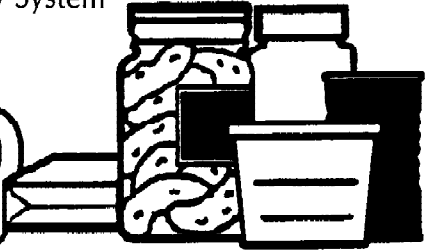




Texas Agricultural Extension Service

The Texas A&M University System

Texas Food Processor



Serving the Food Processing Industry of Texas

VOL XXV, ISSUE 2 • MAY 1996

In this issue

- A. Food Processors Meet in Ft. Worth
- B. Computers: The Productive Menace?
- C. Excitement, Not Sugar, Causes Adverse Behavior by Most Children
- D. How is HACCP Fitting In At Your Company?
- E. Items of Interest
 - 1. Bovine Spongiform Encephalopathy
 - 2. Cool, Pure, Cold-Pasteurization Process Ok'd by FDA
- F. Coming Events

TEXAS FOOD PROCESSOR

This newsletter is prepared for the Texas food processing industry by Al Wagner, Extension Food Technologist. It is sent to you as a service of the Texas Agricultural Extension Service, an educational agency of The Texas A&M University System. Requests for additional information on topics addressed in this newsletter should be directed to:

Al B. Wagner
 Extension Food Technologist
 HFSB 225
 Texas A&M University
 College Station, Texas 77843-2134
 (409) 845-7341 FAX (409) 845-8906

Food Processors Meet in Fort Worth

The 19th annual meeting of the Texas Food Processors Association was held April 10-12 in Fort Worth Texas. The program included an excellent slate of speakers and an auction to raise money for scholarships. A synopsis of the speakers presentations follow:

Dan Sowards, Director of Manufactured Foods, Bureau of Food & Drug Safety, Austin, TX gave an FDA update on food issues. Dan reviewed the current status for HACCP and gave advice on establishing true critical control points. He mentioned that last year 11 administrative penalties totaling \$137,000 were handed out, which accounted for only 1% of food manufacturers. Penalties were enacted only after 2 warning letters had been distributed. Penalties will be reduced 50% if manufacturers establish and implement a HACCP program.

Layne Berman, President, The Berman Company, Dallas, TX gave updates and pointers on the following labor issues:

- Companies can prevent employees from bringing weapons on plant premises by posting warning signs.
- If an employee is fired, you have up to 6 days to give them their pay-check.
- Deductions from employees paychecks for damages must be authorized by the employee.
- No law requires employers to give employers work breaks.
- Unions are merging to increase membership and resources, so expect more union activity in the near future.
- Sexual harassment charges are still popular. Don't settle to get rid of the problem, fight it.
- To improve work-force safety, you need written documentation and programs to satisfy OSHA, insurance companies, etc. Employee handbooks are an excellent way to document safety regulations.
- Family Leave & Medical Act-If the employee is back within 12 weeks, he/she must be given the same job at equal pay prior to leaving.

Dr. Alan Saxe, Professor of Political Science, University of Texas at Arlington presented, "Politics 1996: Egos, Issues & Elections". Some of Dr. Saxe's thoughts and predictions:

- Most Americans don't care about politics which is evident by low voter turnout in local elections.
- Dole will pick a surprise VP (republican governor?). He will announce his cabinet in advance to head off the "old age" issue.

Continued on Page 2

- Clinton will do well on the east and west coast, but not in southern states including Texas.
- Dole will do well in the Midwest and south.
- Solid south is now republican, even local offices.
- Whitewater may backfire on the republicans unless indictments are handed down reaching to the White House.
- This will not be a defining election. Clinton and Dole are similar, they have worked together and are both internationalists.
- Our lives may be affected more by judicial decisions than legislative ones. The conservative supreme court appointments by Reagan may be critical.

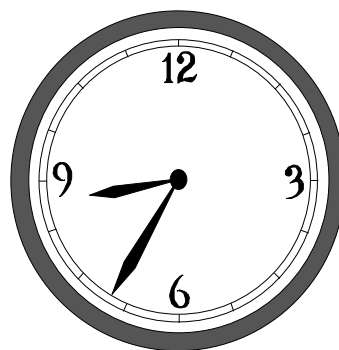
"Where is Our Industry Headed?" was the title of the presentation delivered by Jim Ethier, President & CEO, Bush Brothers & Co., Knoxville, TN. Mr. Ethier is also the current President of the National Food Processors Association (NFPA). Jim started off with a historical account of how the Bush Brothers Company was founded and almost floundered. He then offered his thoughts on issues affecting the food industry, and gave an overview of services offered by NFPA.

Terry Moore, Assistant District Attorney, Deputy Chief of Felony Justice Center, Ft. Worth, TX gave an interesting talk entitled "Gang Violence-No One Is Safe and It Is Getting Worse". Terry gave a historical account of gang activity and described how a specialized prosecution gang unit had to be implemented to deal with the gangs unique language and culture. She said that kids from every ethnic and socioeconomic background are being recruited into gangs. Terry gave an interesting overview of each of the four major gangs in the Dallas-Fort Worth area.

"Unique Marketing of Unique Foods" was the title of the presentation given by Mr. Park Kerr, Co-Owner, El Paso Chile Co., El Paso, Texas. Park gave a historical account of how El Paso Chile Co. was formed and discussed how they have created a niche in the specialty foods arena. Keys to their success were attributed to unique marketing and product development. Their products have value added packages (some have tied on bonnets and custom paper), and unique graphic designs. Another pointer was "keep it new;" El Paso Chile Co. has over 400 salsas, and they change their product line every year. Future trends according to Park will be development of ethnic specialty foods other than Mexican, such as dried tomatoes, pestos, chutneys, marinades, pasta salsas, beer mustard, etc.

At the Thursday lunch, Mr. Dale Robbins, formerly with Rio Grande Foods received the Association Hall of Fame Award. Dale was recognized for his many contributions to the Association and the food industry. In addition, nine food science students from Texas Tech and Texas A&M were recognized for their scholarship activities.

This was followed by the auction which raised over \$5,000 for the scholarship fund.



Computers: The Productive Menace?

Looking around the office, you may notice all your employees seated attentively in front of their computer screens working diligently on their projects. Well, take a closer look. Your employees may be actively engaged - but they may not be doing what you think. Having a computer on every desk may not be affecting productivity quite the way you had in mind. One recent survey of 6,000 computer users reports that "computer gaming" may be responsible for the loss of \$100 billion in US businesses. Here are some PC office hazards to be aware of.

- **Computer games.** One of the biggest temptations for an office worker may be to tune out the business at hand, and to plug into one of the computer games that are often accessed on the average computer hard drive. Managers may consider purging company PCS of computer games.
- **E-mail.** E-mail offers a quick and effective means of interoffice communication. It also offers the means by which to engage in an endless stream of "chitchat" that may hinder productivity. Be sure to clarify the objective of E-mail and set up clear guidelines for its use.
- **Software.** Unlimited software can allow great flexibility among office workers. It may also encourage personal use and creativity that may cut into company time.

**Taken from Incentive, April 1995, p. 64.*

Editors Note: I just had to put in this article so that some of you do not get too carried away "surfing the Internet."

Excitement, Not Sugar, Causes Adverse Behavior by Most Children

Children often consume sugar-laden foods and drink at birthday parties and holiday occasions, but any variations in their behavior should be blamed on their state of excitement, not on the sugar, according to an analysis of scientific literature by Mark Wolraich, Department of Pediatrics, and David Wilson, Institute for Public Policy Studies, both of Vanderbilt University, Nashville, Tenn., and J. Wade White of the U.S. Naval Hospital, Yokosuka, Japan, in the Nov. 22-29 Journal of the American Medical Association.

The researchers added that, in those situations or any others, sugar does not affect the behavior or cognitive performance of children, and the strong belief held by parents that it does may be due to the parents' expectations rather than the children's actions.

Searching through available research in their files of MEDLINE and PsychINFO data bases, Wolraich *et al.* analyzed only those studies meeting specific criteria. Studies were included only if: they intervened by having the subjects consume a known quantity of sugar; they used a placebo (aspartame or saccharin) condition; their design had the subjects, parents and research staff blinded to the conditions; and means and Sds or other statistics that could be used to compute an effect size for the dependent measures were reported.

The search identified 16 articles on 23 studies, all using a within-subject design, the researchers noted. The studies were conducted from 1982 to 1994. Fifteen of the studies used doses per kilogram of body weight ranging from 1.25 to 5.6 grams, while eight used fixed doses from 35 to 78g; 13 of the studies used aspartame as the placebo, two used saccharin and six used both saccharin and aspartame.

"Each set of effect sizes shows no more variation than expected from sampling error, and their mean can be presumed to estimate a single under population effect size," Wolraich *et al.* noted, adding: "Of interest was the possibility that sugar might have a larger effect on some behaviors than others. The general inability to reject the null hypothesis for any of the measurement constructs cautions against any such interpretation."

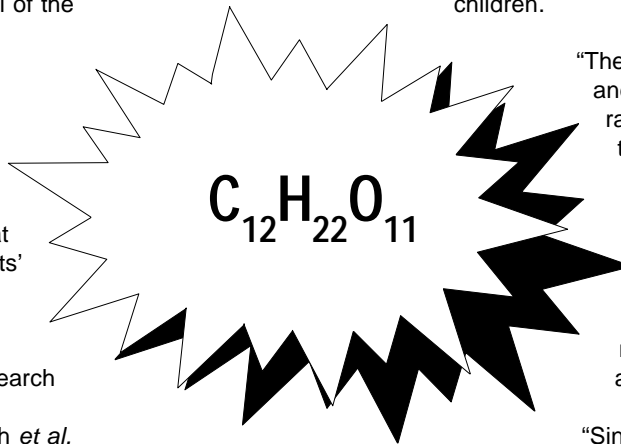
One study tested a group of parents and children in which the parents believed that their children were adversely affected by sugar. The children were given a drink sweetened with artificial sweetener, but half the parents were told the drink was sweetened with sugar. The parents were then asked to observe and rate their children's behavior, and the researchers observed and recorded the parents' behavior in interacting with the children.

"The effect sizes for the parents ratings and behavioral coding of the parents ranged from 0.57 to 1.11, with 7 of the 11 measures greater than 0.42, which are considerably higher than those found for the sugar studies," Wolraich *et al.* noted, adding that natural childish excitement, not sugar-induced hyperactivity, is responsible for kids running around at parties.

"Since sugar is commonly ingested and enjoyed by children [at special occasions] variation in their behavior may be mistakenly correlated with its consumption," the researchers said, noting: "In addition, all of the lay publicity suggesting an association between sugar and behavior may prime parents to expect the adverse behavior. This combination could appear very convincing to parents, thus perpetuating their beliefs."

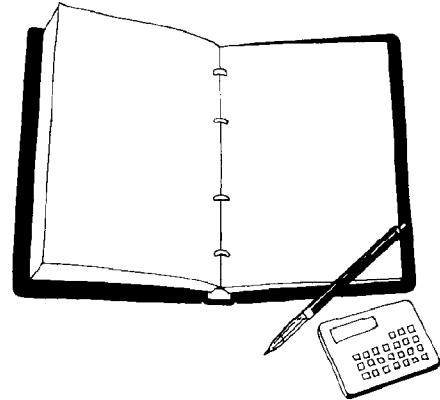
Although the studies they used "give no support for the effect of sugar on behavior, there are not currently enough studies to reach a definitive conclusion," Wolraich *et al.* said, noting the need for more tests to determine "differential effects of sugar on restricted subsets of children."

**This article appeared in the December 4, 1995 issue of Food Chemical News, Washington, D.C.*



How is HACCP Fitting in at Your Company ?

Is there a statement of corporate policy that endorses HACCP, that shows management is behind it? Who has the authority for HACCP? If it's put way down low on the totem pole, you might get an indication that HACCP is not very important." "What kinds of communication do you get from management with respect to your HACCP program?" These questions were asked by Ken Stevenson of the National Food Processors Association. He cautioned that management will sometimes act like the "800-pound gorilla" and maintain that everything is fine. "Do you get management responses when the HACCP group finds some things that are not working?" he asked.



Monitoring Record-Keeping Is Important, Stevenson Says

Employee practices also need to be checked out. "Just by talking to employees you can find out if they have been trained effectively, whether they have appropriate experience and knowledge for the task," Stevenson said, adding, "You can ask to see the standard operating procedures to find out how they are doing. You can also look around to see if the procedures are being followed and records are being maintained."

"Certainly you have to watch out, because sometimes what you'll get is a song and dance," Stevenson warned, adding: "People will tell you they are doing something and you go away. But by taking a look around the corner, you find out they are doing something else. That is one of the things we continually have to look out for."

One of the most important things that auditors can do is to evaluate critical control points, he said. The auditor must make sure procedures are being implemented correctly.

"I've seen some instances where companies sat down and developed a HACCP program and wrote out what needed to be done at a critical control point. It all sounded very good until you put it out on the line," Stevenson said. This is what occurred at one meat plant that Stevenson visited. "It so happened that the operator responsible for the monitoring of it was so busy and actually so messy - there was a lot of juice and things flying around - that the task that person was asked to do, he really couldn't do it effectively," he said.

In this case, the operator waited until the end of his shift to fill out paperwork. "That's not the way it should be done or the way that management had envisioned it being done," Stevenson commented. When this was pointed out to the company, management agreed to change it, he said.

Special attention also needs to be paid to the records, Stevenson added. "They are the written evidence," he said, adding, "If you don't have records, how do you prove what really happened? You need to make sure those records are there to tell us what happened."

He continued: "Make sure appropriate record keeping procedures are in use. If something is changed, it should be lined out - not whited out - and initialed, with maybe an explanation of why it was changed. A record review also should be done daily."

*Excerpted from **Food Chemical News**, January, 1996.*

Statement of Dr. H. Russell Cross, Director, Institute of Food Science and Engineering on Bovine Spongiform Encephalopathy

Recognizably, bovine spongiform encephalopathy (BSE) is an extremely serious issue that demands focused attention to all details. Based on a 10 year monitoring and surveillance program, BSE has not been located in the United States because of previously implemented precautions by the U.S. government and the beef industry.

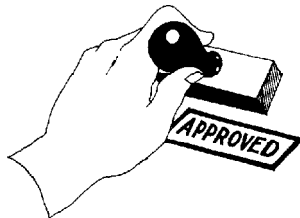
Bovine spongiform encephalopathy (BSE) is a chronic degenerative disease that affects the central nervous system of adult cattle. BSE was first diagnosed in Great Britain in 1986. From November 1986, when BSE was first identified as a separate disease, until December 1995, an estimated 155,600 head of cattle in almost 33,000 herds were diagnosed with BSE in Great Britain.

Many scientific facts are known about transmissible spongiform encephalopathies such as BSE, scrapie in sheep and Creutzfeldt-Jakob disease (CJD) in humans and other related disorders. There is a great deal we have yet to learn. Therefore, we must avoid drawing unsound correlations. We believe that BSE can only be found in spinal and brain tissues and perhaps lymph nodes and spleens of infected animals, but is not carried

through muscle tissue or fat. Therefore, based on today's science, consumption of meat is not a threat to public health. We must look carefully at each possible link and scientifically evaluate all aspects of transmission.

Unfortunately, this will require more information than we have today. Therefore, the beef industry and the U.S. government must continue to take additional precautions. For example, the recommendation by the U.S. Department of Agriculture, the Food and Drug Administration, the U.S. Public Health Service, and the beef industry to omit rendered ruminant animal protein from ruminant animal food is only a precaution. The science to fully support or refute each individual precaution will need to be addressed and changes made based on scientific findings.

The bottom line is that the U.S. cattle industry and the academic community must extensively research the issue. We should do our best to protect our consumers from this and all other threats to our food supply. The United States has the safest beef supply in the world, and it is our job to keep it that way.



Cool Pure, Cold-Pasteurization Process Ok'd by FDA

A new cold-pasteurization process for antimicrobial treatment of liquids and pumpable foods was developed by PursePulse Technologies, Inc. San Diego, CA, according to the Food Master (October). Whole eggs, being extremely sensitive to heat, will be the first beneficiary of this process. The technology makes use of short, high-intensity pulses to that cause irreparable damage in microorganism cell walls. Remarkably, CoolPure does not affect taste or color.

A uniform treatment is assured by high-speed oscilloscopes whose cost ranges between \$250,000 to \$500,000 depending on capacity.

The process can prolong the shelf life of several products, like orange juice, without affecting flavor or Vitamin C content of enzymatic changes.

Coming Events

Texas Association of Milk, Food and Environmental Sanitarians (TAMFES) Meeting

TAMFES is preparing for its 15th year of providing the dairy and food industry with the most up to date information concerning product development, new processing technologies, federal and state regulatory issues, and items of public health concern. The TAMFES organization can only begin to reach its objectives with the support of all the individuals from industry, regulatory, academia, the armed forces, and vendors. TAMFES also supports Food Science students at Texas Tech and Texas A&M Universities.

The annual meeting will be held in Austin, Texas at the Wyndham Hotel, located at 4140 Governor's Row, directly off of I-35 and Ben White Blvd. The annual golf tournament will be on June 3, with meetings on June 4 and 5. Some topics and speakers are listed below:

TUESDAY, JUNE 4, 1996

Laboratory Session

8:50 - 9:30 a.m.

Topic: "Aflatoxin"

Speaker: Dr. Tim Phillips, Texas A&M University, College Station, Texas

10:30 - 11:15 a.m.

Topic: "Monitoring the Effectiveness of Food Sanitation Procedures using ATP Bioluminescence Systems"

Speaker: Dr. Robert B. Gravani, Professor of Food Science, Cornell University

11:15 - Noon

Topic: "Cryptosporidium - A Health Issue?"

Speaker: Nick Nickelson, Red Mesa Microbiology, Austin, Texas

General Session

1:15 - 1:30 p.m.

Topic: "Texas Department of Health Update"

Speaker: Dr. William Rosser, Chief of Bureau of Food and Drug Safety, Austin, Texas

2:45 - 3:30 p.m.

Topic: "Using Innovative Multimedia Employee Education and Training Program in the Food Industry"

Speaker: Dr. Robert B. Gravani, Professor of Food Science, Cornell University

3:30 - 4:15 p.m.

Topic: "Epidemiology and Animal Diseases"

Speaker: Dr. Leon Russell, Department of Veterinary Public Health, Texas A&M University

WEDNESDAY, JUNE 5, 1996

General Session

10:30 - 11:15 a.m.

Topic: "Overcoming Employee Apprehension Associated with Mergers and Acquisitions"

Speaker: Gene D'Orazio, Human Resources Consultant, Ft. Worth, Texas

For registration information, contact Dr. Ron Richter 409/845-4425 or Dr. Al B. Wagner, Jr. 409/845-7341.



FOOD IRRADIATION CONFERENCE

The Institute of Food Science and Engineering and the Texas Department of Health are cosponsoring a Food Irradiation Symposium June 3 & 4 at the Doubletree Hotel in Austin, Texas.

For registration information, contact Marilyn Kelso at 512/834-6688 or Kerri Harris at 409/862-2036.