

MINUTES OF THE HOUSE HEALTH AND HUMAN SERVICES COMMITTEE

The meeting was called to order by Chairman Jim Morrison at 1:23 P.M. on February 2, 2005 in Room 526-S of the Capitol.

Committee members absent:

Representative Delia Garcia- excused
Representative Geraldine Flaharty- excused
Representative Patricia Kilpatrick- excused

Committee staff present:

Melissa Calderwood, Kansas Legislative Research Department
Mary Galligan, Kansas Legislative Research Department
Rena Jefferies, Revisor of Statutes' Office
Gary Deeter, Committee Secretary

Conferees appearing before the committee:

Teresa Schwab, Oral Health Kansas (proponent)
Cindy D'Ercole, Senior Policy Analyst, Kansas Action for Children (proponent)
Sarah Hampl, MD, American Academy of Pediatrics (proponent)
Bobbe Mansfield, Baker University School of Nursing and Prairie Family Medical (proponent)
Chris Wilson, Executive Director, Kansas Dairy Association (proponent)
Elaine Schwartz, Executive Director, Kansas Public Health Association (proponent)
Jerry Slaughter, Executive Director, Kansas Medical Society (written only, proponent)
Ron Hein, Kansas Beverage Association (opponent)
Leslie Bonci, Sports Nutrition Director, University of Pittsburgh Medical Center (opponent)
Donna Whiteman, Assistant Executive Director for Legal Services, Kansas Association of School Boards (opponent)
Brad Stauffer, Communications Director, Topeka Public Schools (opponent)
Noah Welch, Lawrence High School student (opponent)
Mark Desetti, Director of Political Action and Government Relations, Kansas National Education Association (opponent)
(written only) Kevin Fisk, Grocery Manufacturers of America (opponent)
(written only) Stephen Lodge, National Confectioners Association (opponent)

Others attending:

See attached list.

The Chair made several announcements regarding electronic committee protocols.

The minutes for February 1, 2005, were approved.

Representative Paul Davis requested the committee sponsor a bill dealing with breast feeding, stating that a constituent had requested the bill. A motion was made, seconded, and passed to sponsor the bill.

MINUTES OF THE House Health and Human Services Committee at 1:23 P.M. on February 2, 2005 in Room 526-S of the Capitol.

The Chair opened the hearing on 2137, a bill dealing with health food choices in school vending machines.

Teresa Schwab, Executive Director, Oral Health Kansas, spoke in favor of the bill. (Attachment 1) She said that bacteria in the mouth converts sugar to acid, eating away tooth enamel. She noted that one of the most common childhood diseases is early childhood caries, saying that soft-drink vending machines in schools send a mixed message to students.

Cindy D'Ercole, Senior Policy Analyst, Kansas Action for Children, testified in support of the bill. (Attachment 2) She stated that the growing obesity epidemic as well as early childhood caries are problems that can be prevented, noting that the bill does not ban the sale of soft drinks, but allows options for students, saying that nutritional value is the key issue since this bill looks at foods of low nutritional value. She said passage of this bill is one step on a path to improve the health of Kansas children.

Sarah Hampl, MD, representing the American Academy of Pediatrics, testified that childhood obesity is a growing problem, saying that one in three American children is overweight and one in six is obese, noting that many health problems are directly related to obesity. (Attachment 3) She said studies have shown that obese children have plaques in their arteries as early as age six, observing that many vending machines offer what would amount to 2 or 3 servings of high-fat, high-calorie foods. She stated that outside the classroom, students are presented with a wide array of high-carbohydrate foods; schools should provide an oasis from these messages. This bill provides an opportunity to improve the health of Kansas kids.

Bobbe Mansfield, Baker University School of Nursing and Prairie Family Medical, spoke as a proponent. (Attachment 4) She said that any effort to prevent obesity is commendable, which this bill does. She commented that about 41% of Shawnee County are overweight or at risk of becoming overweight, a problem compounded by a food industry that generates 3800 calories per person per day. She said that research shows that efforts such as this bill will encourage better nutrition, increase revenue, and improve student behavior.

Chris Wilson, Executive Director, Kansas Dairy Association, commended the goal of the bill to improve vending machine choices. (Attachment 5) She said that the Kansas Dairy Association for the first time began research regarding revenue produced by vending machines in small schools. She reported that four of nine of the schools lost money. Nevertheless, eight of the nine schools continued with the machines because they wanted to offer wider choices for students. She said the association is working with schools to help them be successful and profitable, even though machines cost \$3000 to \$4500.

Elaine Schwartz, Executive Director, Kansas Public Health Association, spoke as a proponent of the bill. She said the association has 500 members committed to working for a healthier Kansas. (Attachment 6) She said childhood obesity and early childhood oral health are two concerns about which the bill offers action in a positive direction, noting that studies show that giving healthy snacks and encouraging physical activity have been found effective in reducing body mass.

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Jerry Slaughter, Executive Director, Kansas Medical Society, provided written testimony as a proponent of the bill. ([Attachment 7](#))

Members questioned proponents regarding their testimony:

Jodi Mackey said that the school lunch program has strict procedures regarding calorie intake, fat content, and nutritional impact, noting that in the past 10 years school lunches have become much more nutritious.

Cindy D'Ercole said the bill starts the conversation about providing options in school vending machines. She also observed that about 10 beverages on the Coca-Cola website would qualify as healthy alternatives.

Chris Wilson said that even though dairy machines do not always produce revenue for the school, students appreciated wider variety of choices.

Members commended the presence of dairy machines as a means of adding calcium to a student's diet and expressed concern that the sugar in some beverages not only encourage weight gain, but impinge on a student's immune system.

Ron Hein, Kansas Beverage Association, spoke in opposition to the bill. ([Attachment 8](#)) He agreed that there is an obesity problem, but stated that there is room for sugar in a healthy, nutritious diet. He expressed appreciation for the intent of the bill, but stated that it is a small part of a very complicated problem, noting that the beverage industry has moved toward more healthy choices, citing lower soft drink consumption and a wider variety of choices. He said the bill will have an adverse financial impact on schools, often hurting programs that encourage physical activity. Saying that the bill is a simple solution to a complicated problem and creates many unintended consequences, he stated that over the last 20 years caloric consumption has gone up 1%, but physical activity is down 13% over same period, commenting that this bill not the solution to a very wide problem.

Leslie Bonci, Sports Nutrition Director, University of Pittsburgh Medical Center, and registered dietician, spoke as an opponent. ([Attachment 9](#)) She said that all food eventually turns into glucose in the body, and that targeting certain foods is not the answer to a complex problem that can be better addressed by increasing physical exercise. She noted that vending machines always offer a controlled amount, something not provided by convenience stores or home settings. Commenting on oral health, she said that solid types of carbohydrates are worse than liquids, the former adhering to teeth for a longer period of time.

Donna Whiteman, Assistant Executive Director for Legal Services, Kansas Association of School Boards, spoke in opposition to the bill. ([Attachment 10](#)) She testified that the association had developed eight policy statements, all of which were listed in her written testimony. She highlighted three of these verbally, saying that the responsibility to manage vending machines should be left to the 2100 school board members whose duty it is to oversee the 1416 school buildings under their jurisdiction. Further, she said most junior and senior high schools have existing contracts with vending machines companies, the machines generating significant income for school districts. Third, she stated that the federal Child Nutrition and WIC Reauthorization Act became effective June 30, 2004, an act which addresses childhood

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obesity and requires school districts to establish wellness policies by June 30, 2006, policies which may well obviate the need for this bill.

Brad Stauffer, Director of Communications, Topeka Public Schools, spoke as an opponent, noting that the Topeka Public Schools have a contract with Pepsi that garners about \$385,000 each year for the district, \$30,000 of which goes to Topeka High. (Attachment 11) He stated that these funds are used for a variety of purposes, including paying the mortgage for Hummer Sports Park. He observed that in the past few years sugar-carbonated drinks have decreased from 62% of sales to 54% of sales and, concomitantly, healthier choices have increased.

Noah Welch, a student at Lawrence High School and general manager of the Lion's Den, the school store, testified as an opponent. (Attachment 12) He said removing soft drinks from the school will simply transfer profits from the school to the local convenience store, noting that removing carbonated drinks will cut revenue by 30% in his school store.

Mark Desetti, Director of Political Action and Government Relations, Kansas National Education Association, (also representing the United School Administrators) spoke as an opponent. (Attachment 13) He said enrollment costs, activity fees and other costs to parents are often offset or reduced by revenue from vending sales. Regarding the portion of the bill that prohibits using sweets as a reward, he said it was a small issue better addressed by site councils; he recommend that section be stricken.

Two individuals provided written testimony in opposition to the bill: Kevin Fisk, Grocery Manufacturers of America (Attachment 14) and Stephen Lodge, National Confectioners Association. (Attachment 15)

Members queried opponent conferees, who gave the following answers:

Regarding questions about loss of revenue, Mark Desetti said schools with open lunch will probably not lose revenue with the bill, but those with exclusive contracts will. Brad Stauffer said Pepsi's contract nets the Topeka Public School District \$105,000 off the top; the bill may prompt Pepsi not to renew the contract. Donna Whiteman noted that many contracts with school districts stipulate that changes in state law can automatically void the contract.

A member observed that if school districts are receiving important revenue from vending contracts, these sources of revenue should be reported to the legislature. Another member commented that most food-vending companies have a variety of healthy products, so the bill should not be a problem. Mr. Stauffer said the issue should be addressed at the local level. Mr. Hein said the bill blurs two issues—obesity and limited nutritional values, issues which require different approaches.

Mr. Hein to another question that although water would seem to be a less expensive commodity for vending machines, the process of purifying, marketing and distribution add cost to it. To another question, Mr. Hein said that the trend toward eliminating individual freedoms was becoming more onerous, and that lawmakers should avoid addressing complex problems with simplistic solutions.

Ms. Whiteman said there are only a few elementary schools in Kansas that have vending machines. She

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stated that the new federal policies will eventually impact contracts between school districts and vending companies but districts are reluctant to give up the contracts because they pay for underfunded programs. She noted that the bill, if enacted, will be difficult to administer because of the 50% rule; the effect of the federal guidelines is presently not clear, since federal law approaches wellness, not nutrition alone.

One member, acknowledging the value of income generation, nevertheless expressed regret that the prevalence of nutritionally questionable drinks and foods will develop habits in students that will eventually have a negative effect on their health and therefore their productivity as employees.

The Chair announced that the final two conferees would be heard the following day.

Staff provided a briefing on **HB 2077**, which seeks to establish a cancer drug repository through the State Board of Pharmacy. She said the Board is directed to accept and dispense prescription-only cancer drugs donated by individuals, manufacturers, or health-care facilities for the purpose of treating Kansas residents who meet certain qualifications that will be established by rules and regulations. She noted that pharmacists and drug manufacturers who dispense such donated drugs are protected from criminal liability. A copy of the Nebraska statute and regulations (enacted in 2003) were being made available on the committee website.

The meeting was adjourned at 3:07 p.m. The next meeting is scheduled for Thursday, February 3, 2005.

**HOUSE HEALTH AND HUMAN SERVICES COMMITTEE
GUEST LIST**

DATE: FEBRUARY 2 2005

NAME	REPRESENTING
Betsy Lytle	Baker School of Nursing
Ward Cook	American Cancer Society
TERRY FORSYTH	KNEA
Cindy Perole	Kansas Action for Children
Charles Schmitt	Schmitt Vending
William Bradford	DRINK-O-MAT VENDING
Claine Schwartz	Ks Public Health Assn.
Teresa Schwab	Oral Health Kansas
MIKE BERRY	COCA-COLA
Todd SCHULTZ	" "
Noah Welch	Lawrence High School
Josh Edwards	" " "
Sarah Hamp	KS Chapter of American Academy of Pediatrics
Jodi Mackey	KS Dept of Education
Sheila Ward	PepsiAmericas
Brad Stauffer	Topoka Public Schools, USD 501
Sarah Keringer	HNS
Jim McLean	Ks Health Institute
A. Lee	Wichita Eagle
Dave Henry	Holtan, Ks



Testimony before the House Health & Human Services Committee

February 2, 2005

Chairman Morrison and Members of the Committee:

Thank you for the opportunity to provide testimony today in support of HB 2137, healthy food choices in vending machines. My name is Teresa Schwab, and I am the Executive Director of Oral Health Kansas, Inc.

According to the American Dental Association (ADA), American consumption of soft drinks, including carbonated beverages, fruit juice and sports drinks, increased 500 percent in the past 50 years. Americans drank more than 53 gallons of soft drinks per person in 2000, surpassing all other beverages including milk, beer, coffee, and water.

Our mouths are filled with bacteria, and when these bacteria come into contact with sugar or starch, acid is produced that attack teeth. Bacteria are particularly fond of foods containing sugars and carbohydrates. These foods provide bacteria with energy to grow, reproduce, and create enamel eating acid.

Thus, when children have a prolonged exposure to sugary foods and beverages, the risk of early childhood caries (ECC) increases. In fact, according to the 2000 Report of the Surgeon General, dental caries is one of the most common childhood diseases, more than 5 times as common as asthma and 7 times as common as hay fever. Each year, an estimated 51 million school hours are lost because of dental-related illness.

The financial impact of dental disease caused by the consumption of sugary snacks and soft drinks is considerable and especially frustrating because it is totally preventable. For these reasons, Oral Health Kansas supports limiting children's access to the sugary snacks and soft drinks usually available in vending machines and offering children more healthy options.

Once again, thank you for the opportunity to provide you with this testimony today. I would be happy to stand for questions.

Oral Health Kansas, Inc.
215 SE 8th Ave.
Topeka, KS 66603

785.235.6039 (phone)
785.233.5564 (fax)
oralhealthkansas@ohks.com

Respectfully submitted,
Teresa R. Schwab, LMSW

A. Hachment /
HHS 2-2-05

February 2, 2005

To: Kansas House Health and Human Services Committee
From: **Cindy D'Ercole, Sr. Policy Analyst**
Re: House Bill 2137- Healthy food choices in school vending machines



Making a difference for Kansas children

Kansas Action for Children, Inc.
1360 SW Harrison | Topeka, KS 66611
P 785-232-0550 | F 785-232-6699
kac@kac.org | www.kac.org

Kansas Action for Children supports enactment of House Bill 2137.

Proper nutrition has an immediate impact on children's ability to learn, as well as on children's oral health and obesity prevention. Research shows that changes in the school food environment can impact food choices and improve the quality of children's diets while at school. Growing awareness of the importance of the obesity epidemic and oral health presents a clear opportunity to require schools to provide healthy options in school vending machines.

Celebrating 25 years
of child advocacy

Obesity Prevention

There are serious, long-term health consequences of childhood obesity. Childhood and adolescent obesity contributes to asthma, diabetes, high blood pressure, sleep apnea, low self-esteem, and adult obesity. The prevalence of obesity among adults in Kansas has increased by almost 70 percent since 1992. More than one in five adult Kansans are now obese and almost three in five are at least overweight. Reversing the epidemic of obesity in Kansas will require focusing on obesity prevention in children.

Oral Health

When teeth come in frequent contact with soft drinks and other sugar-containing substances, the risk of decay formation is increased. Oral health is a critical but often overlooked component of overall health and well-being among children and adults. Dental caries (tooth decay) is the most common preventable chronic childhood disease. Pain from untreated dental disease can lead to eating, sleeping, speaking, and learning problems in children and adolescents, which affect a child's social interactions, school achievement, general health, and quality of life. In fact, approximately 51 million school hours per year are lost because of dental-related illness.

Improving the health status of Kansans begins with improving the health of Kansas kids. Both inside and out of the classroom, schools present opportunities for students to learn about good nutrition, physical activity, and their relationship to health. HB 2137 would address part of this equation by focusing on creating a healthy food environment for Kansas kids by requiring healthy food alternatives in vending machines accessible to students. **We urge you to support efforts to improve the health of Kansas kids and HB 2137.**

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Gary Brunk

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A Member of Forces
for America's Children

Attachment: USDA guidelines

Attachment 2
HHS 2-3-05

United States Department of Agriculture

☐☐ School Meals

Foods of Minimal Nutritional Value

The following is taken from Appendix B of 7 CFR Part 210.

Appendix B to Part 210—Categories of Foods of Minimal Nutritional Value

(a) Foods of minimal nutritional value—Foods of minimal nutritional value are:

(1) Soda Water—A class of beverages made by absorbing carbon dioxide in potable water. The amount of carbon dioxide used is not less than that which will be absorbed by the beverage at a pressure of one atmosphere and at a temperature of 60 deg. F. It either contains no alcohol or only such alcohol, not in excess of 0.5 percent by weight of the finished beverage, as is contributed by the flavoring ingredient used. No product shall be excluded from this definition because it contains artificial sweeteners or discrete nutrients added to the food such as vitamins, minerals and protein.

(2) Water Ices—As defined by 21 CFR 135.160 Food and Drug Administration Regulations except that water ices which contain fruit or fruit juices are not included in this definition.

(3) Chewing Gum—Flavored products from natural or synthetic gums and other ingredients which form an insoluble mass for chewing.

(4) Certain Candies—Processed foods made predominantly from sweeteners or artificial sweeteners with a variety of minor ingredients which characterize the following types:

(i) Hard Candy—A product made predominantly from sugar (sucrose) and corn syrup which may be flavored and colored, is characterized by a hard, brittle texture, and includes such items as sour balls, fruit balls, candy sticks, lollipops, starlight mints, after dinner mints, sugar wafers, rock candy, cinnamon candies, breath mints, jaw breakers and cough drops.

(ii) Jellies and Gums—A mixture of carbohydrates which are combined to form a stable gelatinous system of jelly-like character, and are generally flavored and colored, and include gum drops, jelly beans, jellied and fruit-flavored slices.

(iii) Marshmallow Candies—An aerated confection composed as sugar, corn syrup, invert sugar, 20 percent water and gelatin or egg white to which flavors and colors may be added.

(iv) Fondant—A product consisting of microscopic-sized sugar crystals which are separated by thin film of sugar and/or invert sugar in solution such as candy corn, soft mints.

(v) Licorice—A product made predominantly from sugar and corn syrup which is flavored with an extract made from the licorice root.

(vi) Spun Candy—A product that is made from sugar that has been boiled at high temperature and spun at a high speed in a special machine.

(vii) Candy Coated Popcorn—Popcorn which is coated with a mixture made predominantly from sugar and corn syrup.

2-2
2-1

American Academy of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™
February 2, 2005

To: Kansas House Health and Human Services Committee
From: Sarah Hampl, MD, FAAP
Re: House Bill 2137—Healthy food choices in vending machines

I am a general pediatrician at Children's Mercy Hospital. I serve on the nutrition committee of the **Kansas chapter of the American Academy of Pediatrics**. Through the KAAP I am teaching pediatricians from across the state about how to be effective advocates for childhood obesity prevention within their communities. I also teach Kansas pediatricians and their office staffs about how to correctly diagnose and manage children who are obese. I am on the steering committee of the Kansas Chapter of Action for Healthy Kids, a nationwide organization that supports healthy nutrition environments for schoolchildren.

The Kansas Chapter of the American Academy of Pediatrics supports the enactment of House Bill 2137.

Overweight and obesity in children and adolescents has nearly doubled in the past 20 years. Nationwide, nearly 1 in 3 children is overweight and 1 in 6 are obese as defined by body mass index criteria (Ogden et al, 2002). In Kansas, 25% of adolescents are either overweight or obese, which parallels the national average (Hunt, KS Health Statistics Report, 2004). This is not a "baby fat" issue. The likelihood that a child, especially an adolescent, will remain overweight into adulthood is as high as 80% according to longitudinal studies (Whitaker et al, 1997). Furthermore, overweight children experience adult-type illnesses. Sixty percent of obese children have at least 1 medical complication, and an additional 25% have 2 or more complications (Freedman et al, 1999). It is estimated that 1 in 3 children born in the year 2000 will develop Type 2 Diabetes, a well-known complication of obesity, in their lifetime. The hundreds of thousands of deaths and over \$100 billion dollars spent in treatment of obesity-related illness annually (Allison et al, 1999) mandates that significant effort should be undertaken to prevent obesity. This prevention effort must begin in our children.

Our children face an uphill battle. They are faced with enticements from multiple sources to eat and drink in an unhealthy manner. It is not surprising that children's food selections are high in added fat and sugar; this category accounts for as much as 40% of children's daily energy intake (Munoz et al, 1997). Sweetened drinks are the primary source of added sugar in children's daily diets (Guthrie and Morton, 2000). One 12 oz soft drink has 10 or more teaspoons of sugar and 150 or more calories, and these figures obviously increase as the serving size increases to the commonly available 20 oz bottle. Three out of 4 school age children drink at least 1 soft drink daily. Adolescent males drink the most soft drinks; 1 in 5 teenage males drinks 4 or more soft drinks per day (Gleason and Sutor, 2001). Teenage males in Kansas are more likely to be overweight

Attachment 3
HHS 2-2-05

than teenage females (Hunt, 2004). Each can of soft drink has been associated with a 0.18 increase in a child's BMI and a 60% increase in their risk of developing obesity (Ludwig et al, 2001). **Promotion of obesity** is not the only concern. Soft drinks also promote **dental caries and erosion of dental enamel**. Soft drink consumption also contributes to the development of suboptimal bone density in that milk consumption typically declines as soft drink consumption increases. Teenage girls lay down 40% of their bone mass during adolescence. If their diets are inadequate in calcium, **weak bones and osteoporosis** can result in an increased risk of fractures in their adult years.

Kansas schools represent an important environment in which healthy habits can be taught and reinforced. Students eat 1 and sometimes 2 meals per day at school, so what is offered in the lunchroom is an area of impact. But what is available outside the cafeteria is just as influential in the shaping of students' food and drink preferences and practices. The brevity of the school lunch period influences some students to choose the more quickly available selections found in vending machines. Other students have access to vending throughout the school day.

Students in Kansas schools are benefiting from the efforts of the Coordinated School Health program, the KState University Extension and Kansas Action for Healthy Kids to name a few; these organizations see the dire present and future consequences of unhealthy nutrition and physical activity patterns. Our students should receive a unified and not a mixed message when they step out of the classroom. Kansas schools have an opportunity through vending machines to promote the development and maintenance of lifelong healthy eating habits by providing nutritious food and drink options. The proposed bill is a moderate and reasonable step in this direction.

Concern has been raised about the loss of revenue that may occur once the vending machine changes are implemented. This revenue is often used to support needed, yet otherwise unfunded or underfunded student programs. We should be encouraged by examining the experiences of other school districts which have successfully implemented healthy food and drink alternative vending. Large and small school districts across the country, including those in CA, MN, PA and even here in Kansas (KS Dairy Vending Machine Test, 2004) have seen no loss in revenue after replacing items of minimal nutritional value (USDA 7 CFR part 210 appendix B) with healthier foods and drinks. In fact, it is well-documented that students do purchase these healthier alternatives; some schools have actually experienced an increase in revenue (www.actionforhealthykids.org). Furthermore, multiple resources are available to assist school districts in making vending machine changes. The Centers for Disease Control, Action for Healthy Kids and the Center for Science and the Public Interest offer detailed instructions and examples regarding implementation of healthy vending.

In summary, multiple efforts are occurring across the state of Kansas to promote the prevention of obesity in our children. The passage of House Bill 2137 would further this effort by allowing Kansas students the chance to adopt and practice healthy nutrition habits during the schoolday. A well-planned and implemented effort should result in no loss of school revenue and will make school a healthier place for Kansas children.

HB 2137

Proponent View

Bobbe Mansfield, RN, MSN, ARNP
Baker University School of Nursing
Prairie Family Medicine
Chair, Health and Wellness Team / Bridges to
Success - United Way of Greater Topeka

*Attachment 4
HHS 2-2-05*

Youth Obesity: A Call for Action



The Youth Obesity Epidemic

- Who is affected?
- Why is it happening?
- What Can We Do?

Health & Wellness Action Team



Mission: ensure that all youth develop healthy lifestyles leading to lifelong wellness.

Youth in the U.S.

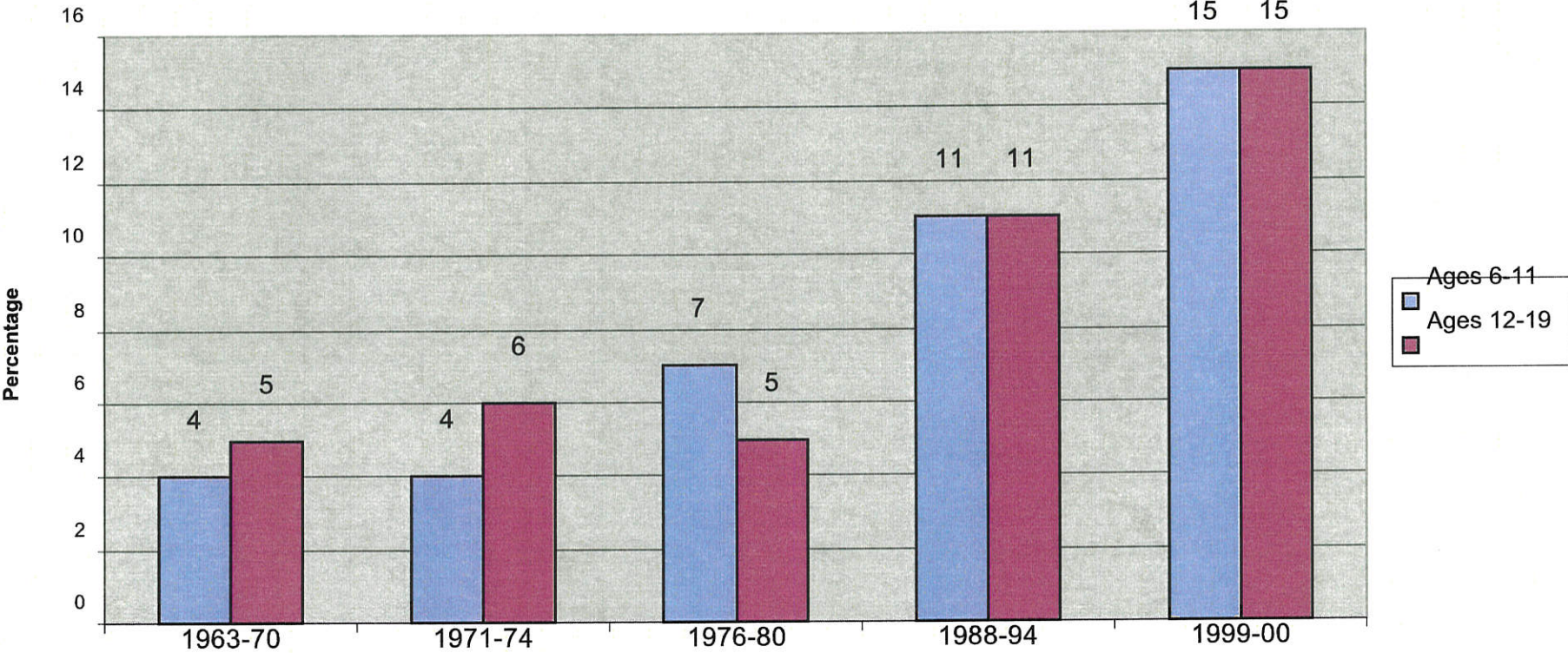
14%: are at risk for overweight
(BMI 85-95th percentile)

15%: overweight (BMI \geq 95th percentile)

NHANES (1999-2000)

Prevalence of Overweight in Children and Adolescents

4-6



Source: CDC/ NCHS, NHES & NHANES

Shawnee County

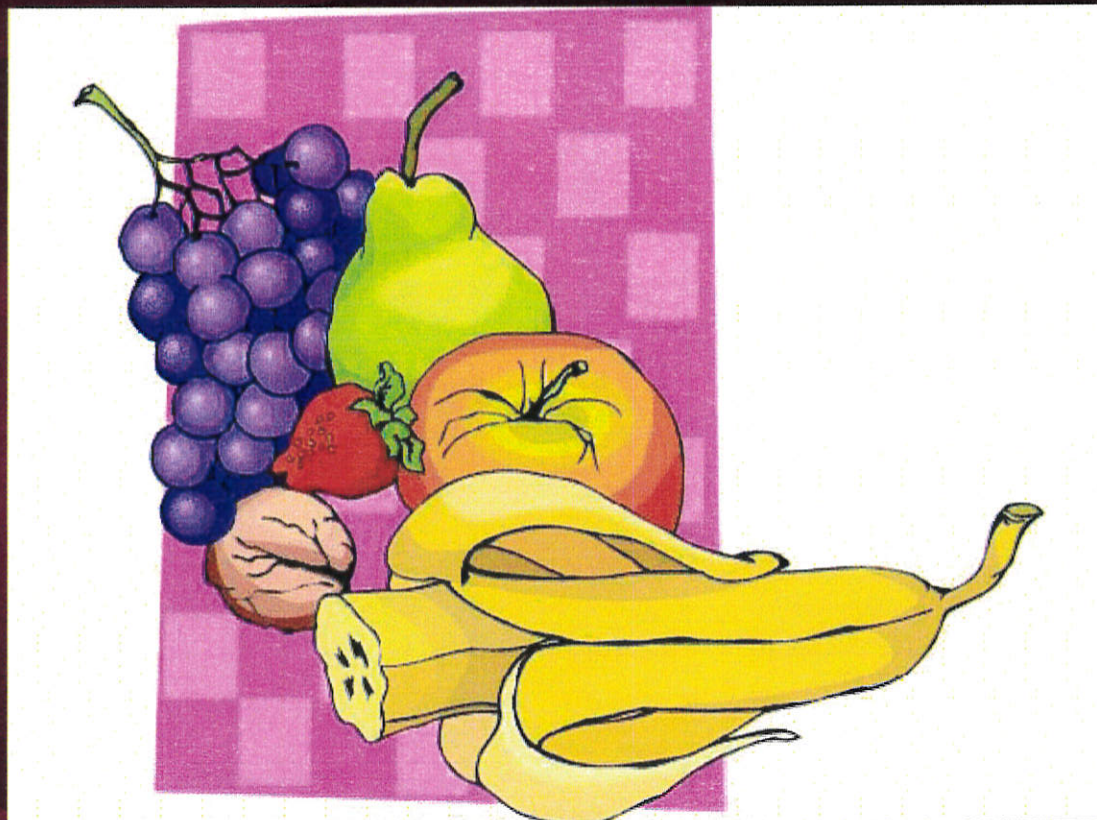
Childhood Obesity Task Force (2002)

" 1 st and 3 rd " Graders	" % At Risk Overweight	" % Overweight	" Total % " (29% U.S.)
" Quinton Ht	" 39	" 21	" 60
" Shaner	" 20	" 31	" 51
" Highland Pk Central	" 23	" 28	" 51
" Quincy	" 26	" 24	" 50
" Shawnee County	" 22%	" 19%	" 41%

Why is it happening?



Trends in Dietary Intake



Nutrition Trends

- **Food industry creates 3800 cal per person / day**
- **The average child needs approximately 50% of that amount**
-
- **Children are consuming more calories than they expend = energy imbalance**

**20% of children are overweight
because they DRINK too many
calories (Cochran, 2004)**



Got empty calories?

	" Soft Drinks " " (per person per year)	Milk " (per person per year)
" 1970	" 24 gal	" 31 gal
" 1997	" 53 gal	" 24 gal

What Can We Do?



Role of Prevention

- Goal: prevent obesity
- Target: youth who are not yet overweight

Targets for Change

- " Children
- " Families
- " **Schools**
- " Communities

**How can schools become
places that model healthy
eating ?**

Improve the school nutrition environment!

1. Improving the school nutrition environment has been shown to impact school success.
2. Schools can make as much money selling healthy vending alternatives.
3. Schools should give clear messages about the importance of good food choices

(Hayes, 2004)

Communities of Solution

Soft drinks and candy removed from schools
in:

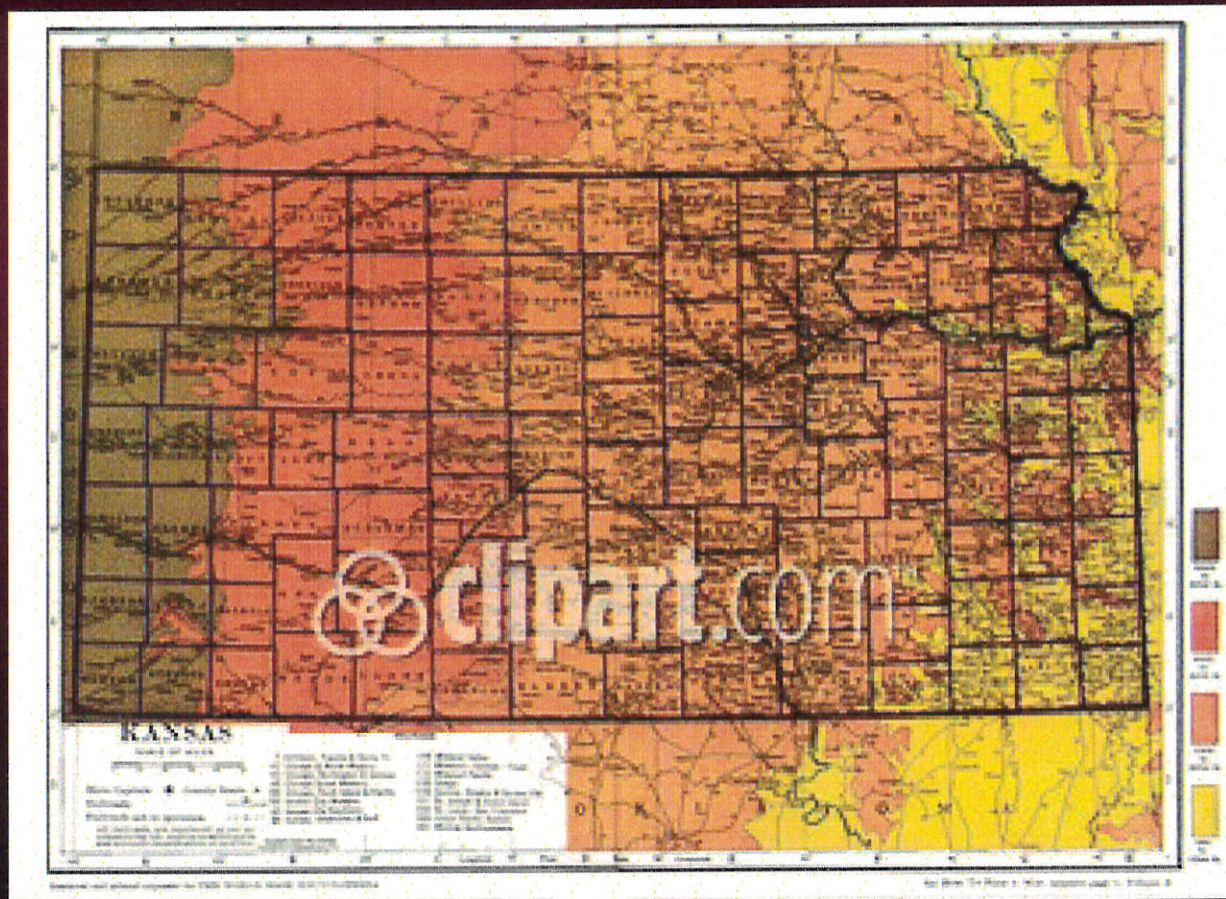
Whitefish, Montana

Oceanside, California

Result: income = or > than before

Improved student behavior and attentiveness
after lunch

Kansas needs HB 2137!



clipart.com

Goal: help youth achieve and maintain healthy weights

Schools are essential for supporting good nutrition.

HB 2137 is a first step in helping schools and youth to achieve this goal.

STATEMENT OF THE KANSAS DAIRY ASSOCIATION
TO THE HOUSE HEALTH AND HUMAN SERVICES COMMITTEE

REPRESENTATIVE JIM MORRISON, CHAIR

REGARDING H.B. 2137

FEBRUARY 2, 2005

Mr. Chairman and Members of the Committee, I am **Chris Wilson**, Executive Director of the Kansas Dairy Association (KDA). KDA members include 99.9% of all Kansas dairies. We commend the Committee for considering H.B. 2137, to provide nutritious choices in vending machines in Kansas schools.

Research has shown how important making healthy choices is for our youth and that the habits formed at an early age will affect their lives and health throughout their lives. Kansas Dairy Association and Kansas Dairy Commission conducted a pilot test study in Kansas schools during the 2003-2004 school year, in conjunction with Midwest Dairy Association. This was the first study nationwide looking at how dairy vending machines can be successful in schools with smaller student populations (under 400). We would be happy to provide the Committee with the results of that study. The study included 9 machines in a variety of student situations. All but one school opted to retain their machines for this school year, and that remaining machine is the one we placed in the Capitol. The machines we used will vend a variety of products, including snacks, water and juices as well as a variety of dairy products.

Through the study, we have developed a fair amount of expertise in working with dairy vending machines, and we are currently working with several additional schools which are wanting to acquire machines. Additionally, there are several other schools which have already purchased dairy vending machines on their own initiative.

We would be happy to work with the Committee and all those concerned to develop the most workable options to achieve the goal of providing health food choices, including dairy, in vending machines for Kansas school children.

Thank you for this opportunity, and I would be glad to respond to questions at the appropriate time.

Attachment 5
HHS 2-2-05



Kansas Public Health Association, Inc.

Affiliated with the American Public Health Association

215 S.E. 8th Avenue

Topeka, Kansas 66603-3906

Phone: 785-233-3103 fax: 785-233-3439

E-mail: director@kpha.us

Web Site: <http://www.kpha.us>

**To: The Honorable Representative Jim Morrison,
Chair, House Health and Human Services Committee**
Re: Testimony in support of HB2137

Thank you, Mr. Chairman, for the opportunity to testify in support of HB 2137. I am Elaine Schwartz, Executive Director of the Kansas Public Health Association. KPHA is the professional home to 500 members committed to and working for a healthier Kansas. We are in support of HB 2137. Our reasons are primarily twofold. The first relates to obesity concerns in school age children and the second relates to oral health.

Due to the nature of childhood obesity being a significant health problem in our country today this requirement should help children learn to eat more healthy, and thus be more healthier through their childhood and into adulthood.

At a meeting one of our members was at last week there was a research study presentation given regarding childhood obesity. The researchers stated that if something is not done to correct this problem soon, children of today will be the first generation in MANY generations, to live shorter life spans than their parents.

This research study, in its second year, is being conducted in the Kansas City metro area in a School Age Program (before and after school care) by the University of Kansas and the YMCA with National Institutes for Health funding. They offer healthy alternative snacks to the children and increase their activity level, hoping to show a decreased Body Mass Indicator, (BMI), and less health risks to children who ate healthier and were more physically active. Weight loss was not a goal, but may be a significant outcome. 10 - 15 % of these adolescents had a decreased BMI <95%. 60 % had one or more CVD (coronary vascular disease) risk factor, 20% had two or more risk factors and these overweight adolescents were 20% more likely to become obese adults.

As for Oral Health, research (below) clearly demonstrates frequent ingestion of food and beverages that contain sugar are a major risk factor for the frequency and severity of dental caries (tooth decay).

Oral bacteria utilize sugars to create an acidic environment in the mouth and, over time, this repeated acid formation leads to dental caries. If there is an increase in sugar consumption, then the risk of dental caries also increases.

With both obesity and oral health risks, the cost of health care increases. Passing HB2137 favorably would help reduce those costs. More importantly, it is of great public health interest for our children and future generations, to help reinforce healthier lifestyles and choices for longer and stronger lives.

Again, thanks for the opportunity to testify in support of HB2137.

1. Joint Report of the American Dental Association Council on Access, Prevention and Interprofessional Relations and Council on Scientific Affairs to the House of Delegates: Response to Resolution 73H-2000.

2. Shenkin et al, Soft Drink Consumption and Caries Risk in Children and Adolescents, General Dentistry January/February 2003).

Attachment 6
HHS 2-2-05



To: House Health and Human Services Committee

From: Jerry Slaughter
Executive Director

Subject: HB 2137; concerning healthy choices in school vending machines

Date: February 2, 2005

The Kansas Medical Society appreciates the opportunity to appear today in support of HB 2137, which requires school districts to offer food products in their vending machines that are healthy alternatives.

It is widely documented that the prevalence of obesity and overweight, particularly among children, has dramatically increased in our country. Obesity is associated with significant health problems in children (cardiovascular problems, diabetes, depression and low self-esteem, to name but a few), and is an important early risk factor for eventual adult obesity and associated health problems.

The causes of adolescent overweight and obesity are many, but certainly diet is a major factor. The excessive consumption of energy-dense, nutrient-poor food products, which are often the staple of vending machines, is undoubtedly a contributing factor. To the extent that we can encourage healthier eating habits among children by making nutritious snacks, such as vegetables and fruits, low-fat dairy foods, and whole grains, available, we should do so. Addressing the problem of childhood obesity and overweight will take a comprehensive, sustained effort over many years. However, efforts such as that contained in this legislation are steps in the right direction. We urge your support.

Attachment 7
HHS 2-2-05

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House Health and Human Services Committee

Testimony Re: HB 2137

Presented by Ronald R. Hein

on behalf of

Kansas Beverage Association

February 2, 2005

Mister Chairman, Members of the Committee:

My name is Ron Hein, and I am legislative counsel for the Kansas Beverage Association (KBA), which is the a state trade association for beverage bottling companies operating in Kansas. Prior to last November, we were named the Kansas Soft Drink Association, but after several generations, we have changed our name to more truly reflect our members and the products we make, which include carbonated diet and regular soft drinks, bottled waters, isotonic drinks, juice, juice drinks, sports drinks, dairy-based beverages, teas, and other beverages.

The Kansas Beverage Association opposes HB 2137 for a variety of reasons. The bill:

1) takes away local control of the school districts; 2) places a decision with the state that should be a decision of the parents regards eating habits of their own children; 3) attempts to label foods as good foods and bad foods; healthy foods and unhealthy foods, contrary to good nutrition science; 4) will have an adverse financial affect upon schools in general and specifically programs which are designed to fight the obesity problem, such as physical education programs; 5) attempts to throw a very simple, yet incorrect, solution at a very complex problem currently plaguing our society.

We have met with the sponsor of this legislation several times, and we applaud the goal he is trying to achieve which is to reduce obesity in our society and specifically in our school children. However, we respectfully submit that not only is this not a solution to the goal he is attempting to achieve, but that there will be unintended consequences from this legislation that will exacerbate the obesity situation. When a focus is put on simple solutions, such as this, for a complex problem, sufficient attention is not paid to the real solutions to the childhood obesity problem.

You will be hearing from others on the issue of local control. You will be hearing from another conferee who will explain from the nutritional standpoint why this legislation is not the appropriate way to solve the problem. However, I do want to provide information of which you may not be aware regarding the current federal law governing vending machines and specifically soft drinks in schools.

*Attachment 8
HHS 2-2-05*

The sale of carbonated soft drinks in schools is regulated by the U.S. Department of Agriculture as part of the School Lunch Program and the School Breakfast Program. Under the regulations (7 CFR Sec.210.11 and Appendix B to Sec.210), carbonated soft drinks are defined as foods of minimal nutritional value (FMNV) and may not be sold in any school in the food service areas (cafeteria) during the lunch and breakfast period. As a matter of bottler policy, there are generally no soft drink vending machines in elementary schools in Kansas

HB 2137 would ban carbonated soft drinks in elementary and middle schools in Kansas, even if those soft drinks are diet soft drinks. Since we do not place vending machines in elementary schools, I will address only the issues as they relate to middle schools and high schools. This bill also provides that in high schools, 50% of the product in vending machines must NOT be carbonated soft drinks, including diet carbonated soft drinks. Therefore, although the goal of this legislation is to fight obesity, it would be a violation of HB 2137 to have vending machines which are totally full of diet soft drinks, even though the products contain no calories.

The problem of childhood obesity is a complicated one. This legislation is not the solution. However, our industry has been among the front runners in those who are attempting to address the issue. We have had a tremendous growth of bottled waters, diet products, and other products which are currently addressing the problems that exist. Consumption of sugared, carbonated soft drinks is down and bottled waters, diet beverages and juices and sports drinks are up.

Studies indicate the average high school age student consumes approximately 1.2 twelve ounce non-diet soft drinks per day, but only one such product is sold in school per week. School sales represent only 9% of school kids' purchases, so this legislation will not have a significant impact.

Although I do not want to get into the details, the logistics of the administration and the various vending providers complying with the 50% rule in high schools presents many logistical problems. When is the 50% rule looked at? Who is responsible for monitoring and accounting for the volume of individual products in machines? Is the 50% rule applicable per machine or for all the products accessible to the students? If the percentage shifts because of usage of one type of product versus another, who is responsible for emptying or adding products to the machines so that they meet the statutory threshold?

If the legislature is truly desirous of solving the obesity problem while still trying to preserve personal responsibility, which we believe that they are, then we would suggest that the legislature create an interim study committee, or some other study committee, to look at the overall problem of obesity. Such a study should include encouragement of

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physical activity of children and of society in general as a part of that solution. The study should probably at least consider restoring physical education in our school system.

As you will hear in other testimony, the solution to the obesity problem is not a matter of simply restricting choices nor the government becoming the food police. It is a matter of educating children in our society to have a healthy overall diet and a regular regimen of physical activity.

There is room for all foods in moderation in a healthy diet. Restricting any single food or type of food simply drives up the desire for such a restricted food. Restricting ANY foods is not the solution to the obesity problem facing our country.

I have provided you with a copy of the American Beverage Association's "Soft Drinks and Nutrition Facts" booklet. I have also attached to my testimony a document by Dr. Guy Johnson entitled "Beverages in Schools Programs—A Nutritional Threat or a Teaching Opportunity" and a publication by Liz Marr "Soft Drinks, Childhood Overweight, and the Role of Nutrition Educators: Let's Base Our Solutions on Reality and Sound Science". I encourage you to read these documents when you have time and I think you will find that they clear up many of the myths that some people believe about nutrition and possible solutions to the obesity problem. They also clearly demonstrate that some of the quick, easy, and simple solutions to obesity, and childhood obesity, in our society, are not justified by the facts and the evidence, and that comprehensive solution is the way for policy makers to go.

I respectfully request that you not pass HB 2137, and that if any action is to be taken, that the legislature develop a full study of the obesity problem.

Thank you very much for permitting me to testify, and I will be happy to yield to questions.

Beverages in Schools Programs

The availability of soft drinks and other “competitive” foods in school-based vending machines has become a contentious issue across the United States. The advocates of such initiatives contend that resource-strapped school systems are placing fiscal considerations above the health of their students, and that decisive policy change is necessary.

Obesity and other public health problems are extremely complex, and there is little evidence to suggest that punitive measures such as invoking a nutritional litmus test for vending machine foods would make a difference. A review of the latest scientific information regarding soft drinks and other competitive foods reveal some surprises, and suggests that using the school environment to teach students the principles of sound nutrition and the importance of physical activity would be a more constructive approach.

Kids are drinking fewer soft drinks than many people believe.

Data from the most recent U.S. Department of Agriculture’s Continuing Survey of Food Intake by Individuals (CSFII)¹ show that mean consumption of non-diet carbonated beverages among 12 to 16 year-olds both in and outside of school is only 1.2 12-ounce servings per day. Nearly 25% of the participants in this study did not have a soft drink on the day of the survey and 50%

A Nutritional Threat or a Teaching Opportunity?

had less than one serving. Only the top 5% of the population consumed three or more soft drinks per day. Too many soft drinks (or any other food) can contribute to a poor diet, but the data show that current intake of soft drinks is not excessive for most kids.

Obesity is caused by too many calories and not enough physical activity — not by snacks, soft drinks or any single food.

The key to maintaining a healthy weight is to balance calorie intake with physical activity. Too many calories, whether they are from chips and soda or 100% juice or other foods and beverages, will lead to obesity. Vending machines provide a wide range of beverage selections including milk, juice, and water as well as diet, non-diet and caffeine-free carbonated beverages. The American Dietetic Association² states, “It is the position of the American Dietetic Association that all foods can fit into a healthful eating style. The ADA strives to communicate healthful eating messages to the public that emphasize the total diet, or overall pattern of food

eaten, rather than any one food or meal. If consumed in moderation with appropriate portion size and combined with regular physical activity, all food can fit into a healthful diet.” The variety of beverages available in vending machines provides an opportunity to show kids the benefits of making appropriate choices based on balance, variety and moderation.

Foods from vending machines contribute only a small fraction of total calorie intake.

Data from the CSFII survey show that 55% of the sodas kids consumed were purchased in retail stores, 25% from fast food and other restaurants, while only nine percent were obtained from school cafeterias or vending machines³. Given that average consumption of sugar-sweetened soft drinks is only about one serving per day (approximately 120 calories) and the vast majority is consumed outside of school, eliminating the school vending choice is unlikely to have a significant impact on the incidence of obesity – especially if other calorie-containing beverages continue to be available outside of school.

Restricting soft drinks or other foods from vending machines may be counterproductive.

An experiment conducted at Penn State University⁴ found that pre-schoolers who were given limited access to one

flavor of a fruit-filled cookie were three times more likely to expressed interest in it (i.e. attempt to obtain, ask for, etc.) compared to a second flavor that remained unrestricted. The children had been ambivalent to both flavors of the cookie prior to the restriction. There are no published studies on the effect of restricting foods in school-based vending machines, but the Penn State study suggests that students may be more likely to purchase forbidden foods when they leave the "protected" environment of the school.

A University of Michigan study showed that soft drink consumption was not related to tooth decay in people under age 25.

Sugars, starch or other fermentable carbohydrates are necessary for tooth decay to occur. These carbohydrates can come from any food or beverage. However, other factors that influence tooth decay such as stickiness of the food, frequency of consumption, oral hygiene, fluoride intake and access to professional care are equally as important. A recent study using data from the National Health and Nutrition Examination Survey (NHANES)⁵ showed that intake of carbonated beverages was not associated with the incidence of decayed, missing or filled tooth surfaces among U.S. consumers less than 25 years of age. This finding suggests that education is a key factor in maintaining oral health and is likely to be of greater importance than the mix of foods available in school-based vending machines.

Physical activity is just as important as energy intake for managing body weight.

As noted previously, obesity is the result of too many calories and not enough physical activity. Unfortunately, the level of physical activity among U.S. children is declining. A recent study⁶ that tracked

the frequency of exercise-requiring leisure activities in a group of 9-10 year old black and white girls found that participation in such activities decreased by 100 and 64%, respectively, by the time the girls were 16-17 years old. Furthermore, television watching is strongly related to the incidence of obesity. An analysis of the NHANES database⁷ showed that children who watched five or more hours of television per day were more than twice as likely to be obese than children who watched one hour per day or less.

Primary and secondary physical education programs have been curtailed during the past decade so that school systems can devote more resources to academic programs. While there are no objective data that link this trend with increasing rates of childhood obesity, the public health community is calling for innovative programs that enable all Americans to get more exercise, and schools have a unique opportunity to participate in such an effort.

Conclusions

The restriction of carbonated beverages and other foods in school-based vending machines has become a focal point for addressing childhood obesity, tooth decay and other nutrition-related issues. However, many factors contribute to these conditions, and there is no objective evidence that such measures will improve public health. Foods from vending machines constitute only a small fraction of the total diet, and restricting them could lead to increased consumption outside of the relatively limited school environment. On the

other hand, a cooperative approach in which educators and other stakeholders use the school environment to show kids the benefits of physical activity and how to incorporate favorite foods into a balanced, energy-appropriate diet, is likely to be far more effective.

Guy Johnson, a consultant with more than 25 years experience in applied nutrition science, is an authority on the role of diet and exercise on health and nutrition.

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⁴ Fisher, J.O. and Birch, L.L. Restricting access to palatable foods affects children's behavioral response, food selection, and intake. Am. J. Clin. Nutr. 69:1264 (1999).

⁵ Heller, K.E. et. al. Sugared soda consumption and dental caries in the United States. J. Dent. Res. 80:1949 (2001).

⁶ Kimm, S.Y.K. et. al. Decline in physical activity in black girls and white girls during adolescence. New Eng. J. Med. 347:709 (2002).

⁷ Crespo, C.J. et. al. Television watching, energy intake and obesity in US children. Arch. Pediatr. Adolesc. Med. 155:360 (2001).

- According to Government data, consumption of non-diet soft drinks among U.S. adolescents is only 1.2 twelve-ounce servings per day
- Only nine percent of soft drinks consumed by children are purchased from school-based vending machines
- Schools provide an excellent setting to teach kids how to incorporate their favorite foods and beverages into a healthy diet and to encourage physical activity
- Restricting access to certain foods and beverages in schools could create greater demand for them outside of the "protected" environment

Soft Drinks, Childhood Overweight, and the Role of Nutrition Educators: Let's Base Our Solutions on Reality and Sound Science

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ABSTRACT

The percentage of overweight children in the United States and other countries has now reached epidemic proportions. Both physical activity and food intake contribute to the energy equation, but research increasingly points to physical inactivity as the primary culprit in weight gain. Singling out and restricting specific foods and beverages are unlikely to be effective in reducing the prevalence of overweight children. Nutrition educators need to emphasize overall lifestyle, including physical activity, as well as caloric intake, in childhood overweight intervention efforts. Long-lasting solutions to the obesity epidemic must be comprehensive and must include all of the key stakeholders: children, parents, schools, health professionals, businesses, and community leaders and organizations. Nutrition educators can play a key role in developing wide-ranging and diverse coalitions, including food and beverage companies, designed to affect social change aimed at achieving healthy weight for children.

KEY WORDS: obesity, child nutrition, nutrition education, soft drinks, school nutrition services

(*J Nutr Educ Behav.* 2004;36:258-265.)

INTRODUCTION

The growing prevalence of overweight children in the United States and other countries has risen to the surface as one of the top public health issues in the 21st century. Federal government data from 1999 to 2000 show that 15.5% of 12- to 19-year-old adolescents are overweight and 15.3% of children ages 6 to 11 years are overweight, up from 10.5% and 11.3%, respectively, when compared

with figures from 1988 to 1994.¹ In the same data set, the percentage of overweight children is higher among those with lower income and less education and among certain ethnic populations, including African Americans, Hispanics, and Native Americans.

In recent years, soft drinks have been targeted as a culprit in the rising rates of obesity, despite a lack of solid cause-and-effect evidence. The setting that has received the most scrutiny is schools, although soft drinks are consumed by children in smaller quantities there than in other settings, such as home and restaurants.² The comprehensive joint position of the American Dietetic Association (ADA), Society for Nutrition Education (SNE), and American School Food Service Association (ASFSA) regarding school nutrition services addresses school meals and other foods and beverages available in the school setting, nutrition education, and physical activity.³ The position advocates state-level action regarding competitive foods (not specifically soft drinks) yet does not clarify why the action should be at the state versus local or national level. An SNE member resolution regarding soft drinks in schools resulted in the organization submitting a letter to US Department of Agriculture (USDA) Secretary Anne Veneman in November 2003 calling for a stronger policy.^{4,5} In early 2004, the American Academy of Pediatrics (AAP) issued a policy statement on soft drinks in schools, calling for district-wide policies.⁶ Many of the AAP policy recommendations are already occurring in many school districts across the country owing to cooperative efforts. AAP's focus on local, district-level guidance contrasts to the ADA/SNE/ASFSA joint paper calling for state-level action.

These organizational positions and resolutions downplay the fact that federal regulations already prohibit the operation of soft drink machines in school cafeterias and food-service areas during breakfast and lunch. The soft drink industry supports these federal regulations through education and distribution of vending machine timers. Beverage companies also advocate for the prerogative of local educators, in consultation with parents and students, to determine the placement of vending machines, the hours of operation, the variety of beverages to be sold, and the allocation of proceeds from the machines.⁷

Funding was provided by The Coca-Cola Company, Atlanta, Ga.
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Reducing the prevalence of overweight children requires reality-based action that is collective and cooperative versus adversarial. Nutrition professionals should advocate for both nutrition and physical activity, not just nutrition. Further, if nutrition educators are interested in working with schools to promote children's nutrition and fitness, they need to understand what is currently happening in schools and have a clear understanding of the science.

This article explores (1) the science regarding trends in childhood obesity and the role of soft drinks in that trend with an emphasis on empirical evidence seldom presented by soft drink critics and (2) beverage partnership practices currently occurring in the school setting.

DISCUSSION

Calories In or Calories Out?

In the simplest terms, obesity results from an imbalance of caloric intake and expenditure. Based on recent obesity trends, Hill et al postulate that caloric imbalance in the US adult population is relatively small: approximately 100 calories per day.⁸ The authors advise a 2-pronged approach: "increasing lifestyle physical activity" and "reducing portion size" of foods consumed rather than changing the types of foods eaten. Further, they indicate that closing an energy gap of similar magnitude among children could be done without major restructuring of the school environment.

When examining the etiology of pediatric overweight, research increasingly points to physical inactivity as the predominant issue, not caloric intake.⁹⁻¹² In fact, analysis of federal data spanning 20 years found that among adolescents ages 12 to 17 years, physical activity decreased 13%, whereas caloric intake increased by only 1%.¹⁰ The USDA's Continuing Survey of Food Intakes by Individuals (CSFII), 1994-1996 and 1998, indicates that energy intake has remained stable among children.¹³ In a randomized controlled trial of 878 adolescents ages 11 to 15 years, of 7 dietary and physical activity variables that were measured, insufficient vigorous physical activity was the only risk factor for higher body mass index (BMI).⁹ Weight status among high school students is correlated with selected physical activity behaviors, especially among adolescent boys.¹⁴

Strauss et al found that children spend an average of only 12.6 minutes per day in vigorous exercise.¹⁵ Of teenagers in grades 9 to 12, one-third do not participate in sufficient vigorous or moderate physical activity on a weekly basis, and 11.5% do not participate in any moderate or vigorous physical activity during any given week.¹⁶

The decline in physical activity among children involves many factors: the decrease or elimination of physical education in schools, the lack of safe play space in many neighborhoods, increasing reliance on the automobile, and the growth of media options, leading to increased "screen time." This last factor is especially important. In 2000, children spent an average of 6.37 hours using media (television,

videos, video games, and computers) each day, a total of 44.57 hours per week—a 6% increase over the previous year.¹⁷ Contrast 6.37 hours (382 minutes) of screen time to 12.6 minutes of vigorous exercise; the difference is 30-fold. The link between screen time and overweight among children is well established, having been identified almost 20 years ago. Dietz and Gortmaker found that the incidence of obesity increased 2% for every additional hour of television watched.¹⁸ Children with televisions in their bedrooms are at 31% greater risk of overweight or obesity.¹⁹ A recent Canadian study reported that "more than 60% of overweight incidence can be linked to excess TV viewing time."²⁰ As of 2000, nearly half (48%) of US families own all 4 media hardware (television, videocassette recorder, video game equipment, and computers), up from 1 in 3 in 1997.¹⁷ In this context, therefore, the conclusions expressed in the *Mayo Clinic Proceedings* make sense: "We believe that the evidence suggests that declines in physical activity are more likely than increases in energy intake as the explanation for the recent increase in obesity prevalence."¹¹

Soft Drinks and Children's Health

Recent efforts to restrict carbonated soft drinks (CSDs) in schools may seem like a reasonable strategy to reduce the number of overweight children. However, when one considers the low consumption levels of such beverages in schools^{2,21} and marketplace changes that are already occurring, these approaches may be unlikely to have any positive effect. More importantly, they could detract from the more comprehensive efforts that are more likely to have a meaningful impact.

Myths abound related to beverage companies' business practices with schools and soft drink consumption and health, including their influences on childhood overweight. When such misperceptions draw on limited public health resources, nutrition educators have a responsibility to present factual, science-based information to redirect community efforts toward meaningful change. Some of the more common misperceptions about soft drinks, as they relate to health and school business practices, are as follows.

Myth 1. Soft drinks cause obesity. Several studies analyzing national food consumption data have found no association between soft drink consumption and excess weight in children. Researchers analyzed CSFII 1994-96 and 1998 and found that among children ages 6 to 19 years, BMI is not related to consumption of regular soft drinks but is weakly related to consumption of diet carbonated beverages.²² National Family Opinion Research/Share of Intake Panel (NFO/SIP) data analysis shows that during the years 1987 to 1998, the amount of soft drinks consumed by age and gender groups did not change, except for a decrease in consumption among children ages 1 to 5 years, whereas milk consumption was stable for all age groups.²³ Interestingly, although the prevalence of childhood overweight is

8-7

higher among certain minority populations, those same groups consume lower amounts of CSDs than do their white counterparts.^{22,24}

A few studies are widely cited as being supportive of a link between CSDs and childhood overweight. Yet the studies have limitations worth noting. In one short-term study, Mrdjenovic and Levitsky showed an association between consumption of sweetened drinks and higher daily energy intake and greater weight gain.²⁵ However, the small sample size (N = 30) and the fact that the authors did not account for key confounding variables, such as exercise or screen time, limit the findings. Another study, cited by White et al,²⁶ examined soft drinks in relation to body weight among 11- to 12-year-old children using a prospective, observational analysis, which precludes establishing cause and effect; the authors themselves caution against drawing cause-and-effect conclusions.²⁷ In this investigation, researchers measured a wide range of sugar-sweetened drinks, including sweetened fruit drinks and iced tea, not just carbonated beverages, relying on self-reported data from adolescents on dietary, physical activity, and menarcheal status, which are highly prone to error. Only 37 new cases of obesity occurred among the total sample of 548 children. Although the article focuses on the 37 subjects who became obese during the 6-month follow-up period, 25 other subjects were obese at baseline but not at the end of the study; beverage consumption and other data were not provided for the latter group. Beside beverage intake, no other dietary factors were considered; thus, the researchers ignored nutrients that previously have been associated with weight gain among children. White et al also cite Krebs-Smith's study examining sources of added sugar in the American diet²⁸ to support their argument that drink consumption has been found to be a contributing factor in the rising incidences of overweight and obesity among school-aged children.²⁶ However, Krebs-Smith cautions, "It is very difficult to demonstrate a link between added sugar intake and obesity using self-reported dietary intake data."²⁸

The contribution of sugar to weight gain has received close scrutiny as obesity has risen as a public health concern. However, the National Academy of Sciences' *Dietary Reference Intakes on Macronutrients* concludes,

There is no clear and consistent association between increased intake of added sugars and BMI. Therefore the data cannot be used to set an Upper Limit (UL) for either added or total sugars. . . Although a UL is not set for sugars, a maximal intake of 25% or less of energy from added sugars is suggested based on the decreased intake of some micronutrients of American subpopulations exceeding this level.²⁹

Researchers have postulated that high-fructose corn syrup, a sweetener used in soft drinks and other foods and beverages, could somehow be driving increasing obesity rates. Unfortunately, the name "high-fructose corn syrup" implies that it is composed primarily of fructose, which is not so. High-fructose corn syrup has several formulations, and

the most widely used forms in the United States are 42% or 55% fructose, with the remainder being mostly glucose. Table sugar is a 50-50 mixture of fructose and glucose.

Another common argument, noted by White et al,²⁶ is that liquids somehow fail to trigger physiological satiety mechanisms, so energy compensation for liquid calories is less complete or less precise than solid calories. However, a recent within-subjects study showed that liquid cola and solid cookies had exactly the same effects on hunger, appetite, and the amount of food consumed at lunch.³⁰ Food consumption was lower when the snack was given just before lunch versus further away from mealtime. The research shows that timing is more important than the physical form of calories consumed.

Myth 2. Soft drinks displace more nutritious beverages. In an analysis of CSFII data of 2- to 20-year-old subjects, regular and diet CSDs and other nondairy beverages had a very small, statistically significant, positive association with calcium consumption.³¹ The authors concluded that CSD consumption among adolescent girls is modest and does not appear to be linked to decreased calcium intake.

Just as the volume of food intake increases with age, total beverage intake increases with age. From third to eighth grade, average daily beverage intake increases from 29 to 41 oz, whereas the amount of milk consumed remains stable.³² In fact, milk is the most consumed beverage, accounting for over half of beverage consumption, even for eighth-graders. Because total beverage consumption increases with age, milk represents a decreasing percentage of total fluid intake over time, but it is important to note that the actual volume of milk does not decline.

Fitzpatrick and Heaney offer the following advice in their editorial addressing the popularity of disparaging foods and beverages that taste good, in particular soft drinks:

The good news is that you can have soda and good bones too, so long as you drink your milk. Not only is the seeming effect of low-nutrient beverages on the calcium economy relatively small, but, if as seems likely, the effect is mediated through milk displacement, the solution lies not in 'viewing with alarm' consumption of things that taste good, but with encouraging and promoting higher dairy intake.³³

Myth 3. Eliminating soft drinks from schools will make a significant contribution to reducing childhood overweight. Considering the small amounts of CSDs consumed in school, restricting such beverages at schools is unlikely to be effective in reducing childhood overweight; more long-term research is needed in this area. A study comparing Nationwide Food Consumption Survey 1977/78 data with CSFII 1994-96 and 1998 data indicates that of total soft drink consumption among youth, soft drinks from vending machines (in all locations, not just schools) went from 2.8% to 4.1% (change statistically significant at $P < .05$ for girls only), and the percentage of soft drinks consumed in

school cafeterias remained stable at 3% (no significant change).² Although the study shows increased percentages of youth consuming soft drinks over time, the greatest percentage point increases were seen in the home and restaurant and fast-food settings versus the school setting. Yet White et al refer to an “alarming 200%” increase for the school cafeteria and vending machine sources.²⁶ Considering that the 200% increase is from 1% to 3% of children, such emphasis entirely misses the larger issue of how much influence parents exert over children’s food and beverage choices.

NFO/SIP data for 2716 12- to 18-year-old adolescents show that 20% of students consume beverages (any beverage) from secondary school vending machines during the school week. Among students who consume beverages from school vending machines, the average weekly intake of regular CSDs was only 12.5 oz, or slightly more than one 12 oz can.²¹

CSDs are not available to any great extent in the elementary and preschool settings; thus, any legislative or regulatory attempts for outright bans of CSDs in these settings are not likely to have much impact. The Coca-Cola Company’s *Model Guidelines for School Beverage Partnerships*

(Table) spell out very specifically elementary schools’ practices already commonly in place with their school partnerships: “CSDs should only be available in teachers’ lounges and after school hours for community use,” and “CSDs should not be available to students during the school day.”³⁴

Myth 4. Soft drinks cause cavities. Like obesity (or any issue involving human health), tooth decay is a complex subject. It is the result of many factors, including the types of foods that are consumed and frequency of eating occasions. Foods that are “sticky” and cling to the teeth are more likely to cause tooth decay. The amount of time that sugar remains in contact with teeth is another important variable. Soft drinks and other sugar-containing liquids pass over the teeth very quickly. Analysis of Third National Health and Nutrition Examination Survey (NHANES III) data shows that among people under age 25 years, soft drink consumption is not associated with increased dental caries, which could be due, in part, to widespread fluoridation.³⁵

A recent study examined dental caries and beverage consumption among 1- to 5-year-old children and found an association between soft drinks and increased caries.³⁶ It is important to note several details of this study. The amount of

Table. Summary of *Model Guidelines for School Beverage Partnerships*^{*†}

Topic Addressed	Elementary Schools	Middle and High Schools
Product availability guidelines	Products for students in elementary schools should include 100% juices, milk-based products, and water. Other products that may be available in addition in elementary schools include juice drinks and rehydrating sports drinks.	Products for middle school and high school cafeterias should include 100% juices, milk-based products, and water. Other products that may be available in addition include juice drinks, teas, and rehydrating sports drinks.
	Carbonated soft drinks should be available only in teachers’ lounges and in vending machines designated for community use after school hours. Carbonated soft drinks should not be available to students during the school day.	Products available in middle schools and high school vending machines may include 100% juices, milk-based products, water, juice drinks, teas, rehydrating sports drinks, and carbonated soft drinks. A full array of juices, water, and other products must be available wherever carbonated soft drinks are sold.
Contracts and financial arrangements	Respect the rights of parents, teachers, and school officials to choose the beverage selections for their schools and vending machines.	
	Be structured to offer schools a steady stream of resources for the length of the partnership, as opposed to relying on an advance payment.	
	Discourage the use of brokers or “third-party” intermediaries because they charge fees to schools/school districts that diminish the revenues that can directly enhance the education of students.	
	Take every measure to ensure that student access to beverages meets federal, state, and local laws and guidelines.	
Machine timers	Timers will be made available to school partners to place time constraints on specific vending machines to meet their local needs.	
Company logo visibility	Beverage company logos and other marketing graphics must not be used in textbooks, in curriculum materials, or on book covers.	
	Venues that may be appropriate for product logos include scoreboards, menu boards, coolers, student publications, and materials to promote educational activities, physical activity, and athletic events.	
Vending graphics	All vending equipment in schools should move toward featuring graphics that show a wide variety of beverage options.	
	As new equipment is placed in schools, signage on vending machines must feature graphics that promote educational activities, physical fitness, and noncarbonated beverage choices.	

Adapted from The Coca-Cola Company.³³

*Recognizing the value that the education community places on local decision making, the *Model Guidelines for School Beverage Partnerships* are strictly voluntary for adoption by schools and school districts; however, it is the intention of The Coca-Cola Company for the guidelines to govern its activities in schools.

†For more information, visit www.corpschoolpartners.org.

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soft drink carbohydrates consumed by the subjects was very small. Although the median amounts of CSDs consumed were statistically different between the caries-free group and those with caries, 28 g (0.82 oz) versus 46 g (1.36 oz), the actual difference in volume was small, 18 g (0.53 oz) of beverage. The amount of carbohydrate in this volume of CSD is minor—about 2 g. Second, the authors did not assess the timing of beverage consumption or whether beverages were consumed alone or with other foods. Third, although the authors did explore exposure to fluoride, they did not account for differences in personal hygiene, such as regular tooth brushing.

The relationship between the acidity of soft drinks and dental health is the focus of an “urban legend” that has circulated over the Internet, unfortunately including some well-known nutrition listservs. Although CSDs have a lower pH than orange juice or pineapple juice, they contain far less titratable acid, which has been shown to be a better indicator of dental erosive potential than pH.³⁷ In fact, citrus juices have been found to be potentially more erosive to tooth enamel than soft drinks.³⁷

Myth 5. Caffeine’s addictiveness may keep people hooked on soft drinks. The previous sentence, practically void of science, is taken straight from the SNE member resolution on soft drinks.⁴ People have come to use the term “addiction” loosely to describe an affinity for something, such as “I’m addicted to chocolate” or “He’s addicted to football.” The term, however, does have scientific and regulatory definitions. The US Food and Drug Administration (FDA) specifically addressed this issue in a 1996 final ruling: “Studies estimate that as many as 92% of all smokers are addicted to the nicotine in cigarettes. There is no evidence that either caffeine or alcohol poses this kind of health problem.”³⁸ The American Psychiatric Association’s most recent diagnostic manual (*Diagnostic and Statistical Manual of Mental Disorders-IV-TR*) does not list caffeine with drugs that cause dependency.³⁹

Caffeine, along with about 600 other substances, was placed on the FDA’s Generally Recognized As Safe (GRAS) list in 1958.⁴⁰ In 1978, in accordance with federal government regulations regarding periodic review of GRAS substances, the Select Committee on GRAS Substances reviewed the data on caffeine.⁴⁰ In 1987, the Institute of Food Technologists’ Expert Panel of Food Safety and Nutrition affirmed that caffeine, including that found in carbonated beverages, does not create adverse effects in adults.⁴⁰

A 2002 National Institute of Mental Health (National Institutes of Health) literature review on the behavioral effects of caffeine in infants and children concluded that although little recent work has been conducted in this area, generally, caffeine is well tolerated by children in usual dietary amounts. Overall, the effects of caffeine in children seem to be modest and typically innocuous.⁴¹

Cola beverages contain about 70% less caffeine than coffee and about 50% less caffeine than tea. Eight ounces

of regular cola contains about 24 mg of caffeine, whereas 8 oz of brewed tea typically provides twice that amount—around 40 mg.⁴² The same amount of coffee typically contains 85 to 100 mg. Thus, even a 12 oz can of cola contains less caffeine than one 8 oz cup of tea or coffee. Nonetheless, for those wishing to limit caffeine intake, a wide range of noncaffeinated soft drinks is available, and noncaffeinated beverages are offered as a choice for schools.

Myth 6. The caffeine and phosphorus in soft drinks damage bone health. The main causes of osteoporosis include insufficient calcium intake, hormonal changes, and a lack of weight-bearing physical activity. Leading researchers in the fields of osteoporosis and bone and dental health concluded in 1994 that phosphorus does not affect calcium absorption or excretion significantly.⁴³ The US National Institutes of Health Consensus Development Conference on osteoporosis reaffirmed in 2000 that dietary phosphorus, as well as caffeine, is not an important factor in osteoporosis for individuals consuming a balanced diet.⁴⁴ Specifically, the phosphorus and caffeine found in carbonated beverages do not affect calcium absorption or retention.⁴⁵ In fact, cola actually contains very little phosphorus—only about 2% of total dietary phosphorus.⁴⁶ The vast majority—98%—of dietary phosphorus comes from high-protein foods such as meats, cheeses, nuts, and grains. Further, among female teenagers, milk drinkers consume over 4 times more phosphorus than do non-milk drinkers, regardless of soda consumption.⁴⁷

Myth 7. Soft drink companies market to young children. For nearly 50 years, The Coca-Cola Company has adhered to a policy not to market soft drinks to children under the age of 12 years. Recently, the company expanded that policy to apply to all of its beverages, including juices, sports drinks, and water.

The Coca-Cola Company has issued beverage guidelines for school partnerships that stipulate what, how, and when beverages are accessed in the school setting (see Table).³⁴ The company worked hand in hand with several educator organizations to establish these guidelines, which emphasize adherence to federal, state, and local regulations; school choice; and limitations on commercial branding. Included are separate, specific guidelines for elementary, middle, and high schools. Timers are available to all schools. Additionally, use of logos and commercial materials is restricted from textbooks and classrooms.

Myth 8. “Exclusive” contracts force schools to serve soft drinks. Exclusive contracts do not force the sale of soft drinks; rather, exclusive contracts restrict the sale of certain beverages to those of one supplier. Further, the decision to require exclusivity in a contract rests entirely with schools, not vendors. Schools often decide to work with one vendor, exclusively, owing to ease of management and logistics. The most important point for nutrition educators to understand is that beverage marketers offer a wide variety of beverages

from which to choose, and schools and/or districts (not the beverage marketers) make the choices about which products to offer, when, and where, based on local needs and preferences, in addition to existing regulations.

Working Together to Remove Barriers

Certainly, as with all complicated public health issues, nutrition educators must avoid the temptation to promote simplistic solutions that do not tackle the real problem. Pointing blame at other stakeholders or targeting a single food or beverage conflicts with building effective, community coalitions that can achieve long-standing social change related to healthy weight.

Such adversarial, restrictive efforts are counter to parental attitudes, nutrition education theory, and sound science. Of all of the key stakeholders in children's health, nutrition educators may be most familiar with research showing that restrictive dietary approaches are ineffective for developing healthy relationships with food and maintaining healthy weight. Further, a 2002 study conducted at Michigan State University indicates that most parents believe obesity to be an issue resolved in the home, not through government intervention.⁴⁸

I have observed many local nutrition organizations signing on to previously existing proposed legislative or regulatory frameworks; thus, instead of rising to leadership in the fight against rising obesity by creating constructive solutions, nutrition professionals may end up in a "me too" position. Additionally, community efforts centered on banning certain foods or beverages in the school arena may usurp community capital that could be applied to meaningful action, such as working toward increasing physical activity in schools. Finally, one has to ask, "If nutrition educators have to resort to legislation to ban foods, have they simply failed in their efforts to affect change through education?"

Nutrition professionals have an important role to play, both with the public and with food and beverage companies, to create an environment that can help reduce obesity rates. Effective, long-lasting solutions to the obesity epidemic must be comprehensive and cooperative and must include all of the key stakeholders: children, parents, schools, health professionals, community leaders, and businesses.

IMPLICATIONS FOR RESEARCH AND PRACTICE

1. Nutrition educators should emphasize physical activity in addition to caloric intake in childhood overweight intervention efforts. The widespread inactivity of American youth, coupled with parents' lack of awareness of this trend, points to a need for improving parental education and community resources regarding physical activity.
2. Parents need science-based and actionable educational resources to be able to work effectively with their children around achieving and maintaining healthy

weight through nutrition and fitness. With regard to CSDs,

- a. The lack of solid cause-and-effect evidence connecting CSDs with BMI suggests that individual intervention may be more appropriate than public intervention.
 - b. The limited amount of soft drinks consumed in schools versus other settings in which parents exert more control points to parental education rather than school-based restrictions.
 - c. Banning and restricting certain foods and beverages perpetuates the "good foods/bad foods" paradigm and may lead to unhealthy relationships with foods.
3. Continued research addressing environmental influences related to childhood overweight is needed, particularly long-term studies that examine nutrient intake, food intake, and physical activity. In particular, research is needed to explore the following areas:
 - a. The long-term effectiveness of school-based food and beverage restrictions on children's overall food and nutrient intake (across all settings) and weight status, as well as the impact on school attendance, considering that secondary students may leave campus to purchase foods and beverages no longer available at school.
 - b. The link between school-based and community-based physical education and recreational activity and BMI, with regard to frequency and duration, age, types of activities, and motivational approaches.
 - c. The influences of parents' food and beverage choices on their children.
 - d. Parental influence and motivation with regard to physical activity among children.
 4. Given the amount of emotional debate that surrounds the public health obesity problem, nutrition educators need to seek out diverse sources of information and keep abreast of the most recent scientific research related to obesity.
 5. Decisions that stand the test of time are based on consensus and inclusion, not adversity and exclusion. Nutrition educators need to collaborate with all key stakeholders, including food and beverage companies, to work toward social change aimed at achieving healthy weight.

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Again in 2005, SNE members will elect officers by voting on-line. The procedure was easy and smooth with last year's elections, so we will continue to use this method. Look for more information about voting procedures:

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**House Health and Human Services Committee
Testimony Re: HB 2137
Presented by: Leslie Bonci, MPH, RD, LDN
on behalf of
Kansas Beverage Association
February 2, 2005**

Mister Chairman, Members of the Committee:

My name is Leslie Bonci, and I am here to testify today regarding proposed legislation on restrictions of certain beverages that are sold in schools. I am the Director of Sports Nutrition at the University of Pittsburgh Medical Center and an adjunct professor in the School of Dental Medicine at the University of Pittsburgh. As a registered dietitian, and mother of two sons, I share your concern regarding the health issues facing our nation's children. However, singling out a particular beverage or food, and banning those items is not going to solve the health and obesity crisis in our schools.

In addition, the concept of "forbidden" foods/beverages may result in increased desire and larger portions being consumed than what the children would obtain in school. The concept of nutrition encompasses food (what we eat/drink) as well as the eating habits (why, when, where and how much) we eat and drink. Energy balance is also a critical part of the equation, in terms of intake as well as expenditure.

The Kansas Beverage Association is an ally in the fight against childhood obesity. The industry believes strongly in choice at the local level as well as providing age-appropriate items in the machine. Wellness is an integral concept and the industry is working hard to partner with the schools in terms of beverage offerings and nutrition education and physical activity programming. It takes a state, a school district, a community, and concerned and committed parents and children to reverse the current childhood health trends. Working with rather than against the beverage industry is a prudent step in improving the nutritional and physical well-being of our children.

The ABCs of Beverages in the Schools Programs

The current and future health of our nation's children is a topic of growing interest and concern for parents, schools, communities, the health care system, industry, and government. Finger pointing, targeting specific items, and "restrictive" legislation are supposed to improve the health and well being of our children, by removing certain products from the schools. An effective call to action should not be a one-sided elimination approach, but instead, be composed of informed choice through education on nutrition and fitness.

Attachment 9
HHS 2-2-05

Let's consider the ABC acronym. Achieving a Balance through Choice. Achievement is a word children, parents, educators and school partners understand well, and desire. There is a great deal of emphasis on scholastic aptitude, as there should be, but perhaps fitness aptitude should receive more attention. For all children, school is the setting for academic achievement, and for many children, school must be the setting for physical fitness since home environments may not be conducive to activity. Children and adolescents who are more physically fit will perform better in the classroom (Stanford study). The acronym NEAT (Nutrition, Exercise, Aptitude Test) could become a benchmark for health.

Balance consists of energy intake through foods and beverages as well as energy expenditure through daily activities and exercise. Children need to understand the concept of balance throughout their day, from the school environment to home. Choice needs to be part of the discussion and decision making process. Children and adolescents do not want to be told what to do, but instead need to be educated on how to make appropriate choices in terms of food, eating habits and physical activity. Children have different food and taste preferences, as well as different backgrounds, cultures and customs. Schools can make the choice in terms of which beverages are sold in the vending machines. The beverage industry provides the schools with choices in terms of which products are sold at different age levels. Schools can also make a choice as to how revenue generated through vending machine sales is used in that particular school district.

Points to consider

Today's children have grown up differently. They may come from single-family homes, or homes with two working parents, so that a sit down dinner is non-existent. The new paradigm for physical activity is the television or computer instead of outside play. The dinner table has been replaced by e-meals, or in front of the television dining, or in car eating while en route to another activity. Milk is not always part of every child's meal, juice may or may not be in the home, and not every child likes water. So, when the discussion turns to beverage choices in schools, the options should be as inclusive as possible.

It is possible to have an impact at the point of education, the school. What children are served for breakfast and lunch, the time allotted for meals, and physical education offerings can be standardized for the maximum benefit of the children. This is not a message of elimination, but of opportunity. The beverage industry will continue to work with the schools to offer age-appropriate beverages at certain non-competing hours of the day. Funds generated from sales can and should be targeted to physical activity initiatives to create or expand upon existing programs to provide more fitness options for children and adolescents.

The Nutrition perspective

There are several points that need to be taken into consideration. Nutrition is an equation of food choices and eating habits. Energy balance is comprised of energy intake and energy expenditure. The energy intake side of the equation is composed of total calories derived from carbohydrate, protein and fat consumed in food and beverages, food preferences, and proper hydration. Energy expenditure is a combination of physical activity as well as the energy demands of growth and development.

Much of the discussion focuses on "bad" or "competing foods". It is important to clarify that the beverage industry has never intended for their products to be a meal replacement. Many children,

adolescents, and adults enjoy something to drink with meals, ranging from a fluid alone, such as water, to a multi-nutrient beverage such as milk. Children need to be optimally hydrated for mental performance as well as for physiological functions. If the child does not like the beverage offerings, he/she won't drink, and that may be detrimental to mental and physical functioning. It is important to realize that with the exception of milk, beverages such as sports drinks, carbonated soft drinks and juices, are carbohydrate-based. This points to the issue of choice and balance.

Children need to be educated on how these products fit in to one's overall diet. In other words, it is not just an addition, but a replacement for something else. If a child opts to consume his/her discretionary calories from a carbonated beverage or juice, then, he/she needs to be able to give something else up, such as a candy bar or cookie. Certainly, children need to be educated on carbohydrate choices and the importance of whole grains, fruits and vegetables in the diet. The lack of intake of these items may be more causal with regards to chronic disease prevalence, than the presence of a sweetened beverage in the diet.

For many adults and children, it is an abstract concept to think of beverages as a source of calories since they are not filling. This is why education is so important. Children need to learn and apply the lessons of balance and compromise. In other words, if a child has a higher calorie beverage at school, they need to try to consume lower calorie beverages at outside of school. If one drinks a higher calorie beverage, they should choose to add more exercise to the day to achieve energy balance.

It is also important to understand the context in which beverages are consumed. Are they stand alone, or as part of a meal. An area of great concern is the largeness of portions consumed by children and adolescents. Vending machines offer controlled portion sizes either in bottles or cans, ranging from a minimum of 8 ounces to a maximum 20 ounce container. Restaurants, convenience stores and fast food establishments offer soda fountain beverages that start at 12 ounces and increase from there. Children and adolescents who stop at a convenience store after school could buy a 24 ounce or larger beverage, which is a greater volume than the items offered in school. In addition, if there are soft drinks at home, it is easier to pour a larger volume, especially if one has larger glasses in the home. Thus, if there are fewer options in schools, children may be more likely to want and consume larger volumes of that same beverage in the home, or outside of school grounds.

Setting the record straight

The debate around beverages centers on ingredients within the products, the sugar. The focus has shifted away from food to specific nutrients, such as carbohydrate. Children consume food, whether in solid or liquid form, not just nutrients. A beverage is a fluid (water, diet soft drinks, unsweetened tea) and a source of carbohydrate (juice, sports drinks, tea, soft drinks) and in some cases protein as well (milk). There are many misconceptions regarding the health effects of these products as well as volume of beverages consumed on a daily basis. Certainly, no one wants children to consume beverages to the exclusion of all other foods, and the reality is that many children do not consume carbonated soft drinks at all. The average daily consumption of soft drinks by children and adolescents is 12 ounces per day. (French et al, 2003). However, this represents in school, at home, dining out, and weekend consumption. Only twenty percent of children consume any type of beverages from school vending machines, and the frequency is once a week. (Ginevan, 2004).

Research from the University of North Carolina has shown that among children ages 12-18 in the years 1977-1996:

53% of calories are consumed at home

19% of calories are eaten out

8% of calories are consumed in school (bringing or buying school breakfast/lunch)

1% of calories are consumed from vending machines

What the science says

Soft drink consumption has been linked with obesity, bone problems, cavities, diabetes and hyperactivity. None of these diseases have a single cause, nor one solution. The goal is to achieve optimal health and well-being for our children in terms of food choices and physical activity. This is accomplished with inclusion, not restriction when it comes to food and beverage selections.

Obesity

Childhood obesity is a topic of interest and concern. Current statistics show that 13% of 6-11 year old children and 14% of 12-19 year old children/adolescents are overweight. (Ogden, 2002). As a stand alone disease, obesity is a health risk, and in addition, being overweight or obese increases the risk of the development of diabetes, high blood pressure, heart disease, musculoskeletal disorders, and exacerbates conditions such as asthma. However, obesity is not caused by beverage consumption. It is a multi-factorial disease resulting from excessive energy intake (from a variety of nutrients rather than one food source), and poor eating habits coupled with inadequate energy expenditure. In addition, other contributing factors include:

- Parental Influence (Food knowledge and food purchasing patterns)
- Portions (children may be overfed at an early age)
- Genetics (children whose parents are overweight are more likely to be overweight)
- Latchkey children (need to prepare food for themselves, and food may be a source of companionship)
- Environment (safety concerns, limited food choices due to lack of supermarkets in the neighborhood)
- Economic status (Fewer discretionary dollars increase the reliance on low cost/ higher calorie foods)
- Labor saving devices (increased automobile use)
- Sedentary replacements for physical activity (computers, television, video games)

The decrease in physical activity is a major contributor to the childhood obesity epidemic. From 1980- 2000 among children aged 12-19, obesity has increased 10%, calorie consumption has increased 1%, but physical activity has declined by 13%. (Crespo, 2001). A study at Brigham and Women's Hospital of 10,000 9-14 year old children showed a larger increase in Body Mass Index in children who spent more time watching television and playing video games. (Proctor et al, 2003) Greater than two hours of daily television viewing can result in a 1 to 2 pound weight gain per year. (Proctor et al, 2003) These activities do not take place at school, but are more likely to occur at home.

Sugar and Obesity

No study has shown that drinking soft drinks causes obesity, although some studies do suggest an association between soft drink consumption and an increased risk for the development of obesity. The USDA CSFII study failed to demonstrate that the BMI of adolescents was associated with soft drink consumption (Forshee et al, 2003). A study of trends in children's beverage intake between 1977-1988 failed to show an increase in consumption over that time period (Park et al, 2002). Some experts have suggested that sugar is an appetite stimulant causing one to overeat. This theory has not held up as studies have demonstrated that sugar in solid or liquid form does not increase hunger or food consumption. (Anderson et al, 2003, Almiron-Roig et al, 2003). The 2005 Dietary Guidelines do allow for a percentage of daily discretionary calories from sugar in the form of solids or beverages.

There has been a great deal of blame being placed on high fructose corn syrup (HFCS), the primary sugar in fruit drinks and carbonated soft drinks. HFCS is very similar to table sugar or sucrose, and is digested and absorbed in an identical manner.

Some studies have suggested that fructose affects insulin levels, but HFCS is a combination of fructose and glucose, not just fructose alone.

Bone Health

Studies have shown that many children do not consume adequate levels of calcium, which can affect the health of both bones and teeth. The problem is related to inadequate intake of calcium containing foods rather than soft drink consumption. (Storey et al, 2004). Consumption of carbonated soft drinks has declined in children ages 1-5 while milk consumption has increased from 1987-1998 (Park, 2002). Flavored milks have increased in popularity, with an observed 7% increase in consumption among 13-17 year olds.

Calcium recommendations for children are currently 1200 mg/day. In addition to calcium, Vitamins D (from sunlight, milk, and other fortified foods) and K (dark green leafy vegetables) as well as the mineral phosphorus contribute to optimal bone health. Many children have inadequate Vitamin D intake as they do not spend enough time outside. Vegetables are not always part of the daily diet, so vitamin K intake is often inadequate. Physical activity is an essential component of strong bones.

Optimal bone health is more a matter of increasing the intake of calcium, Vitamin D, Vitamin K, phosphorus and exercise. There are several foods and beverages that contribute to improving bone health. It is important to note that carbonated beverages do not increase calcium excretion. (Heaney et al, 2001)

Dental health

Cavities are caused by 1) carbohydrate containing foods that act on bacteria in the saliva, and 2) the amount of time the carbohydrate is in the mouth. The incidence of dental caries has declined significantly due to fluoridated water and topical fluoride treatments in the dental office. In addition, regular brushing and dental check-ups have improved dental hygiene. (Touger-Decker et al, 2003, NIH, 2001).

Liquids such as sports drinks, juice, fruit drinks and carbonated soft drinks all have the same effect on the development of cavities and dental plaque. (DiMeglio, et al, 2000). Beverages do not stay in contact with the teeth as long as sugar or starch-containing foods, which must be chewed.

Childhood Diabetes

There are many factors that can contribute to the development of diabetes, but it is not caused by sugar intake. The American Dietetic Association states that sugar is not associated with increasing the risk of diabetes. (ADA, 2004). A higher proportion of sucrose relative to other carbohydrates does not increase the risk for the development of Type II diabetes. A diabetic child needs to learn how to eat well, for optimal growth and development as well as disease management. This can be accomplished with the inclusion of a controlled amount of sugar instead of elimination. If the diet is too restrictive, a diabetic child can feel deprived and compliance with the meal plan decreases. Weight loss, if overweight, and physical activity play a very important role in preventing diabetes and in diabetes management.

Hyperactivity

There are many anecdotal reports of the association between sugar consumption and hyperactivity. A review of all studies on this topic have shown no relationship between behavior and sugar intake. (Wolraich et al, 1995, Wolraich et al, 1994). There has been some interesting research on the role that particular fatty acids may play in managing attention deficit hyperactivity disorder, but there is no reason for sugar to be blamed as a causal factor.

The second concern is the correlation between caffeine and hyperactivity. Caffeine is a central nervous stimulant, and is not advised in large quantities. The amount of caffeine in carbonated soft drinks is small, ranging from 15 to 40 milligrams for an 8 ounce serving, or 20-50 milligrams for a 12 ounce bottle. Although caffeine is a stimulant, the effects are not greater in children than adults, and the amount of caffeine in soft drinks is not enough to cause nervousness or jitteriness in a child who may consume these beverages infrequently. (Hughes et al, 1998). Caffeine has no effect on children's behavior. (Schechter et al, 1995).

A far greater concern is the proliferation of "energy" drinks on the marketplace (of note, these are not sold in school vending machines) that have high levels of caffeine in herbal forms. These products are not recommended for children, yet, if there are no choices within the vending machines, some children may turn to these items as an alternative when they are off school grounds.

Hydration

Children must consume optimal levels of fluid for brain and body functioning. The child who is best hydrated will improve his/her concentration in the classroom. The child who has not had breakfast, or a beverage to start the day is already in a dehydrated state by the time he/she gets to school. This can result in thirst, headaches, mental fatigue and irritability.

For children who participate in school sports and/or after school sports, the need for fluid increases to help improve performance and prevent injury. Water alone may not be the best choice for active children, because it is not as preferred a beverage. A sports drink provides fluid and also the appropriate type and amount of carbohydrate and electrolytes for exercise. Overweight children can heat up faster, increasing the risk of injury, so adequate fluid intake is critical.

For all children, taste drives the beverage selections. Many children do not find water as appealing, as it is bland, and vegetable juice is not the beverage of choice. Some children and adolescents prefer the mouth feel of a carbonated beverage as one of the daily choices. The bottom line is that children must be well hydrated, and all types of beverages can be part of the hydration solution. Milk, water, juice, fruit drinks, tea, and soft drinks all provide equivalent amounts of fluid to the body.

Vending Machine Policies (Bans or Compromise)

The suggestion that the best course of action is to prohibit sales of certain beverages may have some negative consequences. If an item is forbidden, the desire for that item may increase, and consumption may increase as well. (Fisher et al, 1999). If there are no school vending machines, children may consume greater amounts of beverages at home or off school grounds. Vending machines may supplement the diet of children who have the early lunch period and get hungry before the school day is done. In addition, many children have after school activities so they cannot go home first for an after school snack before heading off to sports or a music lesson. A calorie-containing beverage such as juice, sports drinks, fruit drinks and soft drinks can provide some sustenance to get through the afternoon.

The Kansas Beverage Association is supportive of school and health initiatives regarding physical activity, balanced lifestyle and diet, personal responsibility, and choice. The industry cooperates with schools regarding the times of day that vending machines are available, and what products are offered. In addition, revenue generated from the sales can be used to meet that school's needs, but 66% of schools use this money to purchase physical education equipment.

With regards to beverage choices, the sales of water, diet soft drinks and sports drinks have increased, as has the sale of flavored milks. Variety is important to children, and sends a more positive message than restriction.

The food and beverage industry, government, community, schools and parents need to work together to improve children's health outcomes. The Kansas Beverage Association continues to be an advocate for personal choice and responsibility and is committed to the health and physical well-being of students. Revenues generated from vending machines offer programming opportunities in nutrition education and physical activity to schools that otherwise may not be able to fund these programs. There are abundant opportunities for partnering between local school districts and the Beverage outcome so that our children can attain health and fitness competence through Achievement, Balance and Choice.

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Testimony on **HB 2137**
before the
House Health and Human Services Committee

by

Donna L. Whiteman, Assistant Executive Director/Legal Services
Kansas Association of School Boards

February 2, 2005

Mr. Chairman, Members of the Committee:

Thank you for the opportunity to present testimony in opposition to H. B. 2137 on behalf of the Kansas Association of School Boards.

While no one can dispute the need for students and adults to eat healthy foods, following is a list of concerns about this bill:

1. The decision as to what types of snacks to offer in school district vending machines is a decision best left to local school districts. KASB's 2005 Legislative Policies and Priorities established in December by approximately 2100 school board members provides as follows:

As the constitutional authority charged with the management of local schools, the school board is accountable to district patrons through the electoral process and must be the final authority on local management decisions for expenditures, personnel and programs.

2. Many, if not most, Kansas school boards have existing multiyear contracts in place with vendors relating to the products to be sold in the vending machines.
3. Many local vendors have provided tremendous corporate financial support to school districts.
4. Many districts have been proactive in providing nutritious foods. However, one administrator noted the outcry from students on the vending price increases when more nutritious selections were added. Additionally, vending machines are generally not open during lunch periods and are only available before and after school.

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5. Schools have had to manage more efficiently with increased operating costs and decreased school finance funding. Instead of the proverbial “bake sales,” school districts have come to rely upon vending machine profits to help pay for the “necessities” including scoreboards, equipment and other educational needs at the building level. School districts have used the proceeds from vending machines to pay for classroom equipment, reference books, novels, computers, projectors, cafeteria tables, science lab equipment, hand scanners, security, field trip transportation costs, custodial equipment, paper, national honor society activities, new equipment for nurses, teacher luncheons, and staff meals during parent-teacher conferences.
6. Education is the best measure to teach students and parents about healthy life styles. Even if limitations are placed on vending machine choices, students can still bring junk food in their lunches.
7. Most high schools are located near a convenience store. If vending machine usage is limited, high school students will go to convenience stores to purchase their pop and candy there.
8. The Child Nutrition Act became effective June 30, 2004. In an effort to have schools play a key role in addressing childhood obesity, every school district that receives federal funds is required to establish a local wellness policy by June 30, 2006. This new law requires school districts to address the following in their local policy:
 - Nutrition education goals
 - Physical activity goals
 - Nutrition standard and
 - Other school-based activities that serve to promote and reinforce wellness messages.

The law also requires each school district to involve parents, students, food service personnel, school boards, and community members in developing this policy.

The Kansas Association of School Boards, school districts, food service representatives and administrators are already planning for this new policy requirement.

I have attached a copy of the Child Nutrition and WIC Reauthorization Act of 2004.

Section 204 of Public Law 108-265—June 30, 2004
Child Nutrition and WIC Reauthorization Act of 2004

SEC. 204 LOCAL WELLNESS POLICY

(a) IN GENERAL - Not later than the first day of the school year beginning after June 30, 2006, each local education agency participating in a program authorized by the Richard B. Russell National School Lunch Act (42 U.S.C.1751 et seq.) or the Child Nutrition Act of 1966 (42 U.S.C. 1771 et seq.) shall establish a local school wellness policy for schools under the local educational agency that, at a minimum—

- 1) Includes goals for nutrition education, physical activity and other school- based activities that are designed to promote student wellness in a manner that the local educational agency determines is appropriate;
- 2) Includes nutrition guidelines selected by the local educational agency for all foods available on each school campus under the local educational agency during the school day with the objectives of promoting student health and reducing childhood obesity;
- 3) Provides an assurance that guidelines for reimbursable school meals shall not be less restrictive than regulations and guidance issued by the Secretary of Agriculture pursuant to subsections (a) and (b) of section 10 of the Child Nutrition Act (42 U.S.C. 1779) and section 9(f)(1) and 17(a) of the Richard B Russell National School Lunch Act (42 U.S.C. 1758(f)(1), 1766(a)), as those regulations and guidance apply to schools;
- 4) Establishes a plan for measuring implementation of the local wellness policy, including designation of 1 or more persons within the local educational agency or at each school, as appropriate, charged with operational responsibility for ensuring that the school meets the local wellness policy; and
- 5) Involves parents, students, and representatives of the school food authority, the school board, school administrators, and the public in the development of the school wellness policy.

(b) TECHNICAL ASSISTANCE AND BEST PRACTICES. -

(1) IN GENERAL. - The Secretary, in coordination with the Secretary of Education and in consultation with the Secretary of Health and Human Services, acting through the Centers for Disease Control and Prevention, shall make available to local educational agencies, school food authorities, and State educational agencies, on request, information and technical assistance for use in—

- (A) Establishing healthy school nutrition environments;
- (B) Reducing childhood obesity; and
- (C) Preventing diet-related chronic diseases.

(2) CONTENT. - Technical assistance provided by the Secretary under this subsection shall—

- (A) Include relevant and applicable examples of schools and local educational agencies that have taken steps to offer healthy options for foods sold or served in schools;
- (B) Include such other technical assistance as is required to carry out the goals of promoting sound nutrition and establishing healthy school nutrition environments that are consistent with this section;
- (C) Be provided in such a manner as to be consistent with the specific needs and requirements of local educational agencies; and
- (D) Be for guidance purposes only and not be construed as binding or as a mandate to schools, local educational agencies, school food authorities, or State educational agencies.

(3) FUNDING. –

(A) IN GENERAL. – On July 1, 2006, out of any funds in the Treasury not otherwise appropriated, the Secretary of the Treasury shall transfer to the Secretary of Agriculture to carry out this subsection \$4,000,000, to remain available until September 30, 2009.

(B) RECEIPT AND ACCEPTANCE. – The Secretary shall be entitled to receive, shall accept, and shall use to carry out this subsection the funds transferred under subparagraph (A), without further appropriation.

Feb. 2, 2005

Health and Human Services Committee
Hon. Jim Morrison, chair



Testimony on HB 2137
By Brad Stauffer
Director of Communications
Topeka Public Schools, USD 501

Mr. Chairman and members of the Committee,

Public schools across our state support the development of healthy lifestyle choices for our students. There is no argument that nutrition is an important part of a healthy lifestyle. Every educator can appreciate the intent of House Bill 2137. We all want healthier children.

Our society as a whole does not make enough healthy choices when it comes to nutrition, and we've all been guilty of unhealthy snacking. Our purpose today is not to debate the merits of healthy nutrition, but rather to provide information for the committee to consider before it takes action on this bill.

Topeka Public Schools first entered into an exclusive soft drink contract with Pepsi in 1999. The contract was renewed last year for a ten-year period. The financial impact for TPS is approximately \$385,000 a year. These funds are used for a variety of purposes. Pepsi proceeds pay the mortgage on land purchased from the state for Hummer Sports Park, for our staff recognition program and recognition of our Friends of Education nominees. The Pepsi contract means additional dollars in middle and high school activity accounts, generates college scholarship support for our students, provides advertising revenue for high school newspapers and yearbooks, and provides other school support.

In addition to soft drinks, schools realize revenue from snack machines. Those proceeds are also used to support the educational and extra curricular programs of schools. Often, these are the only "discretionary" funds available to schools.

Access to vending machines in our high schools is limited to before and after school and during lunch periods. At the middle school level, access is only after school, and most middle schools don't have candy/chip machines. One of our middle schools doesn't have any vending machines. Vending machines are not available to students at elementary schools in our school district.

We can also report that districtwide sales of Pepsi products are taking a more healthy turn. In the 2002-2003 school year, sugar-carbonated products comprised 62 percent of sales. Last school year that percentage was down to 54. Other choices included diet-carbonated drinks, non-carbonated drinks, water and juice. Last year, 45 percent of the stock in our vending machines was carbonated sugar drinks and 53 percent of the sales came from those vending machines.

We hope that the committee will keep in mind the practical financial impact that this bill could have on our schools. Thank you for your attention, and I stand for any questions you may have.

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From: <njwwelch@sunflower.com>
To: <health@house.state.ks.us>
Date: Tue, Feb 1, 2005 11:19 AM
Subject: House Bill 2137 agenda

My name is Noah Welch and I am a senior at Lawrence High School. I would like to be included on the agenda for the hearing on House Bill 2137 at 1:30pm on Wednesday, February 2nd. The attached files are the points which I plan to emphasize. Due to a lack of a WordPerfect converter, the attached files are in several different formats. Feel free to contact me if you have any questions, concerns, or difficulties opening the files. Thanks for your consideration.

-Noah Welch
(785) 760-3634

CC: <Rhein@Heinlaw.com>

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Points to be emphasized during 1:30pm hearing on House bill 2137

Leave the decision of this manner to the local district.

Most of the snacks and soft drinks that will no longer be available in the schools will be purchased elsewhere and the profits will no longer benefit the educational system.

The opportunities provided by the sale of food products will be undermined by the restriction of revenue set forth by the bill.

Bill is vague on what is considered a food of minimal nutritional value. Please elaborate...

Mark Desetti, testimony
House Health and Human Services Committee
February 2, 2005
House Bill 2137

There is no denying that there is an obesity epidemic in America and that it has hit our children. We know what ready access to fast food, sugary soft drinks, and high fat snacks is doing to all of us. We also know that dramatically increased serving sizes are contributors to the problem. Most of us in this room can remember when the 10-oz soda was the norm for a vending machine. It's nearly impossible to find one now.

Vending machines in schools quite probably contribute to the problem. We don't deny that. This bill, if passed, will certainly change the options that students have. It won't necessarily change what they consume – on the high school level anyway. But I think we all agree that, in the case of the products available in vending machines, we are not talking about the “medium being the message.” Unlike television where people will simply watch whatever is on, there is less of a need to buy whatever is available simply because it is in a vending machine. Some students will consume less soda or fatty snacks. But they won't pick up milk just because it's in the machine. The end result will be greater reductions in funds than reductions in waistlines.

The sad truth is that schools have come to latch on to soda contracts because they need the money to replace the lack of state funding. Perhaps the soda money goes to student activities because activity money has been moved to shore up academic programs. The legislature has asked schools to do with less every year for the past four years. Now you are asking schools to give up another source of revenue with no plan to replace that revenue. We have no argument with the desire to reduce bad food choices for students – your hearts are in the right place. But you can't simply strip schools of a potentially strong source of revenue and not offer an alternative source.

We would suggest that you set this decision aside until you have met the court's school finance requirement.

As for subsection (c), while many legislators have long couched their hesitancy in increasing school funding to a desire to get more money into teachers' pockets, we did not believe you meant simply returning a teacher's own money to those pockets.

Teachers do what it takes to motivate children. Sometimes an M&M or a Jolly Rancher does the trick. Again, I ask you for a suggestion to replace those M&Ms and Jolly Ranchers. Nuts carry allergy issues, stickers are more expensive and not motivating to high school or middle school students, sugary fruits carry the same dental issues, and if celery sticks and carrot chips are longed for why do so many end up in the cafeteria trash?

I would submit that the few candies passed out in class do little to impact obesity; I accept that they may contribute to dental issues. But since many teachers do not use them and there is no restriction on access to candies and other caries-producing edibles elsewhere, you are really making little impact on dental health. This section is like trying to bring down a charging rhino with a pea shooter.

We ask that you do two things:

- First, before you ban or cripple a school's revenue sources, you replace the lost revenue.
- Secondly, you turn away from micro-managing the classroom and let teachers, principals, and parents decide how best to motivate their students. The ban in subsection (c) is best left to school site councils, not the legislature.



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February 1, 2005

House Health and Human Services Committee
House of Representatives
300 SW 10th Street
Topeka, KS 66612-1504

Dear Committee Members:

On behalf of the Grocery Manufacturers of America (GMA), I am writing to express our opposition to House Bill 2137, scheduled for hearing in the House Health and Human Services Committee on February 2, 2005.

Grocery Manufacturers of America is the world's largest association of food, beverage, and consumer product companies. With U.S. sales of more than \$500 billion, GMA members employ more than 2.5 million workers in all 50 states, including 29 companies with 52 plants and over 11,000 employees in the state of Kansas.

GMA and its member companies share the committee's concern about preventing childhood obesity and encouraging healthy eating habits. We believe, as do many nutrition experts, that solving the obesity problem is about maintaining a healthy lifestyle and achieving the proper energy balance. The rise in obesity is the result of many complex factors affecting eating and activity behaviors and there are no simple solutions.

The lack of a balanced diet coupled with the lack of regular, daily physical activity can lead to many physical and mental conditions – including depression, overweight, heart disease and diabetes.

These conditions emerge because of a complex combination of factors and cannot be solved solely by blaming individuals, any single food, or category of food, or societal trends and events. It is well documented that a person's weight is directly related to the interaction of a wide variety of economic, cultural, social, and genetic factors – and not any single cause.

Restrictions – such as those suggested in House Bill 2137 – for the sake of solving obesity would do nothing to motivate students, parents, or communities to take the steps necessary to improve their overall health. If we are to help students to develop and maintain healthy lifestyles for the long-term, we must first give them the tools and resources necessary to do so. Rather than simply restricting student access to foods or finding fault with business-school partnerships that help fund vital programs, we need a more balanced approach focused on providing sound nutrition information to parents, students and teachers; encouraging and funding more physical education and recreational opportunities; and funding the research we need to determine ways to encourage healthy lifestyle choices.

The American Dietetic Association has stated that the entire diet, rather than specific foods, should be scrutinized. In looking at the total diet, we should identify the amount of excess calories in an individual's diet, rather than labeling or categorizing certain foods as strictly "good" or "bad." Restricting or

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prohibiting certain foods will almost certainly not work. In fact, a study published in the Journal of the American Dietetic Association states that overly restrictive diets may lead to enhanced food cravings, overindulgence, eating disorders, or a preoccupation with food and eating.

Restrictions do not educate. It is through education – both nutrition and physical – that we will empower students to adopt a healthy lifestyle that meets their own needs and allows them to enjoy their favorite foods as part of a balanced diet.

Studies have shown that children who participate in physical education programs fare better physically and academically than children who are not physically active. As the National Association for Sport and Physical Education reported, a quality physical education program helps children improve self-esteem and interpersonal skills, gain a sense of belonging through teamwork, handle adversity through winning and losing, learn discipline, improve problem-solving skills, and increase creativity.

However, an alarming number of students have little or no regular, daily physical activity. According to a report issued by the International Life Sciences Institute (ILSI), about one in four children do not get any physical education in school. Physical education requirements in our public schools have been declining over the last twenty years. Today, only the State of Illinois has a daily physical education requirement for grades K-12, but it allows schools to be exempted from this requirement. Currently, Kansas bases its physical education standards on the National Standards for Physical Education, yet does not use any physical education assessment. Physical education is mandatory at the elementary and high school levels, yet not at the middle school level. There are no time requirements, except high school students must complete one unit of physical education to graduate.

Outside of school, the statistics are equally concerning. According to ILSI, fewer than one in four children get 20 minutes of vigorous activity every day of the week and fewer than one in four get at least half an hour of any type of physical activity every single day.

What is done in the home and in the community is important to combating overweight and obesity. It will take more than a single event to create changes in the ingrained personal, cultural, and nutritional habits at the root of the problem. Successfully addressing the real problems of overweight and obesity will require entire community buy-in. Sustainability of nutrition and physical activity habits is the key.

GMA members and many other companies in the food and beverage industry support a wide variety of nutrition education and physical activity programs designed to help individuals and their communities.

GMA urges the Committee to look for broader, more effective solutions to this situation. GMA requests your "NO" vote on HB 2137.

Sincerely,



Kevin Fisk
Manager, State Affairs



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February 2, 2005

opp

The Honorable James F. Morrison, Chairperson
House Committee on Health and Human Services
Kansas House of Representatives
300 Southwest 10th Street
Topeka, Kansas 66612

Dear Chairperson Morrison:

The National Confectioners Association (NCA) greatly appreciates this opportunity to express its views regarding HB 2137, which is up for consideration in your committee. The measure seeks to expand restrictions on the sale of selected food and beverage products in the schools of your state. In addition, a provision would prohibit all teachers from using candy as a reward or incentive.

As you can imagine, the members of our association are very interested in this issue. NCA represents more than 700 companies that manufacture and market the vast majority of chocolate and non-chocolate confectionery in the United States, with several members in your state.

NCA believes that students, parents, legislators, vendors and in some circumstances even school officials are not fully aware of the current restrictions in schools regarding the sale of foods in competition with the national school lunch and breakfast programs.

There are already significant control measures at the disposal of schools in your state through regulations promulgated by the U.S. Department of Agriculture (USDA). These regulations strictly prohibit the sale of "foods of minimal nutritional value" in designated food service areas during the meal periods. Other foods in competition with the school breakfast and lunch programs are only sold when proceeds benefit the school or an approved student organization. Unfortunately, these USDA guidelines are sometimes unknown or not enforced.

Please be aware that improvements in technology can increase the capability of schools to enforce these USDA guidelines. Timers can now be attached to vending machines that control when the machines can be operated or shut down.

We strongly support a comprehensive education campaign so as many people as possible know about the tough guidelines already in place to restrict the sale of our members' products in schools. Our association accepts the fact that local districts are capable of making these guidelines even tougher if they so desire and ask that your committee maintain the flexibility of local districts to make this decision based on their own particular norms and needs.

Children's health is a complex and multi-faceted issue, affected by a variety of factors, including a child's behavior, environment, levels of physical activity and inactivity, genetics, and diet. **Our organization is committed to supporting children's health and to encouraging both parents and children to maintain a healthy lifestyle.** We are currently working with leaders in the health professional community by providing materials to help them educate children and their parents on effective approaches to health, nutrition and weight management.

Health professional organizations such as the American Dietetic Association believe that a healthy dietary regimen incorporates a diet that is balanced and includes a variety of foods in moderation. While we certainly agree with the need for continuing efforts to identify and support measures that

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House Committee on Health and Human Services
February 2, 2005
Page Two

encourage children's health and well-being, NCA feels childhood obesity is a multi-faceted problem that will not be solved by restricting food choices. Such restrictive proposals are at best short-term in nature and are not likely to be effective, especially at the high-school level. The cover sheet of the ADA Position Statement on a Total Diet Approach is attached.

Please note the comment by ADA that nutrition messages "can be more effective if they focus on a positive image of healthy food choices over time, rather than individual foods to be avoided." They go on to say that "no single food or type of food is necessarily detrimental to health." **These remarks should be kept in mind regarding the unusual provision in HB 2137 to prohibit the use of candy for rewards or incentives.** Clearly candy is not meant to be the sole source of a child's diet. Department of Agriculture data indicate less than 2% of calories consumed in an average diet are from candy. To pick out this specific food product for a government-mandated ban is most definitely not going to solve the problem of obesity in your state and implies the legislature knows better than Kansas teachers how to run their classrooms. We strongly encourage the committee to delete this provision from HB 2137.

The children of your state will benefit far more if you instead pursue long-term solutions to health that emphasize nutrition education and increased physical activity. *Teaching children about the benefits of a balanced diet* would do more to steer them in the right direction on nutrition than would the enactment of food restrictions. *Increasing the amount of their time devoted to physical activity* through physical education classes, not eliminating recess periods or other methods would also have a positive impact on the health of children. Studies have found the physical activity of children has decreased over the years and has had an impact on rising obesity rates.

Our association also asks that you consider the impact this legislation could have on fundraising projects in the schools of your state. Each year, nearly \$2 billion worth of projects at schools and other non-profit organizations are made possible by fundraising. The vast majority of Americans, including eight out of ten parents, support school and non-profit product fundraising. Fundraising in schools supports music programs, youth athletic activities, computer education, PTAs, PTOs, scout organizations and other programs that are important to students' overall educational experience.

Nationwide, candy and confectionery products are typically the most popular fundraising products sold. Restrictions on student fundraising activities jeopardize much-needed programs, while doing little to promote the overall health of children. Product fundraising programs primarily involve purchases by students' families and family friends and co-workers, and the vast majority of sales occur in the family's home and over the telephone, rather than within the school environment.

We ask that you please not adopt shortsighted proposals and instead support long lasting provisions for children's health that more fully incorporate nutrition education, physical activity and extensive education regarding the current guidelines.

You can be certain that the National Confectioners Association will continue working with the health professional community and physical fitness professionals, the food industry and other committed industries and organizations to educate consumers about how all foods can fit within a healthy diet when adopting good nutrition and embracing appropriate exercise. Do not hesitate to contact our association if we can answer any questions regarding this issue.

Sincerely,



Stephen G. Lodge
Vice President, Legislative Affairs

cc: Health and Human Services Committee

15-2

Position of the American Dietetic Association: Total diet approach to communicating food and nutrition information

ABSTRACT

It is the position of the American Dietetic Association that all foods can fit into a healthful eating style. The ADA strives to communicate healthful eating messages to the public that emphasize the total diet, or overall pattern of food eaten, rather than any one food or meal. If consumed in moderation with appropriate portion size and combined with regular physical activity, all foods can fit into a healthful diet. Public policies that support the total diet approach include Reference Dietary Intakes, Food Guide Pyramid, Dietary Guidelines for Americans, Nutrition Labeling and Healthy People 2010. The value of a food should be determined within the context of the total diet because classifying foods as "good" or "bad" may foster unhealthy eating behaviors. Eating practices are influenced by taste and food preferences, concerns about nutrition and weight control, physiology, lifestyle, environment, and food product safety. To increase the effectiveness of nutrition education in promoting sensible food choices, dietetics professionals plan communications and educational programs that utilize theories and models related to human behavior. Communication campaigns/programs should implement an active, behaviorally focused approach within the larger context of food choices. Nutrition confusion can be reduced by emphasizing moderation, appropriate portion size, balance and adequacy of the total diet over time, the importance of obtaining nutrients from foods, and physical activity.

At least four of every five Americans agree that there is a relationship between diet and health (1,2), and 57% have become more aware of the benefits of a healthy diet in the previous year (3). In addition, over half of shoppers report actively seeking diet and nutrition information in the last month (2), and 41% of Americans feel that they are doing all they can to eat healthfully (4).

Obstacles to healthful eating reported in the recent American Dietetics Association (ADA) Nutrition and You: Trends 2000 (4) were reluctance to give up favorite foods (44%), satisfaction with current diet (39%), lack of time to keep track of diet (38%) and lack of understanding of nutrition guidelines (29%). In addition, 77% of Americans believe that there are "good" and "bad" foods. Perhaps the myth of "good" and "bad" foods is linked to the perception that tasty foods do not fit into a healthful diet. This pessimistic attitude may impede dietary change if Americans are tired of messages from nutrition experts that everything that tastes good is bad for them. Eating is an important source of pleasure in life (5); consequently, attempts by health promoters to change undesirable dietary behavior may be difficult if consumers perceive that they must choose between good taste and nutritional quality.

Nutrition messages from dietetics professionals can be more effective if they focus on a positive image of healthy food choices over time, rather than individual foods to be avoided. This concept is not new. The American Dietetic Association strives to communicate that there are no good or bad foods,

only good or bad diets or eating styles (6). No single food or type of food ensures good health, just as no single food or type of food is necessarily detrimental to health.

Research conducted for the Dietary Guidelines Alliance's "It's All about You" campaign suggests that the "good foods/bad foods" myth should not be perpetuated (7). The Alliance is a consortium of government and food industry organizations, including ADA, whose mission is to provide nutrition messages to help achieve healthy, active lifestyles. In order to boost effectiveness, it is recommended that food tips be kept positive, short, and simple and include examples of foods and activities that reflect the lifestyle, preferences, and culture of the audience. The recent Food for Thought III survey (8) reported that the news media are airing more positive messages about food and fewer negative messages. This positive approach empowers consumers to achieve the principles of a healthy diet as part of their overall lifestyle.

Positive messages help avoid the consumer confusion that results when messages from experts appear to be in disagreement, as well as the feelings of guilt that are associated with eating "less healthful foods" (9).

POSITION STATEMENT

It is the position of the American Dietetic Association that all foods can fit in a healthful eating style. The ADA strives to communicate healthful eating messages to the public that emphasize the total diet, or overall pattern of food eaten, rather than any one food or meal. If consumed in moderation with appropriate portion size and combined with regular physical activity, all foods can fit into a healthful diet.

FEDERAL NUTRITION GUIDANCE THAT SUPPORTS THE TOTAL DIET APPROACH

The Dietary Guidelines for Americans and the Food Guide Pyramid take a total diet approach to food guidance which form the basis of federal food, nutrition education, and information programs. From their inception in 1980, the Dietary Guidelines for Americans have recommended moderation for certain dietary components, such as fat and sugar, while continuing to emphasize nutrient adequacy. The Guidelines are reviewed every 5 years by a scientific advisory committee to ensure that they reflect the most current research that is available on diet and health (11). The science-based framework supporting the Food Guide Pyramid, originally developed in the early 1980s, incorporates dietary standards, including the Dietary Guidelines and data on food composition and food consumption practices of Americans. This research framework is updated continually by the USDA to ensure that Federal dietary guidance is based on the most accurate and current scientific data. (12a,12b)

The developers of the Dietary Guidelines for Americans and the Food Guide Pyramid found that consumers and educators tend to prefer dietary guidance that allows consumers to eat in a way that suits their individual tastes and lifestyles (12-14). An illustration would be to balance a high-fat dessert such as rich ice cream with lower fat selections in other food groups to