Supply Chain Outlook 2021

AUGUST - ISSUE 10



Contraction of the second second

ECONOMY

NEW COVID DELTA VARIANT

• JOB REPORTS ARE STRONG

USA

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Pricing Trends Key



The emergence of the delta variant of COVID-19 and the rise in cases nationally has resurfaced pandemic related economic concerns as many states consider implementing a new round of mandates and/or restrictions for its people. Jobs reports continue to be strong with the latest data showing average hourly earnings on the rise and an additional 943,000 jobs added in July, contributing to the unemployment rate falling to 5.4%. Despite the positive news

JOBS REPORTS

CONTINUE TO BE

STRONG WITH

THE LATEST DATA

SHOWING AVERAGE

HOURLY EARNINGS

ON THE RISE

STELEVIEL IN

many analysts are cutting their economic growth forecasts for the remainder of 2021 due to the variant's emergence. Further, the potential for future restrictions being imposed in certain areas would likely have

a negative impact on job growth and consumer spending which already still remain depressed in the service sector. Stock markets remain near record highs thanks to continued economic recovery, though the recent rise in COVID cases and the potential for more restrictions could worry investors and lead to a slight pull-back in the market in the future: Markets YTD as of 8/6/21:

- S&P 500: +14.26%
- DJIA: +12.04%
- NASDAQ: +12.73%

European Union

European recovery efforts continue to pick up the pace thanks in large part to increases in vaccination rates. Over 60% of EU residents have now received at least one dose of the vaccine. Manufacturing in the region continues to be in strong expansion territory despite raw material shortages being reported across a variety of different industries. PMI for the month of July was reported at 62.8 beating initial estimates of 62.6 and still well above the 50 thresh hold that indicates growth. Inflation continues to be a concern, particularly recently in the Euro zone as its recovery efforts lagged behind those of the US and China. Suppliers are battling to ramp up production

> fast enough to keep up with demand, but raw material shortages compounded by increased transportation costs continue to push consumer prices higher. The Input prices index reading for the region came in at 89.2, the highest reading ever since the survey began in 1997.

China

In Asia, COVID cases continue to increase sparking newly imposed restrictions both to travelers and citizens in many countries including Japan, Vietnam, Malaysia, and The Philippines. China has also seen a spike in cases recently but most investors expect the country will have it under control within a month or two. This new wave of cases is not expected to have a noticeable impact on manufacturing but is expected to have a significant impact on retail sales and the services sectors within China. This is why analysts have recently downgraded China's annualized growth rate for Q3 including Goldman Sachs, revising its projection down from 5.8% to 2.3% for Q3. They are however currently expected to rebound in Q4 and finish the year at over 8% YoY growth.

CURRENT EVENTS

- RISE IN COVID CASES
- IMMUNITY-BUILDING NUTRIENTS ARE STILL ON THE RISE

COVID-19

- Top 3 total number of deaths are in US, Brazil and India.
- Top 3 total number of cases are in US, India and Brazil. Following are France, Russia, UK and Turkey.
- Global COVID-19 cases have passed 200 million and deaths have exceeded 4.2 million..
- Although the number of deaths is rising the official figure may not truly reflect the actual number in many countries.
- Several COVID-19 vaccines are approved for use in 194 countries and territories administering and publishing roll-out data.
- Overall, China and India have given the most vaccine doses (1.7 billion and 495 million respectively) while US has administered 349 million doses. United Arab Emirates, Uruguay, Bahrain have given more doses per 100 people in countries with populations over 1 million.
- Asia, the center of the initial COVID-19 outbreak, has had another rise in outbreaks; this includes India, Indonesia, Japan and China.
- Brazil has had the second highest casualty rate globally. Mexico now has the fourth highest number of deaths globally and Peru has the fifth highest.
- Although the UK, Russia and Spain all saw a rise in cases recently, driven by the delta variant of the virus, numbers have started to fall. Other European countries, such as France, Italy and Greece, are still seeing case numbers climb. The high level of vaccination has greatly reduced the number of deaths in the UK.
- The US has seen a rise in cases over the past few months attributed to the delta variant. Canada has not yet seen an increase in number of cases.

Global Trade

- Container shipping rates from the US to China have recently reached new highs
 - Retailers are beginning to increase order volume ahead of the back-to-school shopping season in the US which is one of the peak seasons of the year
 - Global container turnaround rates have recently slowed even further due to the acceleration of the delta variant of COVID-19 in many countries
 - Global container shipping has become a highly

disruptive, creating an environment where shipping companies can charge four to ten times more than usual to move cargo

Supply Chain

• Shipping container shortages and rate hikes continue to dominate headlines. Goods that used to take 6 weeks to move from Asia to the US now take 10 +. Domestically freight lines continue to be strained as well with logistics companies struggling to keep up. Driver shortages and full warehouses are creating situations where carriers are unable to handle the large volumes. This is now leading to temporary embargoes being placed on certain terminals and cities to allow them time to catch up.

Consumer Trends

- Pandemic 2020 meant comfort food and post-pandemic 2021 has seen this continue so far. Pantry meals are about stretching and saving food and money. Consumption of certain foods (via vegetarian or flexitarian diets) is on the rise for maintaining mental and cognitive health.
- Cutting down on food scraps and waste and minimizing purchases of over-packaged foods appears to be on the increase for now. More upcycled foods are being introduced into the CPG market, especially snacks.
- Although keto products are selling well again consumers are still experimenting with fusion cooking, baking breads and elevating the role of plant-based desserts as part of healthy eating.
- Herbs, root vegetables and mushroom consumption continues to grow. Consumers believe that these contain not only important nutrients but also adaptogens which supplement their healthfulness.
- Instant pots and air fryers are increasing as appliances for cooking everyday meals.
- Although consuming a healthy diet is important the rise in digital healthcare technologies will increase personalized nutrition. The supply of home test kits and individualized dietary supplement packets and practices continue.
- Immunity-building nutrients and other ingredients are still of interest to consumers despite caveats of limited clinical studies. Most commonly sought are: Vitamin C, Vitamin D, zinc, elderberry, probiotics and medicinal mushrooms.
- On-the-horizon for immunity are: astragalus, selenium, garlic and andrographis.

FAT SOLUBLE VITAMINS Trending Vitamins: • FOLIC ACID • VITAMIN C

CYANOCOBALAMIN

Vitamin A: Prices for Vitamin A have stabilized despite tightened supply due to European producer supply constraints.

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

Vitamin E: Suppliers report costs of the raw ingredients used to manufacture E products are significantly increasing (Methanol, Acetic Acid, Alcohol, Acetone) which is resulting in the E products increase.

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. The market now has a strong interest in immunity ingredients, leading to price increases among many vitamins.

VITAMIN D



WATER SOLUBLE VITAMINS Trending Vitamins: • FOLIC ACID • CYANOCOBALAMIN

Vitamin C: Vitamin C prices remain high during the first half of 2021 and are not currently increasing. Potential extensive summer shutdowns could cause prices to move up in second half of this year.

Vitamin B1 (Thiamine): The

B1 market has stabilized but still volatile as we move into second half of 2021.

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.

Vitamin B5 (Calcium Pantothenate): Price and supply of Vitamin B5 has stabilized

Vitamin B6 (Pyridoxine):

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

Vitamin B7 (Biotin): After

reaching exceptionally high prices in 2020, B7 prices began to fall and have now stabilized at a low level.

Vitamin B9 (Folic Acid):

Vitamin B9 prices have increased due to lack of raw material availability.



Vitamin B12 (Cyanocobalamin)

The B12 prices and supply are relatively stable.





MINERALS

SOME MINERALS HAVE SEEN PRICE INCREASES **COVID-19 HAS MADE SOURCING SOME MINERALS DIFFICULT**

Zinc Gluconate

Zinc Citrate Zine Oxide

Trending Minerals

- Iron
- Magnesium Sulfate
- Magnesium Oxide
- Magnesium Citrate

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



Price Increase Due Price Stable 177 Price Decrease 77

Copper: Due to increased

domestic demand in China coupled with COVID-19 related supply issues, Copper prices have started to rise.

Iron: Iron prices and availability remain stable.

Electrolytes

Calcium: Prices for calcium are stable and are expected to remain steady through Q4.

Magnesium: Magnesium prices remain stable.

Potassium: Potassium prices and availability are stable.

Phosphorus: Pricing for phosphorus is stable and expected to remain so.

Sodium: Sodium prices remain high. Potential extended summer shutdowns could cause prices to move higher in second half of this year.

Zinc



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MINERALS

SOME MINERALS HAVE SEEN PRICE INCREASES

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, and prices are beginning to increase.

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.





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



ANDINALGANT

DRINK MIX Net wit it da da da da

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 multifunctional 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 prequalified 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.





FUELING PRODUCTS ENHANCING BOTTOMLINE

About The Wright Group

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.

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