

StaleyNews

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Decision to use 55% HFCS in colas, a milestone in sweetener's success

News of cola manufacturers' approvals to use 55 percent high fructose corn syrup (HFCS) as a partial replacement for sucrose in major brands recently created great excitement in the corn refining industry.

This corn sweetener, designed specifically for soft drink bottlers' needs, now has been adopted in drinks very sensitive to ingredients, thus "breaking the ice" on that part of the bottling industry, which could not use the less sweet, original 42 percent high fructose product in its formulations.

As a result of this new large demand for second generation high fructose corn syrup, manufacturers have scurried to find ways to rapidly boost their capacity. Staley, the leading HFCS manufacturer, has an edge on competitors, having begun plant modifications at Lafayette last summer after seeing the product's growing importance to bottlers. And only a month ago, the board of directors approved expanding Morrisville to incorporate 55 percent HFCS production into that operation.

Success for 55 percent high fructose syrup didn't come over night, however. The lime-light enjoyed today is a reward for a heavy investment of money, time and effort by Staley personnel, cutting across many segments of the company from sales, marketing and research to engineering, purchasing, manufacturing and finance.

"Even before the advent of high fructose corn syrup, Staley marketing people knew

Dalton, new V.P. at Gregg Foods

William J. Dalton, Jr., has been named vice president of sales and marketing for Gregg Foods and is now located in Portland, Oregon, the headquarters of that division of the Staley Company. Previous to this appointment, he was vice president and general manager of Gregg's plant in Garden Grove, California, a position he held since October of 1978.



Bill Dalton

When the Garden Grove plant opened in 1976, Dalton joined the company as its food service sales manager. He was named operations manager at that plant in April of 1978.

Bill came to Gregg Foods with years of sales and marketing experience. From 1969 to 1976, he was with Idle Wild Foods, headquartered in Worcester, Massachusetts, as regional sales manager and then national sales manager.

Prior to that, he was employed by Weyerhaeuser, Specialty Papers Division, as a marketing analyst four years and with 3M, Office Products Division, in sales four years.

Dalton has a B. S. degree in business administration from Clark University in Worcester, Massachusetts.

there was a multi-billion-pound-market out there for a product as sweet as sucrose. But, as with other corn refiners, we had only dextrose, about 70 percent as sweet as sucrose, and regular corn syrups. Nothing among our existing products approached or could come close to the sweetness of sugar," said Larry Cunningham, marketing manager, sweeteners, industrial products.

The story unfolds over a decade ago with the Japanese development and patent of a process for making a corn sweetener possessing a higher fructose level, nearly equivalent to the sweetness of sucrose, relates Dr. Robert Schanefelt, director, food and agriproducts, research and development.

Staley was the second American corn processor to enter the HFCS business, following Clinton. The company's decision to make this product came in 1970. The Morrisville plant was started up in 1972 and launched Staley's entry into the high fructose corn syrup market.

"It took much courage on the part of management back then and down through the years to spend the capital to get into the business and to push the product to its current success. The market then and at crucial times during its development has not always been encouraging," said Cunningham.

Follows growth pattern

"Historically, growth comes in steps for corn sweeteners," said Bob Smith, director, sweetener sales, who, back at the launching of Staley's high fructose venture, was its product manager. "It's taken a team effort once again to produce the outstanding growth in high fructose over an eight-year span. Success didn't happen the first or second year of marketing the original product Staley called 'Isosweet 100'. By the same token, 55 percent high fructose (Staley's 'Isosweet 5500') did not gain overnight acceptance either," Smith allowed.

Besides being an unknown ingredient to food processors, HFCS came on the market when sucrose was moderately priced. When Staley began HFCS production at Morrisville during 1972, the world price of raw sugar was only 7.3 cents a pound and the average wholesale price for processed sugar was 12 cents. The following year, processed sugar only rose to 14 cents a pound. Not much incentive to purchase a product priced a few cents less. But in 1974, the story changed dramatically, giving HFCS an opportunity to move into the food processing industry in a big way. Sugar that year climbed to 34 cents and continued its price rampage to the 65-cent range before backing off.

Paving the way for the new sweetener, introductory efforts by marketing and research were launched nearly a full year prior to the product's market entry. Employing a multi-media campaign, the team used direct mailings, trade magazine and newspaper advertising, trade show publicity, sales calls, product sampling and Decatur visits to the Research Center for key customers to spread the word about the attributes of Isosweet.

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Approvals for the use of 55 percent high fructose corn syrup in cola soft drinks have stirred great excitement in the corn refining industry. Staley recently announced plans for expanding Morrisville to incorporate 55 percent HFCS production into that operation, and two expansion phases are under way at the Lafayette plant, one of which will be completed in time to meet the demand of this summer's peak soft drink consumption period.

Morrisville tapped for production of "Isosweet 5500"; will have option to make 55% or 42% high fructose

Staley's corn sweetener plant at Morrisville will be expanded and equipment added to produce 55 percent high fructose corn syrup (HFCS) with the trade name of "Isosweet 5500". The action will position the company to take greater advantage of growing demand from soft drink bottlers for the corn sweetener as a replacement for sucrose in their products. Staley is the nation's leading HFCS producer.

Work already is under way to increase the plant's HFCS capacity and to make it totally flexible for production of both the 42 percent high fructose syrup ("Isosweet 100") and the newer 55 percent fructose product, the latter used most extensively by the soft drink industry. When this new expansion is completed in the spring of 1981, Morrisville will have an annual HFCS capacity of 700 million pounds.

In addition, the company already has completed engineering studies on the possible enlargement of other plants as well as for construction of a fourth high fructose production facility. Its other corn refining plants are at Decatur, Illinois, and Lafayette, Indiana.

Selection of the Pennsylvania plant for this expansion was based on the need for additional Isosweet 5500 capacity as soon as possible. "We could meet this objective faster at Morrisville than at any other location," said Bill Luby. "If we would start from scratch rather than at an existing plant, construction could take up to two and one-half years." Luby is project manager for increasing the grind there (work already in progress), as well as the new 55 percent HFCS expansion. This newest project, according to Luby, will duplicate the original Lafayette installation for Isosweet 5500.

Logistically, Morrisville is ideal for production of the second generation high fructose corn syrup, said Larry Cunningham, marketing manager, sweeteners, industrial, because of the heavy concentration of customers for that sweetener nearby.

Although 55 percent high fructose syrup will not be available from Morrisville for about a year, production capacity for

"5500" will soon be increased at Lafayette. That plant is currently involved in a two-phase expansion, phase one of which will bring the plant's annual capacity for 55 percent HFCS to about 800 million pounds. This phase will be completed in time to meet the demand of this summer's peak soft drink consumption period. The second stage will increase the Lafayette plant's capacity for producing "second generation" HFCS to 1.2 billion pounds and will be on stream in early 1981.

By summer of 1981, with Morrisville's 55 percent expansion on stream, Staley's total capacity for Isosweet 5500 will have tripled.

Staley originally produced 55 percent HFCS at Decatur, first in a pilot plant and then commercially from late 1977 until the Lafayette plant began manufacturing the product in February of 1979. Production of high fructose corn syrup at Decatur is now limited to the 42 percent sweetener.

Bloodmobile at Decatur plant on April 17, 18

Marking its 27th visit, the Red Cross Bloodmobile will be at the Decatur plant on Thursday, April 17, and Friday, April 18.

To be located in 77 building's cafeteria, the Bloodmobile's hours of operation will be from 11 a.m. to 5 p.m. on the 17th and from 6:45 a.m. until noon on the 18th. Outside donors are welcome.

This year's goal will be 500 pints, a goal the Staley drive has surpassed seven times. To avoid waiting in line, which could occur if a large group of employees decided to give at the same time, donors are encouraged to make appointments.

Co-chairmen of the event are J. B. Webb, supervisor, safety department; Bob Hull, rigger leadman, and Gene Sharp, senior mechanic, elevator C&D, for the plant; Bob Moore, supervisor, loss control, risk management, and Brenda McCoy Smith, public relations, for 62 building and Norm Kocher, supervisor, operations/budget control, for 63 building.

From donor names, 15 will be drawn for gift certificates, which include five \$25 certificates to Stoney's Restaurant in Dalton City; five \$25 certificates to Bergener's department store; and five Cub/Cardinal baseball game tickets. All donors will receive a bottle of "Staley's 100 Percent All Natural Syrup".

Staley holds a rather special place in this program. Besides being the first company (Continued on Page 2)

In the News...



Manager/P2



Volunteer/P3



Dancer/P4

Western manufacturing operations received the Neumann "touch"

Creative thinker, calculated risk taker, problem solver and troubleshooter all describe Paul Neumann, a roll-up-the sleeves and get-it-done fellow. A man with an international reputation, he's designed plants, revamped equipment and tied into new processes with little stumping him for very long.

Neumann and the growth of Monte Vista, Staley's potato starch processing plant in Colorado, have been inseparable over the years. The plant today bears little resemblance to the San Luis Valley Starch Company he joined in 1957. Then only one steel building and a parking lot existed totalling about 8,000 square feet of manufacturing and storage space. Employees back then numbered 12. By comparison, the plant today has 21,000 square feet of manufacturing area, 17,000 square feet of warehouse and 1,200 of office area. Forty employees run the operation three shifts a day.

From five million pounds of production or 50,000 bags of product a year back in the late 50s, Monte Vista is now manufacturing in excess of two million pounds a month! Products 23 years ago were basically food-grade starches made from locally grown potatoes. Today, the plant primarily produces cationic "Sta-Lok 400" (added in 1970 for use in manufacturing fine paper products); plus "Arogum 50" (added in 1966 for coating and sizing by paper manufacturers); dried pulp for cattle feed; and modified starches of the "Redisol" and "Hamaco" families, which joined the line in 1978 when two drum dryers were installed.

The country still had a healthy potato starch industry when Neumann arrived at the Monte Vista plant nestled in the high mountain valley of the Southern Colorado Rockies. More than 25 manufacturing plants were producing starch for industrial uses back then. Now, fewer than five potato starch manufacturers are in operation. Waste from many plants caused their demise, when they could not afford to meet Environmental Protection Agency (EPA) regulations.

Further hardships loomed though. Culls, the imperfectly formed or damaged potatoes unacceptable to grocers, formed the basis for

Tyler, Waller made manager, assistant at Monte Vista



Steven Tyler



Don Waller

Steven L. Tyler has been named western area production manager effective April 1, replacing Paul R. Neumann, who retired. In his new position, Steve will oversee both the Monte Vista, Colorado, and Murtaugh, Idaho, plants.

Succeeding Tyler as assistant plant manager at Monte Vista is Don R. Waller. He had been shift foreman at 111 building in Decatur since January of 1977.

Tyler joined the company in 1969 as chemical engineer in Decatur and worked with the wet milling and then dry starch areas before moving to Monte Vista as assistant plant manager in early 1975.

A graduate of the University of Utah, Tyler has a Bachelor of Science Degree in chemical engineering. He and his wife, Linda, have four children: Michael, 11; Daniel, 10; Jenny Lynn, 8; and Ruth Ann, 3. Steve is active in scouting, the Chamber of Commerce and other community activities.

Waller joined Staley as senior methods analyst in June, 1975. Previously, he was employed by General Electric in Decatur as a quality control engineer.

Don holds an associate degree in electronics and a Bachelor of Arts Degree from Eastern Illinois University. Waller and his wife, Bonnie, have three children who are Beth, 18; Chelle, 16; and Brad, 13. He enjoys hunting, fishing and softball.



From a single steel building and parking lot, the Monte Vista plant has grown considerably the 23 years Paul Neumann has been associated with it. Today, as pictured, the plant has 21,000 square feet of manufacturing area, 17,000 square feet of warehouse and 1,200 square feet of office area. The work force has grown from 12 in 1957 to 40 employees today.

virtually all of the potato starch industry. In the late fifties and early sixties, starch manufacturers found themselves competing with the potato dehydration food industry for those so-called "ugly spuds".

While those years marked the decline for the potato starch industry as a whole, the Monte Vista operation prospered. Part of its success is due to its location in the heart of potato country, but a large part undoubtedly is due to the efficiency of operations and the ongoing imaginative creativity of the man who has run the plant for 23 years.

Recovery system developed

Unlocking the supply problem which developed with culls going to dehydrated potato processors, Staley developed an alternate source of raw material. Neumann and Jim Dustin, now retired, designed a starch recovery unit to turn wastewater of potato processors, like the chip and fry manufacturers, into a principal source of starch for their operation. Besides designing the system and associated flash dryers, they also built the filter. This system was originally produced in Monte Vista and initially installed at users under the supervision of Neumann; Dustin; Gene Griffith, then manager, starch engineering and production with responsibility for outside plants, and now operations manager, industrial manufacturing, Decatur; Don Barringer, deceased; and Steve Tyler, assistant plant manager. So successful, the recovery system has grown into a business all of its own and is handled by a licensed equipment manufacturer.

This innovation has been a winner all round. Potato processors concentrate and dry the starch from their operations, sending the reclaimed product to Monte Vista for conversion to cationic starch. While it provides Staley with a constant supply of high-quality potato starch (about 16 million pounds a year), processors benefit greatly. A liability has been turned into a profit maker. . . They're paid for this reclaimed product which previously had cost them sewage assessments or penalties for disposal and has reduced their water consumption through recycling washwater.

Presently, about 75 percent of Monte Vista's production utilizes reclaimed starch and the remainder, fresh potatoes.

From the time Staley purchased the plant in 1966, modernizations have been taking place with a project nearly always on Neumann's drawing board. Paul's ingenuity has touched even the beginning of the process where potatoes are received. The surrounding area has gravelly soil, easily picked up with potatoes at harvest. If rocks are mixed with potatoes, they go directly to the grinder, tearing it up or requiring constant cleaning and attention. To alleviate the problem, Neumann designed a de-rocker which separates dirt and rocks from the raw material.

For the process itself, the plant manager came up with a baume' controller used throughout the plant and in the recovered starch units. Paul's device automatically controls starch concentration at the desired

level and replaces manual sampling procedures.

As production expanded, so did the plant facilities mostly built by the employees under Neumann's supervision. Besides moving out walls, these employees cannibalized machinery and equipment discarded by others and reworked it for that location. And to more efficiently dispose of effluent from the process, a new wastewater spray field was installed by Tyler in 1977 on the ranch adjacent to the plant and used to irrigate acres of hay and brome for cattle grazing.

In recent months, Paul has been working on a new bag dump that will accept whole bags of the reclaimed starch. As it's envisioned, the Neumann Bag Dump will take whole pallets of bags, separate the starch from the paper, send the starch to process and the paper to be baled and sold for recycling.

Projects beyond Monte Vista

But the Neumann "touch" jumps the boundaries of Monte Vista. Paul designed a plant for Grafton, North Dakota, in 1958 and in 1962 went to Idaho for a year to revamp a plant which Morningstar Paisley (then owner of Monte Vista) intended to purchase. A year later, he was sent to Chicago as production superintendent of an adhesive plant, supervising 120 employees and earning a reputation for being a tough but fair manager. While in the Windy City, Paul drew up blueprints for a sodium hypochlorite reactor for Monte Vista and a short while before Staley acquired the plant in 1966, he returned to that location as plant manager.

During the 1970s, Neumann designed several other plants and then took his crew along to build them. Tyler designed the dryers for those facilities including the Staley plant at Murtaugh, Idaho, which receives slurry from area potato processors, dries and bags the starch that is shipped to Monte Vista for further processing. A similar turnkey facility was erected in Stanfield, Oregon.

Missions have also included a couple of trips outside of the country, where Paul's expertise as a potato starch processor has become almost legendary. To a country in which potatoes are native and have long been a staple, Paul was summoned to solve a production problem. An affiliate of Union Starch in Lima, Peru, was making potato starch, using yams when potatoes were in short supply. They found yams difficult to grind, and besides that, there was dirt in the starch. Looking over their process, Paul soon solved the problems. They needed a different grinder and also had to crush the yams prior to grinding them. Feat accomplished. . . Neumann saw to it that a pretty white starch was derived from those difficult-to-handle yams.

A versatile background built on practical experience gained in his youth, part gained while working for his father, a building contractor, and later on his own, Paul was well prepared for his career at Monte Vista. During World War II, he worked for Rio Tinto Copper Mine in Nevada and as head electrician for the mine earned his master

electrician credentials. For the next 12 years, Neumann had his own electrical and pump supply business in Idaho and worked on a variety of design and engineering problems.

Shortly after arrival, Paul recalls rewiring the plant, putting in new control panels. In all, he built the panel board that controls the feed dryer, fabricated the panel that controls the slurry tank and rebuilt the panel board controlling all of the potato grind. In fact, most of the wiring in the plant he's handled in one fashion or another.

Several years later, when he was in Denver where his wife, Marie, was hospitalized, Neumann recalls receiving an SOS after an electrical mishap that knocked out the plant's electrical system. Getting wire from a contractor but not wanting to wait for help which was days away, he led the employees in changing wires and making splices, doing much of the work themselves. A day and one-half later, the plant was running again.

Monte Vista, its products and loyal employees have shared the past 23 years with Neumann. When he retired April 1, Paul left Steve Tyler in charge with a crew of well-trained employees, who have had the advantage of working side-by-side with a master craftsman. They, too, have learned their skills on-the-job and have been trained to tackle any project in that plant.

Very soon Paul and Marie will trade their Colorado mountain stream, rushing only a few feet from their front door, for a new home in Arizona. Paul has obtained plans for a dry slucier to take the gold dust out of the desert sands, so he'll be tinkering with that project. . .making his fortune.

Bloodmobile April 17, 18

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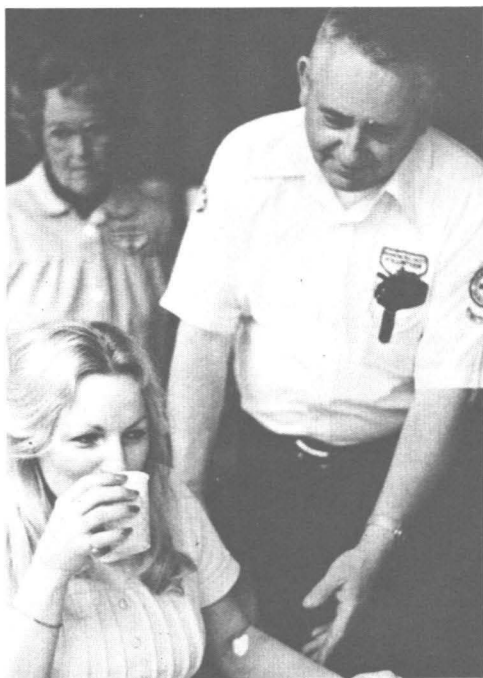
in Macon County to allow an in-plant visit of the volunteer unit, Staley claims the top donor in the city--Hubert Crum, who has given 143 times and is a 17 7/8-gallon donor. Staley also has had one of the most productive visits in the midwestern region.

One of the largest collections the Red Cross had in a 12-hour session was at the Decatur plant in 1958. That occasion was a 6 a.m.-to-6 p.m. visit during which 666 pints of blood were collected, the most in one day, setting a record for the whole midwestern area.

Why give?

"Residents of Macon County are fortunate to have a voluntary blood program," says J. B. Webb. "Under this Red Cross program, the recipient is not charged for this blood, but assumes only a portion of the cost of collecting, processing and delivering the blood, included in a hospital administration charge. Financial support for the program comes from contributions to Red Cross through the United Way campaign.

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Shelley Heiland, retiree, watches a donor in the refreshment station, while his wife, Juanita, talks with another donor.



Volunteers key to success of blood program

"It's reassuring to know that 24 hours a day, blood is always available to residents of Decatur and Macon County. Every 17 seconds someone in this country needs blood, but only one out of every 25 persons able to give blood are donors," says Juanita Heiland, co-chairman of the blood program for the Macon County Chapter of the American Red Cross.

She's the wife of Shelley Heiland, who retired from Staley/Decatur as a foreman of the pipe shop, on January 31, 1980.

The county's blood quota has been boosted from 4,000 to 5,000 units of blood for 1980. Mrs. Heiland says the dramatic increase is a reflection of more surgery being performed, more blood being used in the treatment of blood disorders and more blood being used in the recovery of patients. "Needs all round are greater. It's a comfort to know that blood will be there when it's needed, and there's no charge for it." She commented that a hospital charges an administration fee that helps defray the cost incurred in collecting, testing, processing and distributing each unit of blood the hospitals receive.

"Volunteers--those who give the blood and those who help at donor sessions--make this program work," according to Mrs. Heiland. She pointed out that 90 volunteers worked 491 hours staffing a Bloodmobile session a year ago that collected 479 units of blood. Without a volunteer program of donors and helpers, we have nothing."

The Heilands know all about volunteering, with their support of various Red Cross programs, including the Bloodmobile, giving an average of 30 hours of their time a month. Shelley contributes even more now that he's retired. Together they were recognized a year ago as "Volunteers of the Year" for their work in health services by the local Volunteer Action Force.

While both take part in the Bloodmobile program, (Juanita assisting with donors and Shelley at the recovery station or walking donors), they also are on call to provide emergency transportation for this life-giving fluid. Although the sheriff's deputies generally make these emergency trips, the Heilands have been called on day or night in snow or sunshine to bring the blood into a local hospital where needed.

On a recent occasion, related by the Red Cross, that organization's duty worker received a call about 6:30 p.m. notifying him that an emergency relay of blood was on its way to Decatur for a hospitalized patient. The duty worker called the sheriff's office and was informed that due to a serious problem, deputies could not be spared. Almost immediately, the sheriff's office called back saying that a deputy's wife could pick up the relay if called. That person turned out to be Juanita. Shelley, an Auxiliary Deputy, was on duty that night at the county jail, and that emergency the sheriff alluded to was an attempted jail break in progress. Shelley was one of the deputies being held hostage! Juanita knew of the attempted break because of her police radio at home and knew Shelley was on duty. Nevertheless, she drove the relay (about 40 miles round trip), delivering the blood.

Friend's need spurs couple

The Heilands' work with Red Cross goes

back 22 years when a friend needed blood. They wanted to donate. Going to a hospital, Shelley was accepted as a donor, but Juanita was deferred. She wanted to help in any way and decided to become a volunteer for Red Cross, first joining the motor service as a driver taking children to Progress School and to Red Cross swimming classes. She later became chairman of that program.

Then when Mrs. Louise Mueller and the late Dr. Herbert Bavor set up the blood program in Decatur 21 years ago, Juanita became involved in that service, accepting a good deal of the responsibility locally when the chairman became ill several years ago. Now, she helps plan Bloodmobile sessions, recruits volunteers and serves on the regional committee on blood matters.

Shelley's interest perked in Red Cross after taking a first aid class his wife instructed 18 years ago. He became an instructor also and later served as first aid chairman about five years. He's since been on the Red Cross board and spends most of his volunteer time teaching first aid and working first aid stations at large gatherings in the county. Shelley figures he's trained well over 1,000 persons in first aid during the past 15 years.

Instructors for the vital signs course offered by the Red Cross home nursing service, the Heilands were two of the first to be certified to teach that program. Heiland has been teaching Cardiopulmonary Resuscitation since 1974, the same year he became an Emergency Medical Technician.

His training has proven helpful to many. Besides lending assistance to persons at first aid stations, Shelley, during his last year with the company, teamed up with another first aider to administer CPR to a co-worker, who had suffered an attack on the job, giving this victim aid until an ambulance and emergency personnel arrived.

Since retiring, Heiland has averaged three days a week teaching classes for the Red Cross, trying to catch up on day classes, for which the organization has had no instructor. This type of service takes on special importance when you have helped a person, and Shelley has that satisfaction. Some time ago, a member of a first aid class thanked him for the special knowledge that allowed this person to save the life of his own child, who went into convulsions.

The efforts are all worthwhile, and that's why the Heilands will pursue their volunteer services. It's an important facet of their lives. . . .

Bloodmobile April 17, 18

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"Without this voluntary program, local hospitals would have to establish their own blood banks and there would necessarily be a charge for blood," Webb said.

The need for donors is always there--with someone in the country needing blood every 17 seconds. Most people, 17 to 65 years of age, are candidates to give this life-giving gift if they are in good health and weigh at least 110 pounds. Persons can donate blood every eight weeks.

Only one unit of blood, less than a pint, will be taken. An average adult's body has from 10 to 12 pints of blood and can spare a little since it's replaced quickly. Most donors find

Approvals for 55% HFCS in colas, a milestone

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Wanting to establish a broad base of customers for this product, Staley worked not only with the bottlers but also with bakers, dairy processors, jelly and jam manufacturers and canners, expending time and energy with customers and potential candidates to perfect the use of HFCS in their formulas.

Headway was made. During that year prior to Morrisville's start up, technical service personnel prepared more than 100 product formulations on soft drinks alone, some specifically for customers requesting formulation assistance to use the revolutionary new sweetener in their beverages. Subsequently, these efforts were augmented by concentrated sales calls and more advertising in trade magazines.

While sales were slow and somewhat frustrating those first couple of years, Staley made good use of the time, undertaking the challenge of teaching the food industry about this new ingredient very closely resembling sucrose and medium invert sugar in many respects. Even before the product gained universal acceptance, the company forged ahead with an expansion at Morrisville in 1973 which doubled that plant's output of HFCS. Staley was right on target though, having made significant progress during the first couple of years conveying the message that there is an alternate to sugar with the right pricing structure.

"Because we had done such an intensive job in making people aware of the product, sales took off with the spiraling sugar prices in 1974," said Smith.

Sweeter product needed

During the heavy marketing campaign, Staley found a wide segment of soft drink makers who couldn't be reached with the 42 percent high fructose product. "The sweetener lacked the punch to get the job done in the colas for instance," said Smith. "It just wasn't sweet enough. Even non-cola drinks were coming up short on their replacements of sugar, except in fruit flavors, which seemed to be enhanced with HFCS.

"We knew the fructose/dextrose ratio was one of the most critical factors in producing a sweetener acceptable to the soft drink industry--where the big volume is," said Dr. Schanefelt. The fructose content had to be increased to meet bottlers' sweetener requirements.

More team effort was poured into this problem during 1974 with a concerted push coming the following year. Research and engineering knew sales had a problem with 42 percent fructose in some soft drink formulas. Intensive application efforts under the guidance of Dr. Trish Richmond, group leader, sweetener development, confirmed this. A major research and development program was successful in developing a sweeter high fructose corn syrup.

"Staley went overboard with first attempts to make a higher fructose product, coming up with one around 65 percent," said Cunningham. "Showing the new, sweeter product in soft drinks along with a control containing sucrose at a soft drink convention in 1976, Staley learned that 65 percent high fructose syrup was just too sweet."

Back to the bench. . . . Additional work indicated that from the standpoint of sweetness, stability and economy, 55 percent fructose was the appropriate level. At fructose levels greater than that, the product was actually too sweet in some systems plus the sweetener was more expensive to make, said Dr. Schanefelt. Staley's technological and management direction provided the leadership to successfully introduce the 55 percent fructose to the soft drink industry!

While zeroing in on the fructose specifications, a commercial-sized process was being developed to make it. John Rasche, process engineering manager, and Gin Liaw, lab head, sweetener engineering, research and

the discomfort no more than having a blood sample taken for testing.

Donors should eat a good meal within four hours prior to giving blood. After donating, the nurse will suggest a few minutes rest and refreshments before returning to normal activities.

development, are credited with developing a batch method of fractionating the 42 percent fructose product and winding up with 55 percent HFCS. At first this product was made in a pilot plant for initial testing with some of the bottlers. Then the Staley process was fine-tuned and proven in a 100-million-pound operation in Decatur, commencing in the spring of 1977.

Although the development of the process was certainly a significant factor, the untiring performance of Staley's manufacturing people was a highlight. Under the leadership of Art Schoepfer, then superintendent of the refinery and now manager, industrial production, manufacturing personnel in only three short months commercialized the process in Decatur to enable Staley to quickly provide this sweeter product to major soft drink manufacturers.

Process tested

"Benefiting from the experience of the Decatur operation, we acquired a continuous process and made significant changes and improvements in the commercial process installed at Lafayette," Smith recalls. He continued by saying, "Research, engineering and manufacturing came together and did a magnificent job refining the process into an even better one for Lafayette.

"Timing was the key to Staley's success in the development of the second generation high fructose," Smith said. "While the process was being developed for Lafayette, the Decatur operation was in production, supplying Isosweet 5500 to key customers to accelerate the development of this market. Through this developmental work, Staley became the leader in production as well as sales of both 42 and 55 percent fructose products. 'Number one' is a position the company chose to pursue, gain and now protect."

Because this sweeter product was developed for bottlers, technical service efforts were concentrated on soft drink makers. Time and persistence again paid off. "If customers are not aware and don't know how to use your product, even price changes will not encourage its use. Processors must be ready," said Dr. Schanefelt. Knowing the personnel with whom Staley worked earlier helped us contact the right personnel about 55 percent fructose, he allowed.

Speaking of their work with customers, Dr. Schanefelt said that Staley makes certain that everything learned from one customer is proprietary information and kept confidential. In this way, we have built the confidence of our customers, who in turn have allowed Staley access to many of their flavor bases with which to conduct further research on HFCS in their systems.

"Although we have experienced major breakthroughs recently on acceptance of Isosweet 5500, we want 100 percent replacements in soft drinks and are working with cola manufacturers and other beverage makers in looking at ways for them to go with the product all the way," Dr. Schanefelt said.

Picking up this train of thought, Smith said, "We have not totally convinced some of the soft drink manufacturers that they can replace all of the sugar in their products. This is a new ingredient, relatively speaking, and they are not as comfortable with it as with sugar. But with experience, hopefully they will be inclined to make larger replacements of sucrose.

"One of the reasons that Staley is an outstanding supplier and 'number one' in the field of high fructose is the fact that we have invested much time and effort working with customers to perfect their uses of corn sweeteners. We are one of only a few companies still providing this valuable tool. Staley also has excellent engineering services which most competitors have dropped. Both of these services are extremely valuable and important to our sales force," Smith said, adding, "the best sales force in the industry. When customers want quality and service, they seek the expert."

The seventies proved exciting years with the introduction and market development of HFCS, and the eighties promise even greater horizons. . . . teeing off with cola approvals for the use of the 55 percent fructose product in major brands. With price and quality on the side of high fructose corn syrup, it's definitely the sweeter of the future.



Staley employees and spouses lend their talents to the production of the "Music Machine II", a fund-raising project to help Junior Welfare Association of Decatur, Illinois, complete the restoration of a community landmark, pictured in the montage.

Staley talents "discovered", pressed into service

With politics the theme, fun's the outcome of Junior Welfare Association's major fund raiser, "Music Machine II". From behind the scenes to center stage, Staley/Decatur employees and spouses have major roles in productions as well as seeing that the evening packed full of a wide variety of entertainment comes off as planned.

Spearheading this money-making event to complete restoration of the James Millikin Homestead, are Susan Zick, wife of Al, employee benefits manager, and Debby Staley, wife of Bob, government affairs representative, public relations, general co-chairmen, who have devoted the better part of a year to pulling all the details together. A hundred members strong, the ladies of Junior Welfare rely heavily on their husbands to assist with set designs, building projects and programs as well as the duties of hosting the extravaganza April 17, 18, and 19.

Entertainment runs the gambit from night club acts and live music with buffet dinner to an original slide film hitting the census, scripted by the witty local writers Bill Madden and Nancy Roucher and a musical, written by Mrs. Roucher, which takes on the selection of a party candidate.

Among the cast for the film, entitled "It Maketh No Census" or "Knock on Every Door", are Lin Shepard, manager, refined oil division, agriproducts, as the census chief; Bob Staley, air traffic controller; Al Zick, census taker; and Jackie McNamara, wife of Larry, manager, refined oil, the bride complete with boots. Plot calls for the 1980 census to reveal that the biggest problem facing the United States is transportation. Since it's an election year, something must be done to solve the problem, and Decatur is chosen for a pilot project to solve the crisis.

Turning to the election scene, one finds soloist Jay Holmes, general counsel, law division, chairman of the convention, in a three-act comedy, "Off and Running". Also included in this production, wearing several different hats, are Shepard as shiek and a convention delegate; Zick as Grandpa and a delegate; Joe Empen, group leader, new production process, R&D, delegate; and Don Brown, manager, plant transportation, delegate. Other delegates are Betsy Empen, wife of Joe; Penny Honnold, wife of Dennis, product manager, specialty foods, industrial; Jean Simms, wife of Pat, food protein production manager, agriproducts. Karen Holmes, wife of Jay, is a member of a sing-

Joining the leisure life . . .



Paul Neumann

Effective February 29, 1980

WENDELL L. BAUMAN, senior mechanic, I&C Shop

Effective March 31, 1980

PAUL NEUMANN, plant manager, Monte Vista

ing and dancing trio, and Cindy Shepard, wife of Lin, is the musical director.

Behind the scenes are Lesley Cardwell, buyer, construction/equipment, maintenance, purchasing, on the committee for underwriting and advance gifts; Penny Honnold, co-chairman of the invitation committee; and Carol Pritts, wife of Dave, manager of personnel, chairman of advance ticket sales. Don Brown and the Stratmans, Mike, senior plant engineer, protein and specialty feeds division, and Darlene, have assisted with the preparation of decorations.

Greeters for the event include Bill Anderson, director, purchasing, and his wife, Mary Ann, and tending bar are Don Brown, Dennis Honnold, Larry McNamara, Dave Pritts, Bill Schoettle, product manager, fructose, industrial, and Bob Staley. Chit sellers include Marilyn Schoettle, wife of Bill; Beth Ann Satterfield, wife of Dave, division vice president, corporate relations; Lesley Cardwell and Mary Ann Anderson. The Campaign Fever staff includes Carol Pritts and Darlene Stratman, while Mary Lou Brown, wife of Don, and Jackie McNamara work in the Ballot Box.

Anniversaries total 435 years of service



Jim May



Reeder Miller

30 Years

JAMES MAY, process engineering manager, corporate engineering
REEDER MILLER, director, corporate transportation

20 Years

NORMAN KENT DART, senior applications chemist, starch processing, R&D

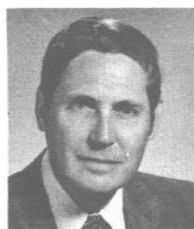
15 Years

FERRELL HENDRIX, starch bulk loader, 20 building
LONNIE WILBER, process operator, 12 building
DANIEL KNUTT, tank car cleaner, 17 building
RICHARD FERGUSON, helper, 2 building
RUFINO GARCIA, assistant production coordinator, Monte Vista
JERRY TRIMMER, utility man, 118 building
MILAN RASKOVIC, homogenizer operator, Cicero
ROBERT PARRISH, pump-tank operator, 5 building
JAMES NAPIER, rigger leadman, riggers
ERNEST HALSEMA, cleaner, 52 building
EMERY SCRIMPSHER, mechanic, electric
JOHN JORDAN, senior mechanic, pipe
JAMES MASSIE, production supervisor, Arlington
LEO AGSANIAN, manager, production control, Oak Brook
THERON REDFERN, shift foreman, 5 & 10 building

10 Years

SAMMY ASKINHURST, cleaner 99 building

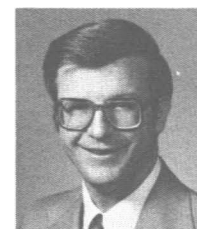
On the move around the company



Ben Cochran



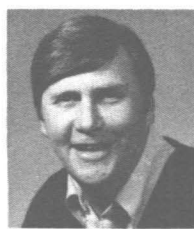
William Kimberly



Roger Lester



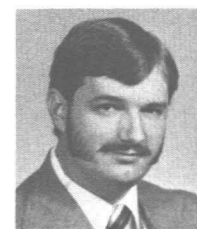
Jim Blakeman



Tom Brabender



Dale Seiber



Don Queary

AGRIPRODUCTS

SUSAN ANDERSON, from grain ledger clerk, control, to chief accounting clerk, control, agriproducts
BEVERLY BROOKENS, from grain merchandising clerk, control, to commodities clerk, control, agriproducts
SUZANNE MONTGOMERY, from purchase order typist, purchasing, to merchandising clerk, commodities, agriproducts
PATRICIA SMITH, from commodities clerk, control, agriproducts, to chief clerk, soybean extraction, commodity operations, agriproducts

CORPORATE

MARY BRAUER, from messenger-office, corporate office services, to chief clerk, auditing
BEN COCHRAN, from principal project engineer, technical, industrial manufacturing, to construction manager, corporate project engineering
HELEN DILLS, from technician, starch processing, R&D, to senior lab-technician, starch processing, R&D
WILLIAM KIMBERLY, from senior development engineer, starch processing, R&D, to engineer associate, starch processing, R&D

ROGER LESTER, from project engineer, corporate project engineering, to senior project engineer, corporate project engineering

RANDY DOTSON, from plant messenger, corporate office services, to environmental technician, environmental sciences, corporate engineering
PAULA WOPAT, from technician, advanced R&D, to associate microbiologist, advanced R&D

INDUSTRIAL

JAMES BLAKEMAN, from plant shift foreman, plant services, industrial manufacturing, to chief, plant protection, plant services, industrial manufacturing
TOM BRABENDER, from shift foreman, process, dry starch, industrial manufacturing, to project supervisor, maintenance, industrial manufacturing
GAYLE JACKSON, from microbiological technician, plant services, industrial manufacturing, to assistant microbiologist, plant services, industrial manufacturing
GEORGE SCHMIDT, from shift foreman, corn milling, industrial manufacturing, to assistant foreman, Satellite IV, industrial manufacturing
DALE SEIBER, from estimating supervisor, engineering, to principal project engineer, technical, industrial manufacturing
DONALD QUEARY, from shift foreman, packaging-loading, dry starch, industrial manufacturing, to shift foreman, process, dry starch, industrial manufacturing
ROBERT BOSAK, from territory manager, sweeteners, to area manager, sweeteners, industrial sales.

CONSUMER

DIANE FERGUSON, from order service clerk, distribution, consumer products, to pricing/promotion control clerk, distribution, consumer products

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