

# Pure Facts

Newsletter of the Feingold® Associations of the United States



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## The Sick School Syndrome

A former teacher who became ill as a result of working in a polluted environment has become a crusader for healthy school environments for both children and teachers.

While she taught Spanish in a newly-built New Jersey high school, Irene Wilkenfeld would not have considered the word "polluted" to be an appropriate description of the building. But years later, she would make the connection between her deteriorated health and the toxic chemicals she encountered. Irene spent fifteen frustrating years searching before she found the medical help she needed to overcome the effects of the school chemicals. Today she is a free-lance medical writer who conducts workshops on how schools can recognize and clean up sick buildings.

Referring to the frequently cited decline in the performance of American students, Irene gives the "educational bureaucracy" a failing report card. She writes:

"It's ironic to note that the institution mandated to nurture our students may often be an unwitting culprit in their toxic poisoning and in their learning disabilities. Educators must realize that *all chemicals* used in construction, furnishing, housekeeping, maintenance, renovation, pest control, food service and classroom activities can and do affect indoor air quality and subsequently the health of the building's occupants. The health of the human body is a barometer of the health of the environment. The health of a student and the health of his/her school environment are intimately interconnected!"

Feingold parents know the profound effect chemicals can have on a child's ability to behave, to learn, and function. If you find that after you have changed your child's diet you are still seeing reactions, consider the following possibilities.



### Typical Culprits in the Schools

Even before your child arrives at school, a potential culprit is the school bus. Just as cars give off a "new car smell", new buses also contain many synthetic materials which release fumes from chemicals that are used in their creation and manufacturing process. A sniff test is a simple way to identify a possible problem; eventually, the smell will fade as the chemicals "gas off". If a cheerful youngster steps into that shiny orange vehicle, and a grouch gets off at the school, step into the bus yourself and see if you detect an obvious smell; you may even notice that you have a physical reaction of some type. Speak with the bus driver. Has he/she noticed any effects after driving a new vehicle, compared to an older one?

**What can be done?** A school administration interested in minimizing off-gassing can do a variety of things. Ideally, they would consult with experts in this field (we can find them) and insist the manufacturer use materials with low toxicity.

When traditional materials are used, allowing them to be exposed to the air and out-gas would help. Permitting the finished buses to air out before they are delivered would lessen the problem.

The Dasun Company provides a product called NonScents, which actually absorbs gases and odors, and can be reused many times. Refer to *Pure Facts* April 1992 and your School Year Calendar for more information about this product.

The inside of the school bus is not the only source of problems. A potent chemical, benzene, is given off in the exhaust fumes of gasoline and diesel fuel.

**What can be done?** Drivers can minimize childrens' exposure to these fumes by simply keeping the engine turned off while parked at the school.

Maintenance crews can check the engine exhaust system carefully for any leaks that could enter the bus.

Where is the air intake for the school's ventilation system? It should be located as far as possible from the exhaust fumes of cars and buses.

### Inside the School

Everyone likes to come back to a freshly painted school — provided the painting was done during the summer and the fumes have had a chance to gas out.

New carpeting looks great, but it can take a long time before the formaldehyde, and other chemicals in synthetic carpeting have outgassed. Unlike hard flooring, carpets are prone to harbor mold, mites and any pesticides used in the building.

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The Feingold® Associations of the United States, Inc., founded in 1976, are non-profit volunteer organizations whose purposes are to support their members in the implementation of the Feingold Program and to generate public awareness of the potential role of foods and synthetic additives in behavior, learning and health problems. The program is based on a diet eliminating synthetic colors, synthetic flavors, and the preservatives BHA, BHT, and TBHQ.

Leaky roof? The best time to spread tar on the school roof is when the building is empty. Asphalt and tar are powerful toxins. (Steer your teenager away from summer construction jobs that will expose him to these.)

Cleaning supplies, waxes, polishes and deodorizers can contain powerful chemicals that leave enough of a residue to cause noticeable problems for sensitive people. Alternatives are available.

Safer forms of pest control are receiving well-deserved attention in some school districts. Integrated pest management (IPM) refers to techniques for controlling pests with the least toxic chemicals possible. There are several organizations devoted to promoting this. (See *Pure Facts* March, 1991 for information on how a Feingold member brought IPM to her schools.)

The art room, shop, chemistry lab, auto repair facility, cosmetology room etc., can all have potentially harmful chemicals.

**What can be done?** Cleaning up a school environment does not have to be an impossible (or impossibly expensive) job. Some substances can be replaced with safer products; a bit of extra precaution in handling others will help. And a major improvement will come by planning for the necessary ventilation.

## Fresher Air

Schools have contained strong chemicals for many years. It's true there are many more chemicals today, but the compounds themselves are not the only problem. Toxic fumes become a serious problem when they are kept sealed in tightly built, energy efficient buildings. These problems are just as prevalent in office buildings. Many new schools and offices have windows that don't open to let in fresh outside air — which is nearly always far purer than indoor air.

Portable classrooms can be comfortable places to work and learn (especially if they're just drafty enough to let in fresh air). But air-tight mobile home style units can be filled with materials that emit formaldehyde.

Centrally controlled ventilating systems are supposed to keep the air reasonably pure, but they are often a major problem. Systems can malfunction. Filters can be dusty, dirty or moldy. Chemicals from one part of the school can be circulated throughout the building.

Since few school boards would be willing to cut holes in the walls and install windows, the next best choice would be to take a close look at how well the ventilation system works, and make any needed changes.

## In Your Child's Classroom

Of the many potential problems found in schools, the most obvious and (hopefully) easiest to change are probably found right in your child's classroom.

A major offender Feingold volunteers hear about is perfume. Perfume manufacturers have given their products an image which is not deserved. Far from being romantic, exciting, fresh, and lovely, perfume is a collection of harsh chemicals, most of which are derived from petroleum. (According to the California consumer group, Citizens for a Toxic-free Marin, some of the chemicals used in perfumes are designated as hazardous waste disposal chemicals.) For more on perfume, refer to the April 1992 *Pure Facts*.

As a rule, the younger your child is, the less likely to be exposed to perfume from the other children. The chemically sensitive high school student may have to contend with fragrances from many sources, but for the typical first grader, the source is likely to be his teacher. Scented stickers, markers and other pens are also frequent offenders. Pot pourri and room deodorizers can be a problem.

Although the most obvious source of trouble for the Feingold child is the food served in the school cafeteria and sometimes given out in the classroom. He can refrain from eating the food, but cannot refrain from breathing perfumed air.

Additional information on safer schools is available from Irene Wilkenfeld, 52145 Farmington Square Road, Granger, IN 46530 (219) 271-8990

## What can you do?

- If your child's health, behavior or learning is being affected, you'll have to speak up. We have no formula for convincing a teacher to stop using perfume, scented classroom products or giving out additive-laden food. But we can provide printed information and materials to support your effort. Don't expect others to take your word for it; you need to be ready to document what you are saying, whether you are speaking with a teacher, doctor, relative, friend, or neighbor.
- Has your youngster's teacher seen the "before" and "after" child? Someone who has never witnessed a reaction has a right to be skeptical. If your child is unfortunate enough to have a reaction and there is some way his teacher can observe the effects without embarrassing him, she may be more understanding in the future. Seeing is believing.
- One child had a very bad reaction as a result of a leak in the school's the oil furnace. In such a case the school should provide a tutor.
- If you can keep your child home temporarily while toxic chemicals are being used, don't be reluctant to do so.
- A private school may be more receptive to making the changes your student needs. A modification that helps your very sensitive child will help his not-so-sensitive classmates. One Feingold mom got fed up with her son spending his days out in the hall, being disciplined because he was reacting to his teacher's perfume. The principal had to weigh an ultimatum to the teacher with the loss of a tuition check. Another mom was astonished at her youngest son's angry, abusive behavior when she picked him up after school. He had eaten lunch in the newly-painted basement lunchroom — a room with no windows.
- Contact Irene Wilkenfeld on how you can become a Safe School Ambassador, alerting your community to the hidden hazards lurking in your schools. Ask her about her workshop, on detoxifying contaminated classrooms, and arrange one for your area.

# That Kid Who Drives You Crazy!

You could run through an alphabet of symptoms: Aggressive, Beligerent, Clumsy, Distractable, Emotional, Forgetful, Gauche, Hyperactive, Impulsive...

There is evidence to indicate that many children like this are reacting to everyday substances; fortunately a great deal can be done to help them.

**D**o you wake up some days and wonder why you ever chose to be a teacher? Of all the challenges you face, let's isolate one, and take a closer look at it — and in this case "it" is a child we'll call Jeremy. He's bright. The tests show that, but you wouldn't know it from looking at his work. He understands a concept one day, and is bewildered by it the next.

He does foolish/destructive things even though he knows better. When you ask him why, and he responds, "I don't know", his answer seems genuine. His hands, legs and mouth appear to possess a life of their own. He says the wrong things, too loud, and at the wrong time. Most of the other children avoid him; although a few find him an easy target and convenient scapegoat.

As you speak with Jeremy's mother you listen carefully for clues that would explain where she went wrong. But she's as exasperated as you are, and her other children are fine. "Poor parenting" just doesn't fit.

Is there "something wrong" with this little boy — something in his brain that doesn't work properly? Is there a defect he was born with? This is not a comfortable fit either, as his behavior is inconsistent. On some days he functions quite well, and on others he's impossible. Similarly, his mother notes there are wide variations at home. She also mentions that Jeremy was a contented baby during the time she was breastfeeding, but he had difficulty sleeping after she introduced table food. Both of you notice he's worse after holidays and parties, but conclude that he is just overstimulated.

Although various tests show Jeremy's brain is perfectly normal, your suspicion is correct that something is wrong with his "internal environment". A relatively new branch of science deals with this. It's called "behavioral toxicology", and looks at the way a sensitive individual's behavior can be affected by external substances.

While the formal study of behavioral toxicology is new, the examples are as old as recorded history. Take an external substance called "wine". If a person consumed a large quantity of wine, and then behaved abnormally or couldn't remember how to solve a math problem, we wouldn't be mystified by the cause.

If we were to conduct an experiment with many individuals, we would see wide variations in the ability to tolerate this substance (wine). The reactions to it would depend upon the amount consumed and each person's degree of sensitivity to it — in other words, their individual chemical make-up would be an important factor.

There are many substances beside wine which can affect a person's behavior and ability to focus and learn. Some are believed to be transient and some are known to be permanent. Examples include: heavy metals such as lead, mercury and cadmium; alcohol of all types; nicotine; caffeine; drugs — both legal and illegal; solvents and glues, such as airplane glue; petroleum.

Petroleum!? Who thinks about this, except when we fill our gas tank or read about OPEC? Few people are aware that thirty seven percent of the crude oil used in the United States goes into the manufacturing of other products with which we come in contact every day. Derivatives of petroleum and crude oil are in our clothing, cosmetics, shampoos, detergents, perfumes, paints, plastics, pesticides, and — most significant of all, our food. We eat, breathe, and surround ourselves with the by-products of crude oil every day, and some of us are having a hard time coping with these powerful substances.

Let's take a look at the typical morning in Jeremy's life as he gets ready for school. (Every substance which is likely to be an irritant for a chemically-sensitive person is noted with an \*.)

He wakes up between sheets which have been exposed to scented fabric softening strips\*. He walks down the hall on new carpeting\*, which still retains the smell of the chemicals used in its manufacture. An air freshener\* adorns the bathroom, and competes with scented soap\* and scented tissue\*. The tub has been cleaned with a miracle spray\*, and the scent of chlorine\* clings to the tile floor. His toothpaste is green\*. Breakfast is a bowl of sugar frosted grains and synthetically colored marshmallow bits\*, all treated with the preservative BHA\*. They float in a sea of low fat milk which has BHT\* hidden in the added vitamin A. What looks like juice is a blend of water, sugar, and synthetic dyes\*, plus artificial orange flavoring\*. An artificially colored and flavored

vitamin\* tops off the meal. If Jeremy is having one of his frequent ear infections, his mother adds a spoonful of bright pink, bubble gum flavored medicine\*. He runs past the fragrant pot pourri\*, out the door, across the lush green lawn — treated with powerful pesticides\* — across the newly paved asphalt\* street. He has forgotten his homework and his lunch money (for the third time this week) and Jeremy's mother wonders why her son simply can't get his act together.

## The Research

### **Food Allergies Can Trigger Symptoms of Hyperactivity and Attention Deficit Disorder**

British and German researchers placed 185 children who showed symptoms of hyperactivity and ADD on a very restricted diet. During the four week period that the children ate a limited number of foods, 116 improved significantly — a positive response of nearly 63%. When the children were challenged with the suspect foods/additives the symptoms returned. The test was double-blind, placebo-controlled.

Although care was taken to exclude several food dyes and two preservatives, this was primarily a study of food allergies. The results, however, document that diet can trigger hyperactive and ADD symptoms. Egger, J.; Stolla, A.; McEwen, L.: Controlled trial of hyposensitisation in children with food-induced hyperkinetic syndrome. *The Lancet*, 339:1150-53. May 9, 1992.

### **Diet Similar to Early Version of the Feingold Program Helps More Than Half of the Preschool Children Tested**

Canadian researchers worked with 24 preschool aged boys diagnosed as hyperactive. By making changes in the childrens' diet, including the removal of some food additives, they achieved an improvement in the behavior of 58% of the children.

The authors conclude: "Our research...demonstrates a larger potential impact of diet than previously reported." Kaplan et al, *Pediatrics*, January 1989.

### **Double Blind Study Demonstrates Yellow No. 5 Triggers Hyperactivity in Majority of Diagnosed Children**

British researchers tested one synthetic food dye, one preservative, as well as some foods, on a population of boys diagnosed as hyperactive. When the children were challenged with the dye and the preservative 79% of them reacted with hyperactive behavior.

The authors report: "The suggestion that diet may contribute to behavior disorders in children must be taken seriously."

Egger et al, *The Lancet*, March 9, 1985.

### **Animal Studies Show that Artificial Food Dyes are Associated with Hyperactivity**

"Animal studies indicate that certain food dyes interfere with chemical communication in the brain, adding further support to the theory that they are associated with hyperactivity in children. The researchers found that, in low doses, the dye enters the brain readily, inhibiting the uptake of neurotransmitters by nerve cells. Neurotransmitters are chemicals that convey messages from one nerve cell to another, regulating the activity of the nervous system."

(From *News & Features from NIH*, March, 1981, published by the National Institutes of Health)

### **Food Dyes Impair Performance of Hyperactive Children on a Laboratory Learning Test**

"Forty children were given a diet free of artificial food dyes and other additives for 5 days. Twenty of the children had been classified as hyperactive by scores on the Conners Rating Scale and were reported to have favorable responses to stimulant medication....Oral challenges with large doses (100 or 150 mg) of a blend of FD&C approved food dyes or placebo were administered on days 4 and 5 of the experiment. The performance of the hyperactive children on paired-associate learning tests on the day they received the dye blend was impaired by the challenge with the food dye blend."

Swanson and Kinsbourne, *Science magazine*, Vol. 207, March 28, 1980.

### **Study Connects Nutrition and Learning**

Over a four year period beginning in 1979 major synthetic food additives were removed from the foods served to children in 803 New York City public schools.

In 1979 the schools ranked in the 39th percentile on California Achievement Test scores. By 1983 the scores had risen to the 55th percentile, with the only change being dietary.

Schoenthaler, et al, *International Journal of Biosocial Research*, Vol 8, No 2, 1986.

The Feingold® Association of the United States is a nonprofit volunteer support group made up of parents and professionals. The Association provides members with step-by-step instruction on how to test for sensitivities to foods and synthetic chemicals. Membership materials include books listing brand name products which have been researched and are acceptable for use. The Association also generates public awareness of the potential role of foods and food additives in behavior, learning and health problems. Additional information for parents and professionals is available from the Feingold Association of the United States, P.O. Box 6550, Alexandria, VA 22306 (703) 768-FAUS.

## Some thoughts on new books, shiny shoes, and lost childhoods

School just isn't as much fun anymore. Growing up in a New York suburb, September always marked the beginning of a new year for me. The air had already given hints of change, a crispness that would come and blow away the sultry days of August.

The first day of school is a memory collage of brown leather shoes, a stiffly opened box of pristine crayons, the awesome responsibility of a brand new textbook that had my name in the top slot. There was a newness, a fresh start I approached with a mixture of excitement and nerves.

As a parent, the anticipation was a blend of excitement for the newness my children would experience, along with relief as I looked forward to some time for myself.

Now, as a Feingold volunteer, the luster of that new beginning is gone. Each September means more children who will be unable to stand in line, to concentrate, to complete their work, to feel good about themselves.

Each year, the ranks of the A.D.D. (or MBD or ADHD, or SLD or ED or HLD, or whatever) will grow. What is it today? Fifteen percent? Twenty?

Each year more teachers will be tempted to diagnose and prescribe. (Administrators and school boards like to believe this never happens. It does.)

Each year more parents will be badgered and more little children will go through the day in a medicated haze.

Each year more teenagers will leave school — with or without a diploma — unable to function in our world.

Each year more gifted teachers will run out of their last reserve of patience, and find a different profession.

Nobody has to tell you how serious the problem is; you have lived it. If you are as disturbed as I am, use this newsletter as a resource to stir up interest in solutions — *real* solutions. Pull out the center page, photocopy it if you like, and pass it on to one or more teachers. Give away the entire newsletter if you wish; we can send you another.

Please don't wait for these little kids to get help from the top; they'll be all grown up before our educational bureaucracy is capable of doing anything. Childhood is important; every child deserves to have one.

Jane Hersey, FAUS Director

## School Lunch

The food programs in U.S. public schools are overseen by the Department of Agriculture (USDA). Any school which participates in the programs (which provide food and funding) must meet certain USDA regulations.

One of these is to provide suitable food for children requiring special diets. Such a rule should be welcome news for Feingold families, but in speaking with a representative of the Department, the chances are slim that Feingold children would benefit.

The regulations cover severely handicapped children for whom diet may have life-threatening consequences. They are unlikely to consider hyperactivity a life-threatening condition, but Dr. Feingold wrote of children who would run out into busy streets after they had consumed synthetic additives.

Parents are still encouraged to speak with the principal, food service director and child's teacher. There may be some dishes your child can enjoy, and they may be willing to help support you by making room in the kitchen freezer or refrigerator for your child's special treats.

Who knows? You may be fortunate enough to find school personnel who want to improve the food served to all the children. If so, please let us know and we will gladly share our information with them.

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## Giving a Child the Gift of Time

"For the 10th time in the last 10 years, New Hampshire students achieved the highest average scores on the Scholastic Aptitude Test of those of any state, according to figures released recently by the United States Department of Education. Yet New Hampshire ranks 50th, dead last, in state aid to public schools. It is also 48th in salaries paid to teachers...In New Hampshire, children are not hurried. It is one (state)...that provides "readiness" classes for children who have completed kindergarten but who are not yet ready for first grade."

David Elkind, *All Grown Up and No Place to Go*, quoted in *I Hate School*, by Jim Grant

School can be a tough place for a chemically sensitive child; and even after the additives are removed, and the sensitivities dealt with, problems may remain.

If he is older than six when he begins the Feingold Program, there will have been negative experiences with both teachers and other children. The longer the school problems continue, the more damaged his self esteem, and the further he is likely to fall behind in picking up the subtle social cues that come so easily to some children and elude others.

A child such as this may not be ready to go to second grade when the calendar says he is seven years old, or to fifth grade just because he's ten. A little more time in first grade, for example, may mean the child will be able to master the early learning and social skills that are critical for future success.

Many children fit this description. In fact, the Gesell Institute estimates that between 30% and 50% of the children in American schools have been placed in the wrong grade — usually a year ahead of where they would function best.

Both parents and teachers will find the little book, *"I Hate School"* to be a valuable and reassuring guide as they search out what is best for a child. The author, Jim Grant, is a teacher, principal, and passionate advocate on behalf of children. He is also a dynamic and very funny presenter, giving workshops around the country. He leaves you saying: "of course...it all makes so much sense."

To learn more about books, tapes and workshops, contact the Society for Developmental Education at P.O. Box 577, Peterborough, NH 03458; phone 1 (800) 462-1478.

## More on School Lunches

The bright spot in *Pure Facts'* conversation with the USDA was learning that all public schools who participate in the agency's programs must have whole milk available for the students. [USDA Regulation 210.10(d)(1)]

Low-fat and skimmed milks are a problem for Feingold members. The butterfat is the part of milk which is rich in vitamin A. When some of the butterfat is removed some vitamin A is lost, so the government requires dairies to fortify the low-fat and skimmed milks with the vitamin. The vitamin A palmitate added to them generally is preserved with BHT. Whole ("vitamin D") milk does not have added vitamin A palmitate.

## Sad Commentary

Yankee baseball pitcher, Steve Howe, has been permanently suspended from baseball after being found to be addicted to cocaine and alcohol.

The *New York Times* (7/24/92) reported: "In his autobiography, *Between the Lines*, Howe wrote that his mother, Barbara, made him and his brother, Jeff, take the drug, Ritalin, because they were hyperactive children. Howe said he was 9 or 10 when he began using Ritalin. The Food and Drug Administration later determined that Ritalin increased hyperactivity in some children, which has caused Howe to ponder whether the drug contributed to his addiction."

## Something New for our Members!

FAUS has established a National Counseling Telephone Line in the New York office of the Feingold Association of the Northeast.

An experienced Feingold member will be available to take calls and offer help on using the Feingold program. The phone line will be in operation from 10am until 2pm Eastern time, from Monday through Friday.

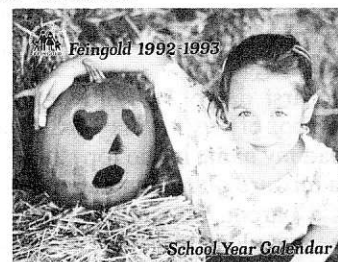
Our thanks to FAUS President, Pat Palmer and our New York members for making this a reality!

**(516) 369-3893**



## School Year Calendars

As this issue goes to press, Feingold members in the United States are receiving their new 1992-1993 School Year Calendar.



This is an especially exciting project this year for two reasons. First, it is adorned with pictures of our own "Feingold Kids". Second, it has been printed with **soy-based ink** (instead of petroleum-based) and should not pose a problem for our very sensitive members. We have long sought a better ink and were delighted to have found a printer in this area who uses it.

As you collect informal photos of your children and teens during the coming year, please keep the calendar in mind. We will no doubt be wanting more photos as we plan our next year's calendar.

Calendars are mailed out only in the United States and in bulk since this is how we can send them at the low bulk mailing rate. If you joined after they were mailed out, or if you live outside the U.S. and would like to have a copy, please contact the FAUS office at P.O. Box 6550, Alexandria, VA 22306 (703) 768-FAUS. The suggested donation for this fund-raiser is \$10. The income from the calendar will help fund our current and new programs, such as the counseling line.

## PIC Report from the FAUS Product Information Committee

The following **Frookies** products have been researched and found acceptable for use by Feingold members who are on able to tolerate **natural salicylates**.

**COOL FRUITS** push-up fruit juice popsicles: Cherry, Grape, Orange (all contain grape juice)

**FROOKWICH** sandwich cookies: Lemon, Chocolate, Peanut Butter, Vanilla (all contain grape juice)

**FAT FREE** cookies: Fig Fruitins (apple, grape juice), Banana (grape juice), Oatmeal Raisin (apple, grape), Cranberry Orange (grape), Apple Spice (grape, raisin).

Frookies juice sweetened products can be found in some supermarkets and in most health food stores.

## Pure Facts

*Pure Facts* is published ten times a year and is a portion of the materials provided with membership in the Feingold Association, a non-profit, volunteer support group.

For complete information on the Feingold Program, contact FAUS, P.O. Box 6550, Alexandria, VA 22306, or phone (703) 768-FAUS.

The Feingold® Associations do not endorse, approve or assume responsibility for any product, brand, method or treatment. The presence (or absence) of a product on a Feingold foodlist, or the discussion of a method or treatment does not constitute approval (or disapproval). The foodlists are based primarily upon information supplied by manufacturers, and are not based upon independent testing.