

Glucosamine and Chondroitin's Worlds Aren't Flat

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Recent changes in conditions surrounding the heartland of the Asian Economic Region have disrupted production and set the markets soaring for otherwise stable and almost essential ingredients in the joint supplement market.

Glucosamine and chondroitin are established complementary ingredients that form the building blocks of most good joint support nutraceutical formulations. Accordingly, most national brands have acknowledged the research and consumer confidence and developed formulations keeping these two ingredients as the base and differentiating with additional actives.

China is the world's leading producer of glucosamine and chondroitin. India, to a lesser extent, has been developing its expertise in supply chain and manufacturing. Apart from these two countries the rest of the world's production is insignificant. However, glucosamine and chondroitin are recognized and used worldwide for their joint supplement benefits. Some countries in Europe consider glucosamine as a medicinal food and accept only pharma-grade product.

So when China decides to increase its new pollution control norms it impacts production, and in many cases, also causes closure of factories that do not comply with the current administration's pollution control norms; this results in a serious impact on the supply of material.

There are some similarities between glucosamine and chondroitin. Both are primarily animal-derived, although there is some vegetarian glucosamine that is starting to make its entry into the market; the supply is small and all the previous research is based on the original shrimp shell-derived material. Animal husbandry laws affect the sourcing and availability of the raw material—marine fishery laws in the case of glucosamine, and bovine harvesting laws in the case of chondroitin. Like glucosamine, chondroitin has alternate sources like piscine- and porcine-derived materials. This is also a source of contamination and in some countries that have strict Halal certified laws where porcine presence in chondroitin is considered an adulteration.

India is beginning to take a formidable position with glucosamine and Bayir is at the forefront as India's largest manufacturer of Glucosamine for the regulated market. It is looking to increase its current capacity of 900 metric tons per annum with recent investments in capacity expansion and R&D possible due to a significant investment from Rabo Bank PE. Exports are on the rise and clearly customers are looking to have another source than China to mitigate the risk of single sourcing, and Indian-origin glucosamine is perceived to be better quality that commands a premium in the market. Bayir's supply chain makes sure that only wild caught shrimp are used in the process thereby improving the quality and lowering the risk of pesticide and herbicide residue seen mostly with cultured or farmed shrimp.

Chondroitin, however, has been hit with a double whammy. On the one side there is China losing factories that do not comply with current pollution control norms and there is India where an anti-cow slaughter movement has picked up momentum, forcing slaughterhouses to close down overnight in some states. For these reasons and other minor cost of production increases, the demand for chondroitin has outstripped supply. How this is going to impact supply in the long term is up for speculation. Bayir has invested in R&D and production facilities and developed a proprietary enzymatic hydrolysis process that makes its chondroitin safe and contaminant-free. It has also been audited by the Malaysian Halal Authority.

Such disruptions have occurred in the past albeit to other ingredients and categories. Time has shown that ultimately the company that invests in R&D and production and continues with uncompromised quality will come out as clear winner. Speculative traders will probably make a few bucks in the short term, but manufacturers committed to the business will see this cloud of uncertainty pass by and emerge even stronger.