

**75,000 Food & Beverage Jobs
Have Disappeared Due To
The Sugar Program**

**A report prepared for
Sweetener Users Association**

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EXECUTIVE SUMMARY

The US sugar program is causing significant and continuing job losses in our food and beverage manufacturing industries because the government support program keeps the price of sugar well above prices in other countries. This makes it cheaper to manufacture sugar-containing products abroad for export to the United States. In just the last eight years, the overall impact on employment in sugar-using industries is a loss of more than 75,000 jobs. And two-thirds of cane sugar refining jobs have also been eliminated since the program began in 1981.

Jobs in sugar refining are down

- In 1981, the year the current sugar program began, there were 23 cane sugar refineries in the United States. Today there are eight.
- Between 1982 and 2005, there was a 67% decline in sugar refining jobs. In 1982, there were 8,300 jobs in the industry, while by 2005 there were an estimated 2,746.

Jobs in sugar-using industries are down

- Over the past eight years, 75,372 jobs have been lost in sugar-using industries according to Department of Commerce data.
- Between 1997 and 2005, more than 1 out of every 5 jobs were lost in the non-chocolate confectionery industry – almost 5,700 or about 22% of total 1997 employment.
- Since 2005, even more jobs have been lost as a result of additional candy plant closings around the country.
- Overall, between 1997 and 2005, 11 of 12 sugar-using industries experienced employment declines ranging from -1.7% to -27.4%.

Jobs in the sugar-using industry are evaporating while jobs in other food industries are growing.

- The 12 sugar-using industries saw employment decline 10.5% over the eight-year period.
- By contrast, for 13 food and beverage sectors that do *not* use substantial amounts of sugar, employment grew by 3.6%.

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SECTION I: BACKGROUND

Jobs are one measure of the importance of particular industries, and certainly weigh heavily in the politics of formulating national economic policy. Perhaps more importantly, jobs are where the abstractions of farm and trade policy directly affect the lives of real people.

The American Sugar Alliance (ASA) has often used inflated claims of the number of jobs involved in the US sugar and HFCS industries to try to justify continuation of the US sugar program. Their most recent fanciful estimate is 372,000 direct and indirect jobs, in marked contrast to the U.S. International Trade Commission's estimate that sugar production in the United States involves only 51,344 jobs.¹

Whichever number is used, ASA raises the specter of all those jobs being lost if the sugar industry is not treated well in the 2007 farm bill and in free trade agreements the Administration has been negotiating.

However, food and beverage manufacturers employ over 60 times as many people as sugarcane and sugar beet processors, and there is clear evidence that a good number of those jobs are disappearing as a result of the sugar program. Manufacturing of sugar-containing products is shifting to other countries where sugar costs are lower.

We have often criticized the methodology behind the study that came up with the ASA job number. It is seriously flawed. It inflates the number of jobs supposedly involved in sugar production and uses multipliers inappropriately to further exaggerate the figures. The study also incorrectly characterizes the cane sugar refining industry as a beneficiary of the program. The truth is that the sugar program has contributed to the 67% decline in refining jobs since 1982. Finally, the numbers include jobs in corn production and refining, which today is a completely separate market.

What is usually ignored in the sugar jobs debate is the fact that the sugar program is costing jobs in the food and beverage industry. This happens in two ways. First, due to their higher cost, demand for sugar-containing products shifts slightly to other types of foods and beverages. Second, and much more importantly, demand shifts to imported sugar-containing products because manufacturers in other countries do not have to pay the high US support price for sugar.

The result is that what were once good American manufacturing jobs get exported to other countries, and industries that are the primary users of sugar in the United States not only do not

¹ U.S. International Trade Commission, "The Economic Effects of Significant U.S. Import Restraints", June 2004 and February 2007

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grow, they decline. As we show below, more than 75,000 existing jobs in food and beverage manufacturing have been lost since 1997 due to our protectionist sugar policy. And another 26,000 that might have been added by normal growth in the sector never materialized. More will continue to disappear as the barriers to international trade in food and beverage products continue to fall, while the domestic sugar industry remains protected.

SECTION 2: JOBS IN THE FOOD SECTOR

The Federal sugar program's high support price is costing us jobs in the food sector. In many cases, and particularly for confectionery, it is clear that the jobs are going to other countries where costs for sugar, other ingredients, labor, etc. are lower. The evidence is plain to see in official Department of Commerce data on employment and trade.

Sources of data on employment

In its Economic Census conducted every five years and in the Annual Survey of Manufactures, the Department of Commerce develops industry-by-industry estimates of employment, value added, sales and other measures of economic activity. The most recent published data is for 2005 and consistent data series are available back to 1997 when the industry classification system was last changed.

For the food and beverage sector, the Department of Commerce collects data on 26 industries defined at the 5-digit level of the North American Industry Classification System. In Table I we have separated those into three groups: the sugar manufacturing industry, twelve sugar-using industries, and thirteen other food and beverage industries. In 2005 the number of employees in the three groups in round numbers was respectively 14,000, 642,000 and 907,000.

Decline or stagnation in sugar-using industries

The differences between the sugar-using and non-sugar-using groups are striking. Eleven of the twelve sugar-using industries experienced employment declines over the eight-year period, and total employment for the group declined 10.5%, i.e. at a compound annual rate of -1.3%.

Normal growth in other foods and beverages

For the thirteen industries that do not use significant quantities of sugar, the number of jobs grew by 31,171 or 3.6%. This represents an annual rate of 0.45%. Food and beverage manufacturing in the United States can only be characterized as a "mature" sector, and at best one would expect employment to be growing at about the 1.0% rate of population growth, or slightly slower due to productivity gains. That is exactly what we see in the latter group of industries.

The fact that the number of jobs in sugar-using industries is declining rather than growing is a sign that something else is going on. Jobs are being lost, and jobs that should have been created here are instead being created in other countries.

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**Table I
Total Employees by Industry**

Industry	1997	2005	Absolute change	% change
Sugar-using industries				
Breakfast cereal mfg	14,396	13,447	-949	-6.6%
Choc. & confec. Mfg. from cacao beans	9,946	7,942	-2,004	-20.1%
Confec. Mfg from purchased choc.	32,871	26,442	-6,429	-19.6%
Nonchocolate confectionary mfg.	25,512	19,830	-5,682	-22.3%
Frozen food mfg.	94,192	85,727	-8,465	-9.0%
Fruit & veg canning, pickling., & drying	97,384	81,234	-16,150	-16.6%
Ice cream & frozen desert mfg.	19,786	19,177	-609	-3.1%
Bread & bakery product mfg.	222,596	218,870	-3,726	-1.7%
Cookie, cracker & pasta mfg	64,401	46,757	-17,644	-27.4%
Snack food mfg	46,609	47,043	434	0.9%
Flavoring syrup & concentrate mfg	6,243	5,553	-690	-11.1%
Soft drink & ice mfg	83,256	69,798	-13,458	-16.2%
Sub-total	717,192	641,820	-75,372	-10.5%
Other food & beverage				
Animal food mfg.	46,651	43,890	-2,761	-5.9%
Flour milling & malt mfg	17,877	15,130	-2,747	-15.4%
Starch & veg fats & oils mfg	26,970	24,351	-2,619	-9.7%
Dairy product (except frozen) mfg	112,082	108,597	-3,485	-3.1%
Animal slaughtering & processing	464,991	485,965	20,974	4.5%
Sefood product prep & packaging	40,763	39,243	-1,520	-3.7%
Tortilla mfg	11,303	12,345	1,042	9.2%
Coffee & tea mfg	12,895	10,700	-2,195	-17.0%
Seasoning and salad dressing mfg	26,055	30,881	4,826	18.5%
All other food mfg	56,886	80,925	24,039	42.3%
Breweries	34,251	24,294	-9,957	-29.1%
Wineries	18,193	24,122	5,929	32.6%
Distilleries	6,417	5,462	-955	-14.9%
Sub-total	875,334	906,505	31,171	3.6%
Sugar manufacturing				
Sugar manufacturing	16,547	14,183	-2,364	-14.3%
Total food & beverage	1,609,073	1,567,353	-41,720	-2.6%

Source: Annual Survey of Manufacturers, U.S. Department of Commerce

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Sugar confectionery jobs hit hard

The US confectionery industry is the clearest example of what is happening. The industry is composed of three parts: companies that process cocoa beans and also make candy from the resulting ingredients; companies that make candy from purchased chocolate; and companies that make non-chocolate confectionery. For the latter group, the main ingredient is obviously sugar. For hard candies, sugar and corn syrup account for about 95% of the weight.

Companies making non-chocolate confectionery have been hit hard because competitors in other countries have access to lower-cost sugar. Over the past decade, plants have closed and companies have moved operations wholly or partly offshore, with the press in each case citing sugar costs as a major factor in the move, usually along with other factors such as labor costs.

As shown in Table 2 below, the number of jobs in the sugar confectionery industry declined by 5,682 between 1997 and 2005. Since then, there has been additional attrition in the industry due to import competition. And one should also take into account the growth in employment that should have occurred in the industry.

Table 2

Employment in the US Confectionery Industries				
	Chocolate from beans	Confectionery from chocolate	Non-chocolate confectionery	Total
1997	9,946	32,871	25,512	68,329
1998	10,000	29,859	27,389	67,248
1999	8,945	33,564	25,386	67,895
2000	9,083	35,581	22,940	67,604
2001	9,045	36,978	23,484	69,507
2002	8,789	32,881	24,037	65,707
2003	8,999	32,580	21,523	63,102
2004	8,308	28,041	19,740	56,089
2005	7,942	26,442	19,830	54,214

Source: Department of Commerce Annual Survey of Manufactures

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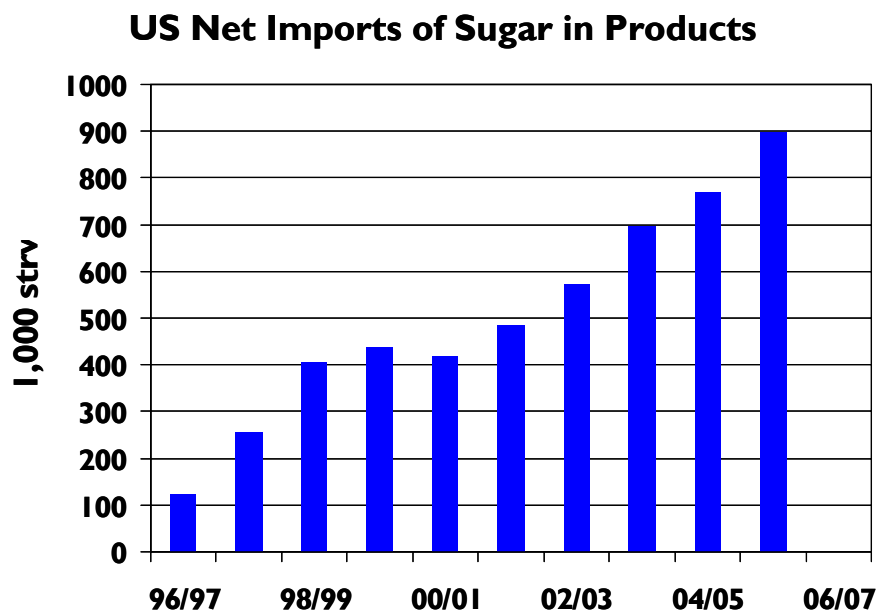
SCP imports

A principal factor behind the decline in jobs in sugar-using industries is the rapid growth that has been occurring in net imports of sugar-containing products (SCPs). For some time Promar has been tracking imports and exports of such products in approximately 230 10-digit categories of Chapters 17 through 22 of the US Harmonized Tariff Schedule (HTS). These chapters include almost all the foods and beverages that normally contain sugar:

- Chapter 17 – sugar confectionery, chewing gum, syrups, etc.
- Chapter 18 – chocolate confectionery and cocoa preparations of various types
- Chapter 19 – bakers' mixes, puddings, malted milk, cereal, cookies, pastries, etc.
- Chapter 20 – jams, jellies, preserved fruit, peanut butter
- Chapter 21 – coffee and tea mixes, ketchup, sauces, condiments, ice cream, gelatin, etc.
- Chapter 22 – soft drinks and other beverages

In addition to retail food products, these chapters also include food ingredients and mixtures of ingredients to be further processed into a final product. Increasingly, many of these SCPs are now being manufactured abroad where sugar is cheaper and are then being exported to the United States. The trade liberalization that has occurred as a result of NAFTA and the Uruguay Round has reduced or eliminated many of the barriers to such trade, particularly for finished retail products. However many bulk mixtures containing sugar remain subject to quotas.

We estimate that the United States has gone from being a slight net exporter of sugar in SCPs in the early 1990s to being a net importer of almost 900,000 tons of sugar in such products in FY 2006. (See figure below)



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It should be noted that there is no legal authority to put quotas on most of these products, and doing so would require the United States to pay compensation to affected countries under WTO rules or face nullification-and-impairment cases.

The volume of sugar embedded in trade in these products is shown in Table 3 on a fiscal year basis by tariff chapter. Imports have risen from 511,000 tons in FY1997 to 1,490,000 tons in 2005/2006. Exports have risen as well, but not enough to offset the sharp rise in imports.

If employment in sugar-using industries had expanded by the same 3.6 percent between 1997 and 2005 that other food and beverage industries experienced, employment in sugar-using industries would have risen by 26,000 jobs instead of declining by 75,000. So the real impact has been a difference of more than 100,000 jobs.

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**Table 3
Sugar Content of US Sugar-Containing Product Trade**

	1996/97	>< 2001/02	2002/03	2003/04	2004/05	2005/06
	(1,000 short tons, raw value)					
Imports						
Chapter 17	207	355	406	490	552	622
Chapter 18	102	229	247	258	267	309
Chapter 19	73	145	166	178	184	190
Chapter 20	20	24	27	27	31	46
Chapter 21	67	142	152	185	192	192
Chapter 22	41	73	86	97	110	130
Total	511	969	1,084	1,236	1,336	1,490
Exports						
Chapter 17	102	146	146	159	160	159
Chapter 18	60	87	92	100	98	106
Chapter 19	134	143	161	165	176	194
Chapter 20	7	9	7	7	8	8
Chapter 21	53	75	73	79	95	96
Chapter 22	33	25	31	29	29	29
Total	389	485	511	540	567	591
Net Imports						
Chapter 17	105	209	260	331	392	463
Chapter 18	42	143	154	158	169	204
Chapter 19	-61	2	5	13	8	-4
Chapter 20	14	16	20	21	23	38
Chapter 21	14	67	79	106	96	96
Chapter 22	8	48	55	68	81	101
Total	121	484	573	696	770	898

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SECTION 3: SUGAR INDUSTRY EMPLOYMENT

In February 2007 the U.S. International Trade Commission (USITC) published its fifth update of “The Economic Effects of Significant U.S. Import Restraints.” The sugar program was one of the import restraints specifically discussed by the ITC.

These reports estimated the number of full-time-equivalent jobs involved in the growing and processing of sugar, as shown in Table 4. Processing, including refining, accounts for just over 13,000 jobs. We have used the farm level figures for 2002 from the ITC’s fourth update because the more recent version seems to have relied on underestimated data. Including all the jobs at the farm level that are involved in growing and harvesting the sugarcane and sugar beets, the industry accounts for 51,344 full-time job equivalents.

Table 4

Sugar Industry Employment	
Sugarcane production (2002)	18,322
Sugar beet production (2002)	19,906
Cane sugar milling & refining (2005)	6,979
Beet sugar refining (2005)	6,137
Total	51,344

Ironically the cane sugar refining industry has suffered the most as a result of the sugar program. The number of refineries has dropped from 23 in 1981, the year the current sugar program was instituted to only 8 today. By 2002, employment in refining had dropped almost 60% from the 8,300 reported in the 1982 Census of Manufactures to only 3,491.

Since 2002, two more refineries have closed – Imperial in Sugar Land, Texas and Domino in Brooklyn, New York – so there has been a further loss of 745 jobs in that industry, bringing total losses since 1982 to more than 5,500 jobs. And it should be noted that these were mostly high-paying inner city jobs.

Conclusion: the sugar program itself is causing substantial job losses in food and beverage manufacturing and cane sugar refining and will continue to do so as long as US sugar prices are supported by the Federal government at levels far above the world price.