

Pure Facts



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The Biochemistry of Learning Disabilities

The biochemical basis for behavior and learning disorders was the heart of Dr. Feingold's work. He knew that it would take massive efforts on the part of researchers to understand the mechanism behind these disorders, and that it would take a commitment on the part of the federal government to provide the funding needed.

Dr. Feingold would have been 86 years old this month. What an extraordinary birthday gift the following information would have been for him!

Interagency Committee on Learning Disabilities

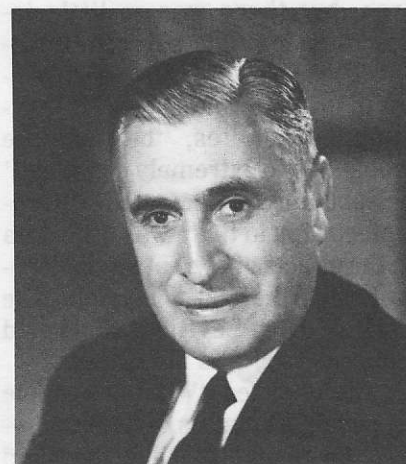
Although John Wacker lives in Dallas, he spends a lot of time in Washington, DC. For the past decade John has chaired the Scientific Studies Committee of the Association for Children & Adults with Learning Disabilities (ACLD), and has attempted to interest Congress in allocating funds to study learning disabilities as a brain dysfunction rather than a psychological problem. It hasn't been easy.

He met with heads of the major research institutions with the feder-

al government, with researchers, and with congressmen. John wanted these people to recognize the magnitude of the problem and he sought to interest them in brain research which would help explain learning disabilities.

"We were surprised — and disappointed," John notes, "to find many key people in our government who not only had never heard of ACLD; they had never heard of LD."

The many trips to Washington



Dr. Feingold in 1969

have paid off, however, and both the House and Senate overrode a presidential veto to pass a bill establishing an Interagency Committee on Learning Disabilities.

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Conference Speaker Investigates Causes Of Hyperactivity



Ruth Aranow, Ph.D.

Each year the student council at Johns Hopkins University selects a faculty member to present the Homewood Lecture.

Feingold members who had the opportunity to hear Ruth Aranow, Ph.D., address the 1984 Conference will not be surprised to learn she was the recipient of both this honor and the prestigious George Owen Teaching Award.

FAUS is proud to have Dr. Aranow as a member of its Advisory Committee and as a speaker at the Annual Conference to be held this month.

Although she joined the Feingold Association in 1976 to help her teenage son, Dr. Aranow's interest in the problems of the nervous system dates back long before then. She received her Ph.D. in physical chemistry in 1957 and later became interested in cell membranes. In 1969 she accepted a fellowship from the National Institutes of Health to study biophysics and physiology.

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The Feingold Association of the United States, Inc., founded in 1976, is a volunteer, non-profit organization. The purpose of the Association is to support members in the implementation of the Feingold Program and to generate public awareness of the potential role of food and synthetic additives in the treatment of behavior, learning and health problems. This program is based on a diet eliminating synthetic colors, synthetic flavors, and the preservatives BHA, BHT, and TBHQ.

Speaker, from page 1

In recent years the problem of locomotor hyperactivity (excessive movement) particularly interested her because it is a single behavior. It's easier to study a single behavior rather than a whole complex of behaviors, which many hyperactive children exhibit.

There were indications that the Feingold program was helping children, but there was so little information to validate it scientifically. "The tests which have been conducted didn't really resolve anything," she notes, "because the problem is so extremely complex."

Searching the scientific literature, she found there was little data on the effects of dyes at the molecular level in the nervous system. The work of Drs. Levitan, Silbergeld and Anderson was important.

"Then I asked, 'What are people proposing as causes of hyperactivity?' So many! It's like the blind men trying to describe the elephant, with each one looking at just one part of the picture."

Some of the suggested causes of hyperactivity include: lead poisoning, psychological factors, allergies, hyperthyroidism and hypothyroidism, PKU (phenylketonuria), imbalances in neurotransmitter action, nutritional problems (including sugar), and genetic problems leading to malfunction in prostaglandin synthesis.

She compared the dilemma to having a TV set which has lost the picture. If you look at a diagram of the wiring, you will see there are so many places where the malfunction could be located. But you may have to examine each part of the circuit and test it before you can uncover the cause.

Determining the cause of hyperactivity is such a "very, very complicated problem, and when you look at it in fine detail you realize how futile the testing was."

Dr. Aranow finds it easy to combine the Feingold diet with her busy schedule. Asked how she feels about the idea of eating petrochemicals, she commented, "Frankly, I prefer food that is just food."

Biochemistry, from page 1

The Committee, headed by the National Institutes of Health (NIH) is composed of representatives from thirteen government agencies. During the next eighteen months it will address many issues dealing with learning disabilities, including:

1. the number of persons affected
2. a description of current research findings on the cause, diagnosis, treatment and prevention
3. recommendations for legislation and administrative actions.

The Committee's work will conclude with a report to the Congress.

"... many key people in our government had never heard of LD."

... he sought to interest them in brain research which would help explain learning disabilities.

In April, the Committee held a preliminary meeting and invited various non-federal groups which have an interest in learning disabilities. The purpose of the meeting was to solicit advice and recommendations from these organizations. FAUS Director, Jane Hersey, represented the Feingold Association.

The Committee will be keeping these organizations appraised of its work as it progresses.

Summertime Notes



Some sensitive members react to insect sprays, lawn chemicals and various lotions rubbed on the skin (insect repellant, suntan lotion, etc.). Avoid these chemicals when possible.

PABA Ointment may be used for safe tanning and for burns of all kinds. Aloe vera and vitamin E oil are also natural remedies for burns.

F.A. of New York

For safe first-aid treatment try:

- Ammonia to relieve the itch of an insect bite.
- Combine 1 tsp salt and 1 Tb vinegar to dry up poison oak and poison ivy.
- Vitamin E oil from a capsule for scratches and scrapes.

F.A. of the Bay Area



NIH Funds 5-Year Study on Biochemistry of Learning Disabilities

The NIH has awarded a \$3.75 million grant for a five-year study of the neurological basis of language, behavior and learning disorders in infancy and early childhood.

The grant has been awarded to the University of California at San Diego School of Medicine, working in cooperation with researchers from UCSD, Children's Hospital and Health Center and the Salk Institute in San Diego; the University of California, Irvine, and UCLA.

"The exciting thing about this center," commented Director Paula Tallal, Ph.D., "is that we will have a collaboration between behavioral psychologists, pediatricians, neurologists and neuroradiologists all working toward the specific goal of defining the neurological problems in children with learning and language disorders."

(Information provided by the newsletter of the Canadian ACLD)

The Summer Dilemma — Away From Home and Hungry

The Convenience Store

You're thirty minutes from home, the kids are hot, tired and hungry, and you spot a 7-Eleven down the road. Do you dare stop?

There's a lot more to a 7-Eleven than Slurpees. If it's been a while since you browsed through a convenience store you may be in for a pleasant surprise. Hidden among the salty-sugary-chemical concoctions you can find real food: chilled fruit juices, yogurt, peanuts or milk.

For those times when a dessert is in order, look for natural juice popsicles or packaged snacks such as: Tastykake Oatmeal Raisin Bars, Austin packaged cookies, natural granola bars, as well as pretzels, potato chips and corn chips.

If you can't find what you want in the convenience stores in your area consider writing to the director of

marketing for the chain. (Your reference librarian can help you find the address.)

These corporations are aware that customers are looking for more wholesome foods. Letters from people such as yourself will be taken seriously.



Pick up your Picnic at the Supermarket

We tend to think of the supermarket as just a place to do our grocery shopping, but modern supermarkets offer a wealth of possibilities at lunchtime. Even the less glitzy

markets can provide the makings for an impromptu picnic.

Check out the salad bar. Are the bananas ripe? And do they offer melon halves ready to eat? Yogurt, cottage cheese and chilled fruit juice or milk are obvious choices. How about cheese with crackers or specialty breads?

At the deli section consider the sliced turkey or roast beef; they may even prepare sandwiches for you. Adult tastes suggest the croissants, and for the kids there's always a jar of peanut butter.

If you're not near a park, an elementary school playground might be just as much fun.

Keep an old blanket in the car for picnicking. A wash cloth will stay wet for a long time if it's sealed inside a Zip-Loc plastic bag; it will take care of dirty hands and sticky fingers.

Good foods and fun are waiting for you this summer. Enjoy!

What About Those Exotic Fruits?

Fourth in a series of articles on salicylates

Many, many times Diet Assistants have been asked, "Does kiwi fruit contain salicylates?" Generally the answer has been something like: "We don't know. If you are noticing a reaction discontinue using the fruit; but it is not routinely eliminated."

The advice from your Diet Assistant is still valid, but the recent study of salicylates in Australian foods has provided some additional information about the salicylate content of exotic fruits.

The following list was derived from the table of tested fruits compiled by Swain, Dutton, and Truswell (JADA, 85, pp. 952 and 953). Only fresh fruit, not canned or dried, is listed, beginning with the fruit found to have the lowest salicylate content (pomegranate). The list ends with fresh dates, which had

| | |
|-------------|---------------|
| Pomegranate | <i>Lowest</i> |
| Pawpaw | |
| Tamarillo | |
| Mango | |

| | |
|---------------|---|
| Rhubarb | <i>These have the same lower level as some pears or lemon</i> |
| Passion Fruit | |
| Figs | |
| Persimmon | |
| Custard Apple | |
| Loquat | |

| | |
|------------|---|
| Kiwi Fruit | <i>These have the same amount as a peach or some nectarines</i> |
| Lychee | |
| Avocado | |
| Mulberry | |

| | |
|-------------|--|
| Fresh Dates | <i>More than currants or oranges — Highest</i> |
|-------------|--|

the highest salicylate content of any exotic fruit.

When the original salicylate testing was done during the 30's in Germany, it is highly unlikely that many of the fresh fruits listed above were tested.

Because these fruits are not frequently eaten in the typical American diet, they should not be routinely eliminated during Stage One. However, anyone observing sensitivity to any of them should use caution.

EDITOR'S NOTE: These are tests done on Australian products and may not necessarily be representative of their American counterparts.

Karen S. Garnett

Next Month: Low Salicylate Foods Studied

No Scents Makes Good Sense

For the chemically-sensitive person, additives in foods are not the only type to avoid. The fumes from fragrances, found in so many household products, can be a source of trouble as well.

In response to the increased consumer interest in natural products, the Scott Paper Company now labels their Scotties facial tissues "unscented."

Scotties have never had fragrance added, spokeswoman Maria Smith told *Pure Facts*. But the company only recently realized that "unscented" is a positive consumer feature.

Scott Tissue is also fragrance-free, but some of the other brands made by Scott have a perfumed cardboard core (Cottonelle and Soft 'n Pretty).

Household products such as these fall under the jurisdiction of the Consumer Products Safety Commission. Chuck Jacobson of the Compliance Office of the CPSC explained that the law covers some

substances known to cause skin or eye irritation in a large segment of the population.

But reactions more typical of the Feingold member — such as headaches or behavior changes — are not covered by the law (the Federal Hazardous Substance Act).

Thus, there are no rules governing the addition of fragrances to paper products, and Feingold members have had little to go on. One can try to sniff a plastic-wrapped package while standing in the supermarket aisle, assaulted by smells from all sides. But the moment of truth comes only when the product is bought, taken home, and the package opened.

So, until the other segments of the industry catch up with Scott and clearly label their products, look for whatever information you can, and be wary of paper goods of all kinds, including sanitary products and disposable diapers.

Pesticides in the News

First EDB, Now Alar

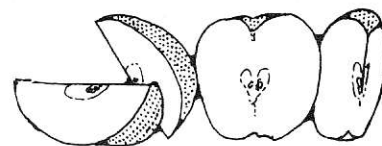
Alar, a pesticide used on fruits, has recently been attracting attention. While it is used on cherries, grapes, and other fruits and vegetables, its main use is to keep apples from falling from the trees too soon, to preserve firmness, and prolong shelf-life.

The newsletter of the Federation of Homemakers noted,

"Alar breaks down into a compound called UDMH (unsymmetrical dimethylhydrazine), a variant of hydrazine rocket fuel that may be a more powerful cancer-causing substance than Alar." (quote from *The Federal Report*, *Washington Post*, 1/21/86).

"Alar, manufactured by Uniroyal Co. . . has been used for decades! So what have we been feeding our infants along with the apple sauce, apple juice and ourselves in our apple pies and our crispy fresh apples?

"EPA (Environmental Protection Agency) estimated the economic loss to apple growers at \$31 million if this potentially cancer-causing chemical is banned."



Tree Top, the world's largest apple-juice processor will no longer purchase apples which have been treated with Alar.

Tree Top's Board Chairman Chuck Peters announced the directors' decision in order to protect their 3500 member growers cooperative. Peters noted the growing concern of consumers and the possibility of regulatory action on Alar.

Pure Facts

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For further information write to: Feingold Association of the United States, Inc., Box 6550, Alexandria, VA 22306.

The next issue of Pure Facts will be our combined July/August newsletter.

PIC Report

These popsicles have been researched and can be added to your Stage II foodlist (salicylates). Be sure you check the label carefully for the box that says "100% Natural."

Jell-O Fruit Bars:

Fruit Sensations Variety Pack
Berry Medley Variety Pack
Strawberry
Tropical Fruits Variety Pack
(All varieties except the Orange contain corn syrup.)

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