressures at the expense of economic growth and could lead to a recessionary period in 2023. It is estimated that the equivalent of 12-13 quarter point hikes in the Fed Funds rate will be necessary to choke off inflationary pressures. We are almost halfway there. U.S. inflation is now expected to be 4.7% by 4Q, 2.7% in 2023 and 2.3% in 2024 barring a major recession.

These factors have led to overall Consumer Sentiment plummeting to decade low levels with the University of Michigan Consumer Sentiment Index (MSCI) hit a 70-year, all-time low of 50.0 in June, down from 59.1 in May. The Conference Board CCI hit a 10-year low of 98.7 in June. Market volatility is expected to remain high as investors and businesses adjust to new monetary policy implementation while simultaneously navigating the Russia-Ukraine conflict and its impact on energy costs (up 34.6% so far this year), commodity prices such as wheat, corn, sunflower oil and soy as well as global supply chain networks. Wheat prices have recently fallen 25% to \$9/bushel due

to exports of Russian product, some of which was stolen from Ukrainian stocks. YTD financial markets remain sharply negative for the year. YTD major index performance:

- S&P 500: **-21%** (Worst half since 1970)
- DJIA: **-15%**
- NASDAQ: **-30%**

Europe

The conflict between Russia and Ukraine has created a significant level of uncertainty in the eurozone, coming at an inopportune time as the region continues to recover economically from the impact of the Coronavirus pandemic. The World Bank estimates a contraction of 45.1% for the Ukrainian economy as well as a decline of 11.2% in Russian GDP, however the true impact remains unknown and will be contingent upon how the war progresses in the coming months. The overall impact is expected to be felt throughout the region, particularly in eastern Europe where GDP is expected to drop 30.7%, a stark contrast to the pre-invasion projection of 1.4% growth. Global food supply remains a concern as Russia and Ukraine account for about 25% of the world's wheat production and account for 80% of global sunflower oil exports. Energy costs have also skyrocketed with many European nations relying heavily on Russian oil and gas.

A recent article in The Economist magazine revealed that BASF, a major vitamin and intermediates producer based in Ludwigshafen, Germany is the largest consumer of Russian natural gas in Germany, accounting for 4% of total imports. There is a pipeline running directly from Russia into the plant. It is used to fuel the complex (60%) as well as providing feedstocks for their chemicals manufacturing (40%). It is thought that if the Russian gas is shut off or if pressure in the pipe drops below 50% of capacity, the plant may not be able to fully operate. In Germany, Europe's largest economy, GDP growth estimates have been cut from 4.6% to 1.8% citing the war in Ukraine & concerns over energy supplies & prices.

China

The economic outlook for the world's second largest economy (China) has continued to worsen lately, although China's manufacturing PMI rose to 54.7 up from 47.8 in May. Their services PMI rose to 50.2 from 49.6 in May. (<50 = contraction; >50 = expansion). A recent spike in Covid infections had led to an unprecedented lockdown now finally being relaxed in Shanghai and other cities, but China remains committed to its "zero-Covid" policy, which will continue to cause disruptions as the disease mutates and as cooler weather starts to impact the world this fall. In the meantime, port congestion has eased, but a shortage of dock workers and truck drivers continue to affect the supply chain.

CURRENT EVENTS

- MOSCOW STRIPPED OF TRADE STATUS
- WORLD TENSIONS RISE

Ukraine – Russia Tension: Global Responses

- As fighting in Ukraine continues into its fifth month, the leaders of Group of 7 countries are seeking to maintain unity against Russia in the face of the war's growing toll on the global economy. Even as Moscow has shown little signs of slowing down, Western sanctions intended to create discomfort for Russia have sent food and energy prices rising across the world.
- The first step in renewing the group's solidarity came before the summit formally began, with the announcement of the ban on gold imports from Russia. Russia is one of the world's biggest gold producers, and the metal is its second-most valuable export after energy products. Most of those exports are going to G7 countries through the gold trading hub of London.

Shanghai Lockdown: COVID-19 Pandemic Lingers

- China's Covid Zero policy looks to have successfully brought the spring outbreak under control, with new infections under 100 a day for almost two weeks, no major cities in a widespread lockdown, and more provinces reporting no cases at all.
- Twenty-two of China's 31 provinces had no cases in the past week, and provinces with cases all reported fewer than 10 a day.
- China reported 23 new infections overall on Sunday, with only 4 in Shanghai.
- As the outbreak has subsided people are going out more, with the number of subway trips last week up 10% compared to the same time last year.
- People took an average of 51 million subway trips last Friday in the top 11 cities, the most since early March.
- The Shanghai subway system is also returning to normal, with people taking almost 7.2 million rides last Friday. That's still less than the 9.8 million on average each day in 2021, but an improvement on the situation in April & March.

Coronavirus: Worldview

- June 27, 2022, Statistics (Reuters): Total Cases – 544 MM (upward trend), Total Deaths – 6.3 MM (downward trend).
- The Vaccines and Related Biological Products Advisory Committee voted 19-2 in favor of recommending that booster shots include a component that targets the omicron variant. The panel did not make a recommendation about what specific formulation the updated booster should take. It is now up to the FDA to decide which strains should be included in the next round of shots. The final decision could be decided within the month which would allow Pfizer-BioNTech and Moderna to begin the three-month process of manufacturing and distributing the shots, which are needed for an anticipated October booster campaign.

US Demand Weakens, Affecting China's Economy

- The pandemic, trade wars, the war in Ukraine, and rising US interest rates are a few factors that have hit China's economy. There has been hope that the economy would quickly rebound now, as COVID-19-related restrictions are eased. However, it appears that new as well as continuing headwinds are impacting Chinese manufacturers.
- There has been an expectation that, once China removed lockdowns and other restrictions, there would be a surge in cross-Pacific shipping of goods that would lead to higher transport costs. However, that has not happened. Instead, the cost of shipping containers from China to the West Coast of the United States continues to fall. This is likely confirmation of declining US demand for imported goods.
- The spot rate for shipping containers across the Pacific fell 3% last week and 17% in June. It has been declining since March. On the US end, it has been reported that there has been an increase in inventories, thus leading to a decline in orders from US retailers. Additionally, it is reported that port congestion in Shanghai is minimal, which is not what had been previously expected.

Trade

- Congress voted in a bipartisan fashion April 7th to strip Moscow of its preferential trade status as well as ban the import of Russian energy into the United States. Russia has since defaulted on its foreign debt for the first time since 1918. Europe is more affected by this than the U.S. In the meantime, the ruble is at a seven year high vs. the U.S. dollar, as the dollar itself has strengthened against most Western and Asian currencies.

Condition-Specific Supplements

- BJ reports 2021 developments in several key dietary supplement markets which were very strong and dynamic during the beginnings of Covid-19 in 2020. So far, according to 2021 data:
- General health supplement growth has slowed to +7.9% vs. 27.5%
Cold, flu immunity fell -4.2% vs. 72.3% growth in 2020. Stress, mood, mental health was up +14.4% vs. +29.4%.
- Sleep was up +17.5% vs. +36.6%. Also witness the marketing of high-end mattresses and pillows. Sports, energy and weight management up +9.2% vs. +5.3%.
- Sexual health up +6.2% vs. +2.2%.
- Hair, skin, nails up +9.5% vs. +4.7 in 2020.
- It should also be noted that e-commerce has become the third largest channel for dietary supplements, following Natural/Specialty stores and Mass merchandisers, mostly thanks to Amazon, which now carries 90,000 SKUs. Growth in supplement e-commerce grew +87.3% in 2021.

FAT SOLUBLE

VITAMINS

Trending Vitamins:

- FOLIC ACID
- VITAMIN C
- CYANOCOBALAMIN
- VITAMIN D

Vitamin A: Prices for Vitamin A have stabilized despite tightened supply due to European producer supply constraints. Feed demand way down, which is starting to pressure pricing in China. Producers are scheduling extended maintenance shutdowns this summer, in part to tighten the market.



Vitamin D: Prices on Vitamin D have stabilized after major increases in 2020.



Vitamin E: Demand is stronger than supply across the market. Price is trending up due to energy and logistical issues stemming from the War in Ukraine. Signs of some weakening in China for the same reasons as with Vitamin A. Extended shutdowns are scheduled this summer. Natural VE is extremely tight & expensive.



Vitamin K: Current pricing for vitamin K1 is stable. Most users prefer a 1% or 5% trituration. New uses in bone health and other condition-specific formulations, especially with vitamin K2, is making this formerly minor vitamin a more interesting story. Pricing and demand are stable.



Some global supply woes are easing and stabilizing while others are increasing.

Pricing Trends Key

- Price Increase
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VITAMINS CONT.

Trending Vitamins:

- FOLIC ACID
- VITAMIN C
- CYANOCOBALAMIN
- VITAMIN D

Vitamin C: Vitamin C prices are continuing to increase significantly due to tight supply and increased shipping costs.



Vitamin B1 (Thiamine): The B1 market has stabilized at a low price and may be bottoming out. All manufacturers are producing and several new entrants coming.



Vitamin B2 (Riboflavin): Riboflavin USP and food grade pricing are firm, and supplies are adequate. Several new entrants have begun manufacturing and potential capacity increases can be expected by the majors.



Vitamin B3 (Niacin/ Niacinamide): Pricing has stabilized in recent months even as pyridines have tightened up. Longer term, oversupply is developing.



Vitamin B5 (Calcium Pantothenate): Intermediate shortage leading to a significant swing in price. This is causing volatility across the market for B5.



Vitamin B6 (Pyridoxine):

B6 pricing has been stable as supplies have improved and demand has decreased.



Vitamin B7 (Biotin): After reaching exceptionally soaring prices in 2020, B7 prices began to fall and have now stabilized at a low level.



Vitamin B9 (Folic Acid):

The B9 market is displaying volatility; prices are currently on the rise due to raw material availability and logistics-related issues.





Vitamin B12 (Cyanocobalamin)


The B12 market is stable but prices are expected to rise due to increased raw materials costs.



Pricing Trends Key

Price Increase 

Price Increase Due to Current Events 

Price Stable 

Price Decrease 



MINERALS

- SOME MINERALS HAVE SEEN PRICE INCREASES
- PRODUCTION AND TRANSIT ISSUES ARE PART OF ESCALATION



Trending Minerals

- Iron
- Magnesium Sulfate
- Magnesium Oxide
- Magnesium Citrate
- Zinc Gluconate
- Zinc Citrate
- Zinc Oxide

Calcium Carbonate: Visit the Granulations section on page 10 for more information about our directly compressible version of SuperTab® oyster shell calcium carbonate.

- SuperTab® Oyster Shell Granulation (OSG) 2000 AM
- SuperTab® Oyster Shell Granulation 2100 Malto
- SuperTab® Oyster Shell Granulation 2300 Acacia

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Copper: Prices have stabilized but demand remains high.



Iron: Production & pricing are tight. Procuring products from overseas vendors is causing delivery delays.



Electrolytes

Calcium: Energy restrictions affected the production of Calcium in a negative way and market prices increased.



Magnesium: Magnesium market price and supply are stable.



Potassium: Potassium prices and availability are stable.



Phosphorus: Global demand and pricing continue to increase.



Sodium: Sodium prices are on the rise due to production and transit issues, limiting availability.



Zinc

Production levels were low in Q4 2021, so supply decreased, and demand continues to rise.



Zinc Gluconate: The price of Zinc Gluconate is stable however, lead times are increasing.



Zinc Oxide: Prices for Zinc Oxide are on the rise and lead times can be longer than average.



Zinc Sulfate: Zinc Sulfate prices remain stable however, lead times are increasing.



Zinc Ascorbate: The price of Zinc Ascorbate is stable; however, lead times are longer than average.



Zinc Citrate: Prices are showing an increase with longer lead times continuing.



MINERALS CONT.

- SOME MINERALS HAVE SEEN PRICE INCREASES
- PRODUCTION AND TRANSIT ISSUES ARE PART OF ESCALATION

Chelates

Zinc Amino Acid Chelate: Prices and lead times for zinc amino acid are increasing.



Zinc Bisglycinate Chelate: Prices for zinc bisglycinate are increasing and lead times are longer than average.



Zinc Glycinate Chelate: The Zinc Glycinate is experiencing longer than average lead times, but prices remain stable.



Copper Glycinate Chelate: Copper Glycinate prices are stable and expected to remain so.



Manganese Amino Acid Chelate: Prices for Manganese Amino Acid remain stable but are experiencing longer than average lead times.



Trace Minerals

Chromium: Chromium prices remain stable but can be difficult to source due to long lead times.




Molybdenum: The Molybdenum market is experiencing longer than normal lead times, but prices are remaining stable.




Selenium: The selenium lead times have increased; however, prices are stable.



Pricing Trends Key

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PREMIXES

- MANUFACTURERS ARE SWITCHING TO PREMIXES
- PANDEMIC HAS CHANGED THE WAY PROVIDERS OFFER SERVICES

Custom Nutrient Premixes

More and more manufacturers are switching to vitamin and mineral premixes. Premixes consolidate multiple nutrients into a quality-assured, single-step ingredient and deliver economies of scale by simplifying ingredient procurement from a single source.



Wright Group SuperBlend®

Our value-added SuperBlend® custom nutrient premixes deliver performance and stability in high temperature and shear processes in a variety of food and beverage products, including:

- Extruded bars
- Gummy supplements
- Breakfast cereals
- Ready to drink beverages
- Beverage mixes



MICROENCAPSULATION

- AN EFFECTIVE METHOD OF MASKING UNWANTED FEATURES
- DELIVER A WIDE-RANGE OF FUNCTIONAL INGREDIENTS



Microencapsulation Technology

Vitamins, minerals, and other nutrients possess unique characteristics that can affect the appearance, color, and odor of the final product. Microencapsulation is an effective method of masking unwanted sensory characteristics while maximizing nutrient function.

SuperCoat[®], our most recent innovation using our proprietary SMART[™] process, envelops particles at the microscopic level in a protective shell. This value-added coating technology delivers superior performance and stability of essential nutrients for a wide range of multi-functional ingredients.

Trending Microencapsulated Nutrients:

- Vitamin C
- Vitamin B5 (Calcium Pantothenate)
- Vitamin B9 (Folic Acid)

With a diverse portfolio of products, The Wright Group is one of only a select group of manufacturers with the technology and resources to deliver independent manufacturing of custom premixes, microencapsulated nutrients, and granulations.

Our comprehensive supply chain and extensive list of pre-qualified ingredients allows us to react quickly to changing market trends and help you keep up with consumer demand. We also understand that superior service is just as important as technology and expertise. That's why we provide you with prompt quotations, technical assistance, and support documentation to help you efficiently deliver your products on time. Contact us today to talk to one of our experts about your project needs or ask about any ingredients not listed here.



GRANULATIONS

- DELIVER ESSENTIAL NUTRIENTS IN GRANULAR POWDERS IDEAL FOR HIGH SPEED TABLETING
- CAN BE INCORPORATED INTO DRUM-TO-HOPPER TABLET BLENDS



Granulations

Rather than outsource granulations from a third-party manufacturer, The Wright Group has committed to developing technologies and processes in-house to effectively and efficiently manufacture **SuperTab® direct compressible granulations**.

SuperTab® granulations deliver essential nutrients in uniform, free-flowing, granular powders ideal for high speed tableting processes. As usual The Wright Group™ combines quality, innovation and superior knowledge to make sure your product is the best it can be. Ask about our granulation capabilities today!

Trending Granulations:

- Glucosamine
- Chondroitin
- Vitamin C

Oyster Shell Granulation

SuperTab® Oyster Shell calcium carbonate is sourced from an above sea level deposit, characterized as fossilized oyster shell beds. These oyster shell beds have been thoroughly vetted over the past ten years with testing of the material both analytically and physically to insure consistency and purity. The Wright Group sources the high purity genuine shells exclusively from a domestic supplier.

Contact us today to get started on your next dietary supplement product containing calcium carbonate granulations. Insist on SuperTab® Oyster Shell authenticity in your formulation.



**SUPER
TAB®**
Direct Compressible Granulations

blending performance & stability

For over 100 years The Wright Group has
utilized our extensive ingredient knowledge
to consistently deliver quality-assured
custom nutrient premixes,
microencapsulations, and granulations.



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