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Feingold Students Take Science Fair Honors

Pure Fac

Newsletter of the Feingold® Associations of the United States

"Does the Feingold Diet Work for Me?"

... was the name of the science fair project completed by Todd Wingard, age 13. Todd received the Third Place Award at the Anne Arundel County (Maryland) Science and Engineering Fair last spring.

He also received the Secretary's Award of Merit from the Department of Health and Human Services, National Association of Nurses.

FDA Approves 2 Dyes, Calls Cancer Risk 'Trivial'

(The Los Angeles Times)

The Food and Drug Administration has given its final approval to external uses of two drug and cosmetic dyes known to cause cancer in laboratory animals.

The agency said that it agreed with an industry contention that the risk to the public "is, indeed, trivial."

A public health organization formed by consumer advocate Ralph Nader said that the decision would be challenged in court, as a violation of the Delaney Clause in federal law, which prohibits approval of cancer-causing ingredients.

"No one believes, except for the Administration and their friends in industry, that there's a safe amount His project included a "Doctor Survey." Todd mailed a questionnaire and received 18 responses. The questions included the following:

1. Are you familiar with the Feingold diet? Yes: 18

2. Do you believe that certain food additives can cause hyperactivity? Yes: 13; Maybe: 2.

3. Do you recommend the Feingold Diet to your hyperactive patients? No: 13; Yes: 4.

4. Why or why not? The response varied, and included the following

of carcinogens," said Dr. Sidney M. Wolfe, head of the Public Citizen Health Research Group.

The two dyes (Orange No. 17 and Red No. 19) which have been under agency review and the subject of lawsuits for more than 20 years, are now in use under a temporary approval in products such as lipstick, nail polish, perfume and shampoo.

They are barred from foods and drugs that are swallowed because laboratory studies have found that they caused cancer in animals that were fed high doses of them.

Laboratory studies have also shown that "small but measurable amounts" of both dyes can penetrate the skin when they are applied as cosmetics, the FDA said.

The decision is part of a turnabout in government policy toward cancer-causing agents that is occurring as the FDA, under Reagan Administration leadership, has reversed its legal interpretation of the important anti-cancer law. reasons for not recommending the diet: "not effective," "only 5% respond to dietary intervention," "has not been proven," "diet of no benefit," "doesn't work," "only a rare patient shows a reaction to some dyes or additives," "I have to stay within my discipline" (response from a psychologist), "true Feingold diet is difficult to follow," "not nutritionally balanced and would be detrimental to the growth and development of the patient."

5. What treatment do you most recommend for your hyperactive patients? Drugs, with or without psychotherapy or behavior modification: 14

Continued on page 2



United Way

We are grateful to members who have designated the Feingold Association as the recipient of their United Way donation. In a few cities, the Feingold Association is listed as a qualified recipient. In other areas, members and friends can write in our name. This is particularly easy for those employed by the federal government (either in civil service or in the armed forces). If you contribute through the **Combined Federal Campaign**, please remember us when you fill out your pledge card.

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.

Science Fair, from page 1

Several years ago, when Jane Wingard told her son's pediatrician she planned to put Todd on the Feingold diet, the doctor said she was wasting her time. Today, Jane reports, he recommends the diet to other patients.

Todd had planned to base his project on the observations of his teachers. He gave each a diary to keep and asked them to rate his behavior in class over a period of weeks, during which he would be on the diet some of the time and off it at other times.

But Todd missed many of his classes due to a death in the family, and then testing, which disrupted the class schedules. So his plan for judging the effectiveness of the diet did not yield conclusive results.

Jane decided to introduce her own contribution to the experiment. She gave her son a drink of cranberry juice. but without his knowledge, she had "spiked" it with 7.25 ml of FD&C red 3. She then made careful observations of his behavior during the next three hours. Todd writes:

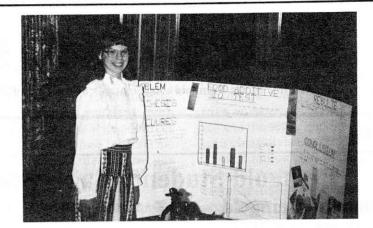


Todd Wingard

"I first became loud and excessively active, consumed an entire large 18" pizza (he is not salicylate sensitive), and when forced to sit and type some of this report, became angry and upset. After finishing the assigned work, with much difficulty, I became exhausted and appeared very burned out. I went to bed four hours earlier than normal for a Saturday night."

Todd had wondered if the diet would be as effective for him as an adolescent, as it was when he was younger. Now he had his answer.

from information provided by Patricia Frederick, FAWA



Monica O'Donnell

Fifth Grader Quizzes Adults

Monica O'Donnell, age 10¹/₂ and a Feingold child for 8 years, won First Place in the Lutheran Science Congress of Concordia College for her project "Food Additive I.Q. Test — How much does the average eater know about his/her food?"

Monica developed her project from the Science Fair packet put together by FAUS.

She contacted doctors, nurses, teachers, mothers and high school/ college students to determine which group was most knowledgable. Her hypothesis was that doctors and nurses would score the highest.

"Result: Nurses and mothers scored higher. Doctors didn't seem to have a lot of nutritional background. While mothers are more aware of what their families eat, most of the nurses are mothers too."

Monica's mom, Peggy, reports that the project taught a lot of people about what they are consuming.

It has been more than 13 years since Dr. Feingold first announced his clinical findings to the AMA; but professionals are still not in agreement over the value of the Program. Some of the reasons are explored on pages 3 and 4 of this newsletter.

Mighty Hyper Mouse

Lori Wachsmuth's science fair project star was Mighty Mouse, a rather endearing little fellow who specializes in running a maze and keeping fit on his exercise wheel.

Mighty handled these tasks well until a red disclosure tablet was added to his drinking water.

"Within a few hours," notes Lori's mom, Gail, "it was apparent to me that there was a reaction. His general activity level rose. Although he should have been hungry, when placed in the maze he spent much time gnawing on the sides...he ate for only a short time ...did not sleep at all that night... his nest was completely beaten flat.

"After the third day my scientific curiosity vanished and I replaced the water with fresh. Within twentyfour hours he seemed to return to normal."

Today, Mighty is a member of the Wachsmuth family . . . and strictly on the Feingold diet.

Science Fair Packet

The FAUS Science Fair Packet, containing resource material and project suggestions, is available again this year. To obtain a packet, send your name and address plus \$3 to: FAUS Science Fair, P.O. Box 6550, Alexandria, VA 22306.

Scientific Studies — Does the Feingold Diet Work?

Positive Results from the Studies

Although many families are referred to the Feingold Association by their doctor, we still hear frequent comments similar to those Todd Wingard received when he sent out his Doctor Survey. Why is there such disagreement over the Feingold Program?

There are many reasons. One is the discrepancy which exists in the reports of some researchers who conducted studies of the diet.

The author of one early study summarized his findings in *Pediatrics* magazine as follows:

"The results of this study strongly suggest that a diet free of most natural salicylates, artificial flavors, and artificial colors reduces the perceived hyperactivity of some children suffering from hyperkinetic impulse disorder."

> C. Keith Conners, Ph.D. et al Pediatrics, Vol. 58, No. 2 August 1976

Another study was summarized as follows:

"The results of this study offer data that a diet free of artificial flavors and colors results in a reduction of symptoms in some hyperactive children."

> J. Ivan Williams, Ph.D. et al Pediatrics, Vol. 16, No. 6 June 1978

Later, these researchers used the same studies to support their conclusion that the Feingold diet was not effective in the treatment of hyperactivity! The 1976 Harley study at the University of Wisconsin (funded by the food industry) has consistently been reported as negative in spite of the fact that:

13 of the 36 mothers

14 of the 30 fathers

6 of the 36 teachers

of the school-aged children rated them as improved on the Feingold diet.

Of the 10 preschool children tested, all 10 mothers and 4 of the 7 fathers rated the child's behavior as improved on the Feingold diet.

Study Designs Did Not Follow Feingold Program

Inview of the many mistakes inherent in the study designs, it is remarkable the children improved at all. The actual dietary habits of families involved in most of the research studies are very different from those of the typical Feingold Association member. Some of the more dramatic deviations are noted below.

Feingold Program: "A successful response to the diet depends on 100% compliance" (*The Feingold Cookbook*, p. 8)

Deviation: "The analysis of our data in terms of dietary infractions indicate the children made approximately one to two dietary infractions a week during our study." (letter from Dr. Harley, Jan 24, 1977)

At the NIH Conference, Dr. Williams also acknowledged that the children cheated while they were in his study.

Feingold Program: "Use only those foods listed in the Stage One Foodlist" (*The Feingold Handbook*, p. 5) **Deviation:** "Other food additives such as BHA, BHT, MSG, nitrates, nitrites, etc. were not given consideration in this study." (letter from Dr. Harley, June 4, 1976)

The Williams study did not eliminate salicylates, and **the children ingested synthetic coloring each day** in the form of colored pills!

Feingold Program: "The diet is usually not effective if the child is receiving behavior-modifying drugs." (*The Feingold Cookbook*, p. 9)

It can take an additional 30 to 40 days for a child to respond once behavior-modifying medication has been discontined.

Deviation: None of the studies addressed this consideration, and the children in the Williams study received medication during half of the study.

Feingold Program: Parents beginning the Feingold Program are asked to keep a daily diary and to note behavior at least once a day. Deviation: The children's behavior in the early Harley study was rated only once a week, making the ratings very insensitive to variations.

Other Problems with the Studies

The dosage of dye in the challenge material was typically 26 mg. Swanson & Kinsborne found that this was an error, and that the typical amount ingested by a child was between 76 and 150 mg.

One researcher (Dr. Williams) acknowledged that the children found the cookies (which contained the dye) to be very filling, and often did not eat all of them.

Children who are well established on the diet frequently do not react to a challenge of synthetic additives or salicylates. Many report that unless they go back to consuming them on a regular basis, there is little or no reaction. This was overlooked in the Mattes study.

Pure Facts/October, 1986 3

National Institutes of Health Evaluated the Studies

Because there has been so much controversy surrounding the Feingold diet, it was the subject of a consensus development conference held in 1982 by the National Institutes of Health.

After reviewing all of the studies conducted to date, the NIH scientific panel concluded:

1. The Feingold diet is a valid option for the treatment of childhood hyperactivity.

2. While some children were clearly helped, the scientific studies did not support the clinical reports of 60-70% success.

3. But, the studies were seriously flawed, and dealt almost exclusively with dyes, and thus were not a valid test of the Feingold diet.

Some of the Supportive Studies

Dr. Herbert Levitan of the University of Maryland found that food dyes reduce the ability of nerves and muscles to respond to signals from other nerves. At the same time, the intensity of signals sent spontaneously from nerves to muscles was greatly increased.

Levitan, H., Fluorescein Dyes Effect Membrane Permability of Molluscan Neurons, Society for Neuroscience. Abstracts, 1976.

Lafferman and Silbergeld of the National Institute of Neurology & Communicative Disorders also experimented with dyes and laboratory animals. They reported their work suggested the link between hyperkinesis in children and food dyes may have a neuro-chemical basis.

Erythrosin B Inhibits Dopamine Transport in Rat Caudate Synaptosomes, Science, Vol. 205, 27 July, 1979 The NIH panel concluded: "Controlled challenge studies have primarily involved the administration of food dyes to children, but have not included other food flavors or preservatives that are allegedly implicated in the causation of hyperactivity. Therefore, these controlled challenge studies do not appear to have addressed adequately the role of diet in hyperactivity."

> Defined Diets and Childhood Hyperactivity, report of the scientific panel of the NIH Consensus Development Conference, January, 1982

In other words, they concluded there never has been a scientific test of the Feingold diet!

Dr. Bennett Shaywitz of Yale University wrote to Dr. Feingold:

"Our results suggest that the administration of food colorings may affect normal development, and also suggest that hyperactivity should not be the sole factor investigated . . . measures of the effects of food coloring on cognitive functions must be carefully evaluated in any further study."

His report, "The Effects of Chronic Administration of Food Colorings on Activity Levels and Cognitive Performance in Normal and Hyperactive Developing Rat Pups" was published in Annals of Neurology, Vol. 4, No. 2, August 1978.

Swanson and Kinsbourne found that a challenge of 26 mg. of dye had no effect on the learning ability of hyperactive children. But with 100-150 mg. of dye, 17 of the 20 children showed statistically significant lower scores on a paired association learning test.

Food Dyes Impair Performance of Hyperactive Children on a Laboratory Learning Test, Science, Vol. 207, 28 March, 1980

Food Dyes Are Only Part of the Feingold Program

"As early as 1974, at a meeting convened by the Nutrition Foundation (food industry lobby) ... I pointed out the complexities of researching my hypothesis with the full diet.

"In view of the inherent difficulties in structuring a reliable research design, I recommended that initial research focus upon the dyes — not because they are the most important factors but merely as a practical vehicle to demonstrate conclusively that food additives do cause hyperactivity."

Letter from Dr. Feingold, 1979

Nutritional Criticism Not Supported

The FDA California study conducted by Dr. Weiss found that the Feingold diet was nutritionally satisfactory. The major criticism it has received is the temporary restriction of some fruits high in vitamin C. However, the allowed fruits and vegetables include many which are rich in vitamin C. (A half grapefruit provides the entire RDA of vitamin C.)

Lancet Reported Positive Study

Since the NIH conference of 1982, Sthere has been one reported study on diet and hyperactivity. this is the double blind British study by Egger et, al., which was published in the March 9, 1985 issue of *Lancet*.

In this study the authors report that yellow #5 and the preservative benzoic acid caused a hyperactive response in 79% (27 of 34) of the hyperactive children tested. The researchers conclude: "This trial indicates that the suggestion that diet may contribute to behavior disorders in children must be taken seriously"

(See Pure Facts, June, 1985)

4 Pure Facts/October, 1986

Halloween's Coming

Refer to page 31 of your *Feingold Handbook* for suggestions on dealing with this notorious sugar-coated holiday.

Mislabeling

The Food & Drug Administration reports **vanilla extract** produced by the Bickford Company of Akron, Ohio has been recalled due to mislabeling.

The label states, "Contains no alcohol, sugar, salt," and that it was made from "oils of natural herbs, vegetables, fruits."

The actual ingredients include propylene glycol, vanillin and ethyl vanillin, all of which are synthetic.

Mislabeling resulted in the destruction of 1,400 gallons of ice cream, manufactured by Super Ice Cream Suppliers of Metarie, LA, which distributes ice cream to about 140 retail stores in five states.

Two flavors, butter pecan and eggnog contained the synthetic dye Yellow #5, but did not list it on the ingredient label.

Because Yellow #5 is recognized by FDA to cause allergic reactions in an estimated 100,000 people, it must be listed on labels of foods, drugs and cosmetics that contain it. The other synthetic dyes used in ice creams need not be listed.

information from FDA Consumer, *9/86*

Does Sugar Contain Any Salicylate?

Until recently, the Feingold Association was not aware of any analyses of the salicylate content in various sugars available in the market place.

Swain, Dutton and Treswell did analyze some sugars available in the Australian food supply (*JADA* 85, p. 956-957), and found that there are some forms of sugar which may contain salicylates.

No measurable salicylate at all was found in Camp Maple Syrup or in white granulated sugar. These two sweeteners would appear to be excellent sweeteners for anyone who is salicylate sensitive.

Two sweeteners common in the U.S. food supply, corn syrup and brown sugar, were not tested at all, so their salicylate level is still unknown. One Australian brand of molasses was tested and found to contain more salicylate than a Red Delicious apple.

PIC Report

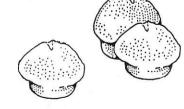
These **Duncan Hines** mixes can be added to your foodlist:

Stage I

Bakery Style Pecan Nut Muffin Mix (CS)

Stage II

Bakery Style Blueberry Muffin Mix (CS, blueberries) Bakery Style Raisin 'n Spice Muffin Mix (CS, raisins)



Most surprising were tests of a number of honeys available in Australia, but not available in the U.S. The variety with the most salicylate had four times the salicylate of the lowest. All had at least as much salicylate as fresh apricots, a considerable amount. Since no American honeys were tested, we do not know whether they are also high in salicylate, but it is very posible that they are. A 1932 German study of salicylates in plants (Klein, Handbuch der Planzenanalyse) found salicylate in both red and white clover, so perhaps clover honevs are high in salicylate.

Do not discontinue using honey unless you observe a specific sensitivity to the particular product you are using.

Karen S. Garnett EDITOR'S NOTE: Tests on Australian products are not necessarily representative of their American counterparts. This report is solely informative; do not routinely eliminate any foods unless you observe a definite adverse reaction to the particular product.

Next Month: Salicylates in Nuts



Product Alert

In some areas **Swiss Miss Choco**late **Pudding** is showing up with "Artificial Flavoring" listed on the individual container, but not on the outer packaging.

Avoid using this product until further notice.

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.

Pure Facts/October, 1986 5

Letter from Australia

"Dear Feingold Association,

I have just recently bought the Feingold Cookbook and commenced my 3 year old girl on your diet. I proved by trial & error over the last two years that she has a change in behavior due to artificial colors and flavorings, so I am hoping for a better life now I am putting her on your diet.

"However, I find that here in Australia even though I have been label reading for several years, the labels do not state exactly what products are in the foods. They generally just state 'emulsifiers', 'food acid', 'thickener', 'antioxidant', and many more. Other things like cheese, diary products, processed meats etc. don't have ingredients labeled.

"I am interested in label reading not only for my child's health but also for my family"

What is HVP?

HVP is an abbreviation for hydrolyzed vegetable protein, a flavoring agent used in many prepared foods.

It is often used in combination with monosodium glutamate (MSG), and HVP itself contains between 9 and 16% MSG.

While many people are aware of reactions which can be caused by MSG, few realize that HVP can have similar effects. In fact, some products sold in health food stores contain this additive.

It is used in a wide variety of foods, including: meat products and meat analogs (where it helps to mask the flavor of soy), soup, gravies (including au jus "natural" gravy), seafoods, and even some snack and bakery foods.

Processors have a variety of HVP flavorings to choose from, including: roast beef, roast pork, and roast chicken flavor.

HVP is generally made by treating such plant materials as wheat gluten, corn gluten, soy flour,

Food Labeling in Australia

Feingold members tend to believe that the only country which has serious problems with excessive use of synthetic additives and with confusing food labels is the United States. Our colleagues abroad would disagree.

Australia is in the process of changing its method of labeling to provide more specific information to the consumer.

Australian law requires packaged foods to "list all ingredients." (But does this include additives already present in the ingredients, such as preservatives in the shortening or vitamin fortification, or coloring in the margarine, etc.?)

At present, the additives are listed only by their 'class name' such as "preservatives," "color," or "emulsifier." They are not required to specify if the preservative is citric acid (not likely to be a problem for the chemically-sensitive person), or sodium metabusulfite (a serious threat for some asthmatics).

When the new system goes into effect by January of 1987, the specific additives will be noted. However, they will be listed by number, not by their chemical name. This system is in common use in Europe.



peanut flour or cottonseed with water, hydrochloric acid and heat under high pressure. The mixture is then neutralized, debittered, and bleached.

It is popular.with food processors because it intensifies the meaty flavor of foods, and holds up well under processing, canning, and freezing.

Although flavor enhancers such as MSG and HVP are not routinely eliminated in the Feigold Program, highly sensitive members should be alert for possible reactions. The disadvantage of the system is that there will be about 170 separate numbers, ranging from the 100's to the 900's, and there will not be a clear division of categories.

For example, the Feingold family living in Australia will have to remember that #101 (riboflavin) is an acceptable vitamin, but #102 (tartraxine) is the notorious Yellow #5!

320 is BHA, but 330 is citric acid. And even the natural colorings have numbers, so simply avoiding numbers will not help.

These regulations do not cover flavorings, which number in the thousands.

The additives . . . will be listed by number, not by their chemical name.

Members who are planning to travel to Australia, New Zealand, Norway, or the United Kingdom may wish to write in advance to the support groups in these countries for information on acceptable foods. For the names of organizations abroad using the Feingold Program, send a SASE to "International Groups, P.O. Box 6550, Alexandria, VA 22306."

Pure Facts

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