

# *GAIN* Report

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# China, People's Republic of

Sugar

# **Artificial Sweeteners Threaten Sugar Demand 1999**

Prepared by:

Ralph Bean U.S. Embassy, Beijing

Drafted by: Freda Chao

#### **Report Highlights:**

Because of China's high support prices for sugar, food processors are substituting lower priced artificial sweeteners for sugar. Artificial sweetners may account for over one third of China's total demand for sweeteners, while sugar stocks continue to grow. The government recently issued regulations to control production and consumption of artificial sweeteners in order to maintain demand for sugar.

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## **Unwelcome Competition**

China's sugar industry is facing hard times. High government-supported prices have led to overproduction, smuggling, and rapid accumulation of domestic stocks. Now refiners face growing competition from artificial sweeteners. The artificial sweetener industry was originally founded as a means of increasing export income: saccharine alone generated nearly \$34 million in exports in 1997. However, high domestic sugar prices have made these relatively inexpensive sweeteners more appealing to domestic food manufacturers, who have been using increasing quantities of artificial sweeteners in their products. Recognizing the problem, the Chinese government has undertaken a number of measures to reduce substitution of artificial sweeteners for sugar.

### **Public Enemy #1**

Saccharine represents the greatest threat to sugar consumption. Production of saccharine has skyrocketed in recent years, jumping from 10,000 MT in 1995 to 29,000 MT in 1998. Of this, some 11,000 MT was exported and the remaining 13,000 MT was consumed domestically. Though this quantity seems small compared to domestic

Saccharine Production and Exports 1995 - 1998				
	1995	1996	1997	1998
Production	10,000	22,500	25,000	29,000
Exports	1,540	10,423	11,672	16,000
Difference	8,460	12,077	13,328	13,000

sugar consumption of over 9 million MT last year, saccharine is highly concentrated. According to some articles in the local trade press, the 13,000 MT of saccharine was equivalent to roughly 5 million MT of sugar, though other sources imply that it is closer to 3.3 - 4 MMT.

In response, the Chinese government has issued new regulations to prevent further erosion of domestic sugar markets. Beginning in 1999, all saccharin production will be managed through a licensing system. Licensed producers are now governed by production quotas, issued in May by the Ministry of Finance, Trade and Economic Cooperation (MOFTEC). Total production quotas for 1999 are limited to 24,000 MT, of which 16,000 MT is to be exported. Plants founded after 1992 are to cease production of saccharine, with conversion efforts supervised by local economic and trade commissions to guarantee that they do not go back to producing saccharine. Licensed plants are further required to report production on both a monthly and quarterly basis. Any enterprises exceeding production quotas could have their license revoked or their production quota suspended. Procurement of saccharine is also being regulated. All procurement must now be made from state-approved (i.e., licensed) enterprises, monitored by the State Administration of Light Industry.

#### **Minor Offenders**

China produces a number of other sweeteners, some of which compete directly with sugar. Most important is cyclamate, which is produced in similar volumes to saccharine, but is not as sweet. The Ministry of Light Industry estimates cyclamate to be roughly 50 times as sweet as sugar, compared to 250 to 300 for saccharine. Like

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saccharine, cyclamate is used primarily as a sweetener, and so it is directly competitive with sugar. The number of manufacturers has remained stable at 15 throughout the 90's, and production is expected to remain steady at or below the 1996 level of 30,000 MT.

For most other sweeteners, use is more specialized, making the products less likely to be used as a substitute for sugar in processing. With the exception of sorbitol, production is either very low or not reported at all. Though sorbitol production jumped from 50,000 MT in 1995 to 90,000 MT in 1997, with imports climbing from 32,428 MT to 46,997 during the same period, the government does not perceive this as a problem since the product is used primarily in pharmaceuticals, cosmetics and toothpaste. Xylitol is likewise classified as a food additive for medical use, rather than as a sweetener.

Steviosides presents a more complex picture. Refined from a plant called Sweet Stevia and used primarily as an additive in food for diabetics, Steviosides production remains low but has grown quickly. Actual trade and consumption is unclear, since official statistics conflict with each other: total production in 1997 is estimated at 1,400 MT, domestic sales 1,360 MT, and exports 1,100. Domestic prices have fluctuated widely, ranging from \$32,530/MT to \$56,627/MT during 1997. Nonetheless, returns are good, and more than twenty provinces are now growing sweet stevia. Excessive supplies of raw material have driven down prices, helping to reduce production costs. Rapid increases in production are unlikely however, since the government has categorized steviosides as a non-nutritious high-sweetness sweetener, meaning that production will be controlled by the government. MOFTEC has declared that no additional manufacturing facilities will be established during the current five year plan.

#### **Just Desserts**

Government price supports for sugar have created an unusual situation in China, wherein manufacturers use artificial sweeteners not to add value by creating diet foods, but to reduce costs by substituting fore expensive, bulky sugar. As a result, artificial sweeteners are often used in circumstances where sugar would normally be preferred, but is more costly. Though the quantities of artificial sweetener are small, the damage is great. If, as industry press claims, the 13,000 MT of saccharine consumed in 1997 is equal to 5 million MT of sugar, this is equivalent to half of total domestic sugar consumption that year, and double the level of domestic stocks. Put differently, if 50% of saccharine consumption were switched to sugar, the vast domestic stockpile that has depressed refined sugar prices might vanish within a single year. As previously noted, the government has become aware of the problem. Though consumption is not likely to fall significantly, the government's measures are likely to prevent further erosion of the consumption base for sugar.