# StaleyNeus New fructose pro to affect demand

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## **Saccharine ban may** boost IsoSweet 9000

The proposed FDA ban on saccharine, if it goes into effect as announced, could have a positive effect upon sales of Staley IsoSweet 9000 by causing beverage and food processors to turn to it for use in reduced calorie drinks and foods.

FDA announced plans for the ban based In tests which revealed that large doses of saccharine caused cancer in the bladders of rats.

The suggested ban faces challenges, however, from several sources, including the food and beverage industry, and diabetics. There is also the possibility that congress will modify the legislation which prompted the ban on saccharine and cyclamates, thereby allowing their continued use. But if this does not happen, what will be the effect upon IsoSweet 9000 demand?

IsoSweet 9000 is not a "replacement" for saccharine, which has virtually no calories. There is, in fact, no known, approved replacement for saccharine at this time. That means that if the ban is carried through, soft drink bottlers likely will develop a new reduced calorie beverage.

Importantly, the demand for IsoSweet 9000 is not dependent upon the saccharine ban. Already, several samples of the 90 percent fructose sweetener have been sent to customers who wish to test it in products

requiring a specialty sweetener that is sweeter than sucrose.

Staley research estimates that, 90 percent fructose, because it is sweeter than sucrose can be used in a reduced calorie beverage. That means, that although a gram of sucrose and a gram of 90 percent high fructose would have the same caloric value, less fructose would be required to attain a desired sweetness level than if sucrose were used. This translates into a lower calorie content.

For example, a 16-ounce cola sweetened with sucrose at a 10 percent brix (sugar) level would contain 190 calories. The same drink sweetened with 90 percent high fructose at 5 brix would have 142 calories. A 16-ounce cola sweetened with saccharine would have fewer than six calories.

At this time, production of 90 percent fructose is limited. The requirements of the soft drink industry for a reduced calorie drink using 90 percent fructose are difficult to estimate and dependent upon consumer acceptance of a reduced calorie drink. It could exceed 200 million pounds yearly, though.

IsoSweet 9000 will be produced at Decatur in the same facilities as IsoSweet 100 and IsoSweet 5500.

## **New fructose products**

told The Sugar Club that new versions of high fructose corn syrup will lead to its further growth as a sugar replacement. The remarks came during the March meeting of the group.

Mr. Nordlund cited a 90 percent fructose product that has potential as a low calorie sweetener, a 55 percent product for use in soft drinks, and, a longer-range, a crystalline fructose for "the consumer's sugar bowl."

High fructose syrup is the first corn sweetener to compete directly with sugar in processed foods and beverages. The product has made substantial inroads as a sugar replacement in recent years. The present industry standard is a 42 percent fructose product.

Mr. Nordlund said interest in the 90 percent product, which is about one-and-one half times sweeter than sugar, has increased sharply since the recent proposed ban on saccharin. He said the corn processing industry's ability to produce such a product is limited but could be increased if the ban on saccharin becomes effective.

A new 55 percent fructose product is aimed at the soft drink industry, said Mr. Nordlund. The Staly Chairman expressed optimism that the Staley Company's 55 percent product would receive approval for use from major cola companies.

#### Long range objective

Mr. Nordlund said a longer-range objective of corn sweetener producers was the creation of a crystalline high fructose. He said the capability to produce such a product exists at the laboratory level and that it could become commercially available in the early 1980s. Mr. Nordlund described



the development as "placing a corn sweetener in the consumer's sugar bowl for the first time."

The Staley chief executive stressed that low-priced sugar has not caused an exodus from high fructose syrup by sweetener users. He said the markets for high fructose are continuing to develop. Mr. Nordlund credited the growth to two sources: customers who are increasing their use as they gain confidence in the product, and first-time users who waited to see if its economic advantage would be maintained against low sugar prices.

Commenting on growing industry capacity, Mr. Nordlund said attractive market conditions of 1974-75 prompted many companies to enter the high fructose syrup business. He said industry capacity will essentially double by early 1978, describing it as "compressing 10 years of normal expansion into a two-year period."

#### New capacity

The Staley chairman emphasized that markets will develop to consumer the increased output, but not as fast as the new capacity comes on-stream. Mr. Nordlund said additional new high fructose entries are unlikely for the next few years. He predicted high fructose supply-anddemand would begin reaching equilibrium in the next year or so.

Mr. Nordlund said high fructose corn syrup would continue to progress under practically any changes in U.S. sugar policy, short of corn sweetener inclusion in new sugar legislation. On this subject, he said such action would deprive the American consumer of the benefits of corn sweetener progress.

Looking ahead, Mr. Nordlund said more corn sweetener producers and sugar refiners are likely to reposition themselves as full line suppliers of both corn syrups and sugar.

Advancing technology in the next decade may lead the sugar industry as well as corn processors into entirely new areas, said the Staley chairman. He cited developments in sucrochemicals and modified corn starches. Because of these new potentials, corn, sugar beets and sugarcane may become increasingly valuable to the United States as renewable natural resources, Mr. Nordlund concluded.

### **Rabon** available in loose feed

Specialty feeds has introduced a new, loose mineral containing Rabon oral larvicide.



The new back-lighted mural at the entrance of Staley's consumer products offices in Oak Brook provides a backdrop for a discussion between Cindy Hyderdall, secretary, non-food, consumer, and Van Moy, manager, warehousing/order processing, consumer. The display features the pastoral setting of Oak Brook mingled with descriptive scenes of consumer products in the factory and in the store.

## In the **News**



High times P/2





High seas P/4

The new product--Staley Free Choice Mineral with Rabon oral larvicide--is designed for the dairy or beef operation that prefers a loose mineral free-choice or mixed with a ration either on the farm or by a feed supplier.

Staley also markets a molasses-salt-mineral block with Rabon. Rabon, developed by Shell Chemical Co., controls all four major flies--face, horn, house and stable--by preventing the hatching of larvae in the manure of dairy and beef cattle.

Cost of the fly protection is less than a nickel per day.

Rabon is the only registered fly protection compound available which is cleared for lactating dairy cattle, so Staley Free Choice Mineral can be fed to all cattle, including lactating dairy cows, with no withdrawal period necessary.

Staley Free Choice Mineral, not only provides fly control, but offers cattle a balanced intake of calcium and phosphorus and a high level of vitamin A.

## Indy blending plant adds to total sweetener impact

In any jigsaw puzzle, the total picture is represented by big and small pieces fitting together. The large in Staley's emerging sweetener picture is best represented by the new Lafayette Plant. The small, but still important part, is represented by such facilities as the sweetener blending operation at Indianapolis.

With only three employees, the Indianapolis facility manages to serve markets in Indiana, central and eastern Illinois, northern Kentucky and southern Michigan. It blends such Staley products as IsoSweet, Neto and Sweetose with sucrose and melts granulated



Jim Moore takes a sample from a blending tank at Indianapolis.

sugar into sucrose for direct sale to customers without blending facilities of their own.

Staley purchased the plant site, formerly owned by a sugar company, in April 1976. Since that time, several improvements have been made, including fencing of the property, laying of a new floor, plans for installation of new submerged fuel storage tanks and paving of the drives and parking area surrounding the site.

The plant has three 27,000 gallon sugar tanks, a Sta-Twin tank (each compartment has 10,000 gallons), one 5,000 gallon Sta-Port and two 6,000 gallon Sta-Ports.

The plant works closely with Jim Keyes, senior bacteriologist, quality assurance, in Decatur to assure quality control. A local lab is also used for quicker checks of outgoing shipments.

Like the rest of Staley, the plant employees are looking forward to the startup of operations at Lafayette. Plant Manager, Bill Coonfield points out that with a continuing supply of IsoSweet and regular corn syrups only 55 miles away, he is looking forward to an increase in the volume produced at Indianapolis and the opportunity to serve an increasing number of customers. That's the way the big and small can work together.

## **Staley News**

The Staley News is published monthly for Staley employees by Corporate Public Relations, Decatur.

Manager, Employee Communications.....Dan Hines

Manager, Visual Communications . . . . . . . . . . . Lee Jeske





Fostoria employees at work. Upper left, Charles Brandeberry, elevator operator, unloads an incoming shipment of soybeans. Upper right, Les Snyder, separation operator, checks the progress of soy flaking operations. Bottom, Marv Smith, bagger-sewer, loads a truck with Staley soy meal. Fostoria is the only plant to bag meal.

## 30th Awards Dinner marks 'firsts'



A new look was given the 30th annual service awards dinner held in March at the Masonic Temple in Decatur attended by more than 400 people.

The "firsts" included the attendance of spouses of awardees at the dinner. Previously, only awardees and employees with long-service were included in the invitations. Also, only employees with 25 years or more of service in five-year increments were honored at the dinner. In the past, the categories included several other long-service groups. The change was made to allow the spouses of awardees to be present and keep the group a reasonable size.

A newly designed service pin was also presented for the first time.

The employees receiving awards this year in each category of service were:



Paul Smith shows his wife the 25-year watch he received.

25 years, 74; 30 years, 135; 35 years, 43; 40 years, 27, and 45 years, one.



Paul Durchholz received a helping hand from his wife with his 25-year watch. It was also the 20th wedding anniversary for the Durchholz'.

A Staley husband and wife team--Richard Blaylock, assistant foreman, maintenance, oil/feed, and 25-year awardee wife Joan, secretary, director, corporate engineering.



Darrel L. Pritts, right, and his wife collect Darrel's 25-year award. An added family touch is provided by David Pritts, manager of personnel, background, Darrel's nephew.



### Fran Guld with the baking powder cans and the 1906 advertising poster. **Staley News spotlight** 1906 cans, poster discovered

What was happening at Staley in 1906? It was a momentous year for the company as A. E. Staley, Sr., incorporated his growing business which he had rebuilt from the ashes of the Baltimore Fire of 1904. As he was doing that, miles to the north, a nowunknown owner of a small grocery store in West Milton, Pa., was putting away a new shipment of Staley baking powder. It was a shipment that would not be unearthed until an unlikely sequence of events of this year enabled the products to complete their journey.

The discovery of the 1906 Staley baking powder cans and a 1906 Staley advertising poster was made last month when a couple purchased the old grocery store in West Milton. While examining some of the old items that were in the store, they discovered the Staley baking powder cans in near perfect condition, as well as the advertising poster.

The couple figured that antique collectors might be interested in the items, and placed them on sale. One of the purchasers was Marian Bruch, a switchboard operator from American Home Foods, a long-time Staley

Pete had coached wrestling, on a voluntary basis, for seven years at the small school (the student body has only 120 boys). He has always had an active interest in sports -- especially wrestling. And, no doubt, he must have enjoyed a vicarious pleasure as Steve this year compiled a 23-3 record. His only two losses were to the 145 pound state champion-once in the regular season, and once in the state final.

Enroute to his second place finish in the state, Steve won the prestigious Class A tournament held during the regular season.

Steve plans on enrolling in a technical school following graduation from high school.

## Anniversaries

40 Years

THEODORE GRABOWSKI, karry krane, rigger

#### 35 Years

GEORGE COMPTON, cooler operator, 17 building KENNETH STUBBLEFIELD, shipping clerk, 17 building ARTHUR ADAMS, lead operator, 44 building HAROLD BEARD, senior analyst, 60 building ELMER BETZER, cleaner, 52 building ROBERT KARLOSKI, senior mechanic, electric

#### 30 Years

JAMES WARNICK, superintendant, specialty feeds ROYAL FOSTER, centrifuge operator, 44 buildign DEAN WADKINS, trackmobile operator, transfer ROBERT COLLIER, 75 building operator, 75 building REX LEE, reliefman, 20 building JACK LEWIS, extraction tower operator, 11 building RAYMOND MILLER, starch bulk loader, 20 building RAYMOND WARNHOFF, senior mechanic, millwrights JOHN HUGHES, floor gang, 20 building LEONARD FORCE, senior mechanic, millwrights WILLIAM HUGHES, lead operator, 111 building

25 Years

ALFRED BRUNLIEB, regional sales manager, sweeteners, industrial sales ALBERT NIXON, senior mechanic, electric

#### 20 Years

FRANK VERBANAC, senior scientist, corporate research

ELIAS VLAAR, production foreman, Columbus plant

TOM PROTZMAN, director engineering research & services, corporate research

#### 15 Years

JAMES RILEY, assistant manager commodity futures, agriproducts WILMA DOWNEY, data control clerk, corporate information systems LEONARD VANDER BURGH, senior scientist, corporate research ED KOVAL, director, international division









J. Warnick



D. Wadkins



R. Foster



R. Miller





J. Hughes



10 Years

TOM SCOTT, senior chemical engineer, agriproducts

GERALD DURFLINGER, senior mechanic, C-D-101

MICHAEL FLEENER, auto starch packer, 20 building

JESSE BARKER, senior mechanic, sheetmetal

JON BUELL, operator, 44 building DAVID BRINKERHOFF, utility labor, 50 building

WILLIAM CARTER, JR., mechanic,

sheetmetal shop

LEE BRADY, maintenance shift leader, Vico-Chicago

#### 5 Years

ERNEST COOK, general foreman, Columbus plant ROBERT BROOKS, group vice president, consumer products DONALD HALL, chemical operator lead, Houlton GERALD WILLETTE, blender-lead, Houlton JAMES FITZSIMMONS, tractor trailer lead-Chattanooga DONALD CARSON, roving operator, Morrisville **JOSEPH GILARDI**, Maintenance mechanic A, Morrisvilel FREDERICK HORN, roll dryer operator, Morrisville

#### customer.

Marian immediately got on the phone to Fran Guld, telephone operator/receptionist, industrial sales office, Langhorne, Pa., and told her of the find. She suggested to Fran that Staley might be interested in the cans and poster. Fran agreed and began a liason with public relations in Decatur and the owner of the store in West Milton.

As a result of Fran's efforts, the company was able to purchase a dozen of the cans and the poster. While plans for displaying the goods are indefinite at this time, one suggestion has been that at least some of the cans be given to the North Fork Museum in Decatur for display in a restored turn-of-thecentury kitchen that is a popular attraction.

#### \*\*\*\*

Like father, like son, goes the old saying. And the similarities between Steve True, a senior at Arcadia High School near Fostoria, Ohio, and his father, Pete, traffic supervisor, were aptly illustrated at Steve this year became one of the top high school wrestlers in the state.

Pete True shows he's a proud father with champion wrestler (and son) Steve. The medals are just a few of the many Steve collected

#### Lockport closed

The company will temporarily close its livestock feed concentrate plant at Lockport.

The plant, adjacent to Valentine Pulp and Paper Company's Lockport mill, employs 20 peoplle.

The company said an unsatisfactory operating outlook for the four-year-old facility prompted the decision.

The plant manufactures dried molasses concentrate for livestock feeding. The concentrate is made from cane molasses and bagasse pith, a sugarcane by-product.



E. Raymond Stanhope, group vice president, international/administration, left, accepts an award of appreciation from the National Maritime Council's midwest program chairman, Bob Luttenberger. The award marks Staley's support of U.S. flag shipping.

## **Every day, Staley products** start high seas journey

Every day of the year shipments of Staley products destined for a foreign country are being loaded at such seaports as Chicago, Baltimore, New York, New Orleans or Jacksonville, Fla.

Also, each year Staley products are shipped to as many at 60 countries. The shipments range from small lots to container loads which are actually 20-or 40-foot boxes with demountable chassis. Upon reaching the overseas destination, a container is loaded to another chassis and sent on to a waiting Staley customer.

The task of scheduling this multitude of shipments rests with the transportation





W. Budds

## On the move

**INDUSTRIAL** 

department of the international division. Recently, the division was honored by the National Maritime Council for Staley's support of American flag shipping. The award reflects not only the company's willingness to use ships flying the American flag whenever possible, but is indicative of the counsel, support and willingness of the company to assign employees to assist the group in voluntary action.

Charles Wilhelm, manager, international transportation, embodies the last part of that commitment by serving on the advisory board of the maritime group.

But, while the international division is dedicated to supporting a strong American merchant marine, its primary task remains the most efficient and economical movement of Staley products to overseas destinations.

The sequence of events is set in motion usually by a cable from either a broker or potential customer asking for a bid on a Staley product. The cable will specify the quantity of the product and the date required at the customer's plant.

The request will go to any of the managers in international or to Peg Albert, office

## Dextrose used in caramel

Several years ago, many soft drink consumers were startled to see something new on their pop bottles -- the words, 'Caramel color added.'

The labeling was the result of soft drink companies complying with a Food and Drug Administration ruling which stated that all ingredients must be labeled.

Perhaps Staley employees would have been even more surprised had they known that much of the caramel coloring in this country is made from dextrose liquor, produced at 44 building in Decatur. Were it not for caramel coloring, your cola might resemble ginger ale.

The source of this caramel is D. D. Williamson & Co., headquartered in Louisville, Ky., a Staley dextrose customer for nearly three years. Williamson produces 40 colors of caramel for use in soft drinks, medicines, beers, baking, or just about any other food or drink use where color is important to the overall asthetic quality of the product.

The shades range from "light" to extremely dark. A word of warning, however. The "light" caramel color is so dark that only a small amount of light will penetrate it. The darkest resembles black paint and light penetration is impossible.

Williamson is one of only three manufacturers of caramel coloring in the country. When one considers that the average bottle of a cola will contain only three to five drops of caramel coloring, and Williamson sends tank car quantities monthly to three of the top four bottlers, the impact of soft drink bottling and consumption is vividly illustrated.

Why did Williamson decide to start using Staley dextrose liquor? Any carbohydrate can be heated and put under pressure to form caramel and previously the company had used corn syrups from a competitor. However, working closely with Staley's Otto Lucht, the Louisville company found that dextrose liquor gave a more consistently high quality product than did corn syrup.

Theodore Nixon, vice president for Williamson, points to the consistent purity of Staley dextrose as a key factor in its quality.

"We've never had to return a shipment of dextrose to Staley," he points out. "Each incoming batch is closely checked for mineral content, clarity, and purity, but nothing from Staley has been out of specification."

A. E. Staley Mfg. Co. 2200 E. Eldorado St. Address Correction Requested

The dextrose is then subjected to heat and pressure in stainless steel cookers. While caramel production is basically a "batch" process that can be easily duplicated, caramel is not caramel is not caramel. Specialized knowledge is required to create the distinct differences between the more than 40 types of caramels made by Williamson.

That's a far cry from the days when the company started in 1865 with the original D. D. Williamson selling a caramel coloring for breweries. By the 1880s, business was picking up as caramel coloring became more popular, and by 1948 a series of expansions was under way which saw the establishment of regional manufacturing plants throughout the United States.

Much of the growth of Williamson was sparked by the desire of the cola companies to have a product with consistent color. Before the use of caramel, cola color would vary according to the color properties of the cola nuts harvested each season.

"We believe our caramel quality is the tops in the country," concludes Ted. "Part of the reason for that is the use of prime ingredients like the dextrose liquor we get from Staley. We're pleased with Staley service and quality and look forward to a long relationship.'



The Williamson quality control lab regularly checks incoming dextrose.

**Bulk Rate** U. S. Postage PAID Permit No. 49 Decatur, III.

Decatur, III. 62521

BETTY MARCH from inventory clerk to freight claims clerk, industrial administration DON RAIRDON from design utility engineer to plant engineer, industrial maintenance

GEORGE WILLIAMS from staff chemical engineer to chemical engineer, corn milling

#### CORPORATE

**RICHIE GRIER** from junior computer programmer to computer programmer ANN MANUEL fom library secretary to library assistant, corporate research CHERYL BROWN from refinery maintenance clerk, 10 building, to secretary, corporate computer center, corporate information systems WILLIAM BUDDS from computer programmer to business systems designer, corporate information systems FRANK ORTHOEFER from research associate to senior scientist, food products

#### **AGRIPRODUCTS**

JAMES I. FRANKLIN from hourly roll to shift foreman, extraction & process

manager, or Larry Shaw, sales coordinator. The next step is handled by Larry, who is responsible for price quotations and Peg who is responsible for bringing all the pieces together--availability of product, shipping dates and date due at destination.

Larry tells Charles the details of the order. Using rate books, steamer schedules and knowledge of past service, the international transportation department draws a shipping proposal with a point of departure from either the Atlantic Coast, Gulf Coast or Chicago. The West Coast region is seldom

used as a point of embarkation.

Charles evaluates the complete shipping package and makes a recommendation to Larry on what carriers and ports to use. All of this is usually done in a few hours.

The information is then relaved back to the prospective buyer and a contract is drawn. The rest is now up to manufacturing which will produce the finished product, and transportation, which will be responsible for getting the product to the overseas customer.