# Clinical Observations on the Treatment of Schizophrenic and Hyperactive Children with Megavitamins

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These observations have been made in the course of a routine pediatric practice, which includes all socioeconomic levels and all races. My office is in my home in a suburb of greater Oakland, California. A large portion of the patients are on welfare, that is, Aid to Families with Dependent Children. During the past six years, because of my interest in nutrition and Orthomolecular psychiatry, adolescents and adults are also being treated. Patient-to-patient referrals are the usual contacts. Recently schools, especially those for the handicapped, and psychologists are sending children with learning and/or behavior problems of all degrees of severity, from the very minor to the severely autistic children, as well as retardates and malformed children.

When I first came here in 1957, the school psychologists were considering almost all problem children to be caused by the home, especially by the mother. Repeatedly l stressed minimal brain damage to school psychologists and the need for electroencephalograms and possibilities of medication. Now the schools demand that hyperactive children be medicated, even before the physician has examined and diagnosed the child, despite the fact that deviant children can be classified into five general types with different etiologies and therapeutic requirements individually adapted to each child.

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## Evaluation of the Patient

The first visit requires one to one-and-a-half hours in order to get a thorough history, This is easier taken chronologically from conception onwards, with particular attention to the delivery history and to earliest feeding. Usually the newborn is fed first with corn syrup in the form of glucose water, followed by cow's milk, and then solids at two weeks of age; so that by three months the infant is receiving a full Thanksgiving dinner except for the pickles, olives, hors d'oeuvres and cocktails, all of this put into an immature digestive tract. He even gets tobacco smoke secondhand. Pinpointing the age of onset of respiratory symptoms, colic, and eczema is especially important. The history continues with other illnesses, accidents, and operations, physical development, that is, age of sitting, walking, etc., and ends up with

a present detailed dietary and habit history, a survey of systems, and consideration of the current problems.

Family history should include all chronic diseases such as obesity, alcoholism, cancer, heart and kidney diseases, mental illness and retardation, as well as the usual asthma, other allergies, migraine, and diabetes. So far, I have implied the "taking" of a history from the parent; but of equal importance is listening to that which the parent volunteers, not only on the first visit, but on subsequent visits, as, for instance, the mother's comments on the child's failure to look her in the eye, or that the child seems to live in another world, or that "Johnny was allergic to milk as a baby but he outgrew it."

Physical examination will note the general appearance of the child, foci of infection, especially of the teeth and ears, stigmata of the abnormally formed child, and includes neurological testing. Examination for flatness and other deformities of the feet, as well as of general posture, are also quite important. A great deal can be learned by observing the child at play with a set of blocks. Mine are two-by-fours, 18 inches long, with smaller blocks that are one-half, one-quarter, and one-eighth the length, a few triangular in shape, some cut lengthwise, and a few with curves. How the child handles the blocks and what he makes not only indicates his intellectual ability but may show visual dysperception. Recently a handicapped eight-year-old built a very good-looking fort, but none of the blocks were lined up squarely, and he must be tested by an ophthalmologist who specializes in dysperception, as the boy's visual difficulty had not been diagnosed by routine eye examination. The blocks also may keep the child occupied during the time of history taking. To be sure, the more severely disturbed children are unable to concentrate at play.

Laboratory tests should include blood count and panel, urinalysis, and hair analysis for trace minerals. Recently I am doing the blood pH and base bicarbonate, as suggested by Dr George Watson. Electroencephalograms, allergy skin tests, and a six-hour glucose-tolerance test are done when indicated. We do not have available the more recently developed test for histamine, blood amino acids, and other chemicals which are being done in the large research laboratories. Dr. Josephine Campbell and I ran hundreds of mauve tests at the Bruce Lyons Memorial Research Laboratory of Children's Hospital Medical Center in Oakland for two years, during which time we realized why some reports stated that the mauve test represented only the drugs which the patient was taking. The mauve is absorbed by any plastic, so that urine must be collected and tested in glass; and it must be kept in the dark, as light destroys the mauve, as do time and heat. In 1969 we suddenly were unable to get any positive results. We finally realized that this occurred at the time when the laboratory was being entirely encircled by a new freeway, during the building of which the water pressure in the lab was greatly reduced, so that the time for the evaporation of the specimen was tripled. Thus we lost the mauve. When the water pressure was improved, the freeway traffic became great, and apparently the resultant nitrogen oxides were sufficient to destroy the mauve. Mauve is a very fascinating research chemical now identified as a kryptopyrrole, but in my hands it was not of enough diagnostic value to be used in a routine medical practice.

As stated above, children with behavior problems will usually fall into one of five general classifications, and some children will have characteristics of more than one type. No two children are exactly alike and each will require an individualized therapeutic program, most of which can be prescribed in an ordinary medical office at a reasonable cost. A working diagnosis is developed at the first visit.

## Types of Children

One type of child is the severely malnourished, basically normal child.

Malnutrition as the culprit will show up in an absence or paucity of allergy symptoms in the child or his family, and will be clearly shown in the dietary history. For example, breakfast, if eaten, will consist of cold cereals, milk, and sugar; lunch may be a candy bar or a white bread sandwich and milk. Numerous sodas, including cola, as well as candy, ice cream, cookies, and gum are eaten in the afternoon; and there may or may not be animal protein and vegetables for dinner, with more milk. I have learned from Dr. Magdalena Pallos to place this type of child on a diet before starting vitamins and minerals. Otherwise the family will continue its poor eating habits and expect the vitamins to cure the behavior and educational deficits. With cooperation, the prognosis is excellent.

The second type is the hyperactive child who is allergic, exhibiting the tension/anxiety syndrome of food allergy. Often this bottle-fed child has come home from the hospital at three or four days of age with a runny nose and/or colic, has had frequent respiratory illness, possible eczema, and may still have asthma or may have "outgrown" it. Teeth are either decayed or contain many fillings. There are dark circles under the eyes, often with generalized pallor. The family history of most of these children will be strongly positive for asthma, other allergies, migraine, and diabetes, and usually will also contain a scattering of obesity, alcoholism, heart and kidney disease, arthritis, epilepsy, cancer, mental illness, and retardation — needless to say, not all in the same person.

From the child's history alone, cow's milk allergy can be suspected. Corn allergy is the second possibility. If, however, allergic symptoms appeared after solid foods were fed in infancy, then the food allergens are not so obvious. In this case, one may prescribe what I call a "cave man" diet, namely meat, eggs, fish, fruit, vegetables, and nuts, all in pure form, thus eliminating all sweets, grains, and milk. This concept appeals to some small boys, and may be more readily followed than complicated elimination diets, as the caveman diet stresses what may be eaten rather than what may not be eaten. It is easier to institute any type of dietary therapy if both parents are present at the first visit. If the child is allowed to help himself to food at home or in stores, it may be advisable to place the entire family on his diet for two weeks. This will save a great deal of household disruption. Of course, if the food allergens are still being given in this diet, further steps are necessary; but many children improve with the cave man diet.

A more elaborate way of finding food allergens is to use a rotating diet in which only one protein, starch, fruit, and vegetable is used each day for all three meals: the same things for breakfast, lunch, and dinner, and between-meal snacks, with a completely different menu for each day of the week. The necessity for a full dinner menu at breakfast and lunch must be stressed or the child may be hungry. The same menu is repeated each Monday, each Tuesday, etc., in rotation. Leftovers may be served to other members of the family, or some of the food may be frozen from week to week, to minimize the expense and labor involved, although some mothers have told me that this type of diet is actually no more expensive than their former diet which included relatively high-cost snack foods and soft drinks. Incidentally, I might insert at this point my observation that the socioeconomic level of the family is one of the least important factors in obtaining cooperation and satisfactory results. The ability of the mother and her desire to enter into a long-term and often arduous program seem to be related to her own character, the amount of help or interference by the father, whether in or out of the home, or by other members of the household, extended family and community.

There are other methods of determining food allergies, but they are medically time-consuming and expensive, although they may be necessary in some cases.

When using the elimination diet, once a

successful result is achieved, then trial is made by reintroducing one eliminated food at a time and any symptoms noted. With the diet established and food allergens removed, as well as removal of household inhalants and treatment for pollen allergies, if present, then vitamin and mineral therapy may be instituted. I keep in my office, or have access to, five different brands of vitamins and minerals and know the source of each tablet, as well as the excipients and binders; because to give a wheat-allergic child vitamins made from wheat, or to give a corn-allergic child vitamins bound with cornstarch is to undo the dietary therapy. The physician needs detailed knowledge about foods, or must have his own especially trained dietician, because the usual training of a dietician does not include all facets which are essential for successful therapy. It takes time to change the diet habits of a family. Repeat visits are necessary every few weeks, and later at longer intervals.

The third type includes the schizophrenic and autistic children. The schizophrenic child, who is able to talk, is often diagnosed by observation of the faraway look in his eyes, the same look which I think Leonardo da Vinci captured so superbly in the Mona Lisa. The child may cling to the mother, does not play in a normal fashion, and is described as "living in another world." He is a beautiful child, has had a normal physical development, and may use speech in an abbreviated or abnormal form. The autistic child does not speak or has a very limited use of language, but he may be differentiated from the retarded by his relatively normal physical development and lack of physical stigmata. The mother's description which she volunteers may be quite diagnostic. Unfortunately, the HOD and similar tests for perceptual defects are not useful under about 16 years of age.

If these children are allergic, then full allergy therapy and dietary treatment is necessary, in addition to megavitamin therapy. Do not be confused when the older child is said to have outgrown his asthma, because, Theron Randolph, M.D., has shown, the allergy may have been transferred from the respiratory, skin, or intestinal systems to the central nervous system. If the children are not allergic, megavitamin therapy is started immediately, along with removal of sweets and white flour from the diet. In my experience, it has been necessary to gradually increase the vitamin C as well as the nicotinamide to at least 2 grams per 50 pounds of child weight per day, as well as giving the other B vitamins. Chelated minerals are given, based upon the finding by mineral analysis of the hair.

Prognosis is dependent upon the severity of the illness, the age of the child at onset of therapy, and the perseverance of the parents in continuing treatment. Many children, especially the autistic, have been severely ill since birth. Because they have enzyme defects which are modified by the megavitamins, treatment cannot be discontinued. In fact, sometimes if it is temporarily stopped and then restarted, it is much harder to get improvement the second time comparable to the first improvement with the initial treatment. I do not know why this happens.

The fourth type, the minimal braindamaged child, may or may not be allergic. He will have a history of anoxia at birth, at surgery, or from an accident, or he may have had encephalitis or meningitis. Often the electroencephalogram will be' abnormal. These children may need tranquilizers or ritalin, although I learned from Dr. Herman Dom that chelated magnesium combined with other needed minerals and high doses of vitamin C may either greatly reduce or obviate the need for medications. Diet, vitamins, and minerals are based on the child's nutritional state and any superimposed allergy or other problems. Prognosis is usually better than expected if he has a total therapeutic regime as described later. This is especially true if he was genetically endowed with a normal brain, since all new growth of brain after the injury will be normal. The brain grows to about age 18 to 20 in the

female, and to age 25 in the male. Repair of brain tissue also occurs.

The fifth group, the truly mentally retarded and defective children, may or may not have allergies and malnutrition. Some may have been misdiagnosed as schizophrenic. I have been quite pleasantly surprised at improvement of some otherwise completely hopeless cases with the use of megavitamins and good diet. Contrary to some professional opinion, parents are not unaware of the child's deficits, and are very pleased to have a reasonable and relatively inexpensive regime which over a period of years may make the child easier to manage and more capable of learning.

**Total Therapy**

In contradistinction to the adult, there must be a general, comprehensive program for every child of all five types. This should include:

(1) Habit and character training.

(2) Special and remedial education if necessary; otherwise, regular education. Many of our handicapped adults of today are unnecessarily handicapped because of the failure to provide both of these when they were young.

(3) The help of a psychologist or psychiatrist, if necessary, for the relief of emotional tensions in the child and family.

(4) All of the families need diet education, reinforced month after month. The ordinary American diet is far too high in sweets and white flour foods for any child. Treats may be allowed for major holidays and birthday parties only. Cod liver oil, one teaspoon daily, is an excellent appetite builder.

(5) Foci of infection, especially teeth or abcessed ears, must be cared for. Little girls often have urinary tract infections. Any defects, for example, myopia, should be corrected if possible.

(6) A full immunization program must be used despite the psychological trauma of shots.

(7) Correction of foot deformities including flat feet and posture is most important for all children. Ligaments are one of the most difficult organs to nourish, therefore are very susceptible to vitamin, mineral, and protein deficits, which cause weakness of the ligaments and consequent slipping of foot and other bones. Consultation with a podiatrist may be indicated.

(8) There is a completely different method of therapy which has been used on over 100 disturbed children by the Doctors William and Gladys McGarey of Phoenix, namely castor oil packs. Four thicknesses of wool flannel are cut in a size long enough to cover the abdomen from two inches to the left of the umbilicus around to and including the right side of the back, and wide enough to extend from the manubrium of the sternum to the symphysis pubis. The flannel is wrung out of castor oil. The child is undressed on the bed, which is covered with plastic. The castor oil pack is applied and covered with a second sheet of plastic and then with a heating pad for from one-half to one-and-a-half hours. The skin may be cleansed of the castor by using baking soda in warm water. The children receive this after school, daily, and feel so much better that many of them ask for their packs. Attempts are being made to determine the scientific basis of improvement. So far, I have had insufficient personal experience to report on this treatment. However, as it is not only harmless but relatively without cost, I feel that many of us might try it. Apparently the results are more than would be obtained from the heating pad. and rest alone.

(9) The spiritual side of the child should be cared for, as well as the physical, mental, and emotional.

(10) A few children, either because of the severity of their behavior and/or the inability of the home to cope with the child's problems, need foster home or institutional placement, temporarily or permanently, in which case the physician should insist on full therapy for the child in these settings.

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**Summary**

Many hyperactive and schizophrenic children can be diagnosed and treated in the routine medical office. The most important part of the examination is a detailed history, which includes family history, the birth, development, and feeding of the child, as well as the present problems. Megavitamins, while very important, are sometimes better prescribed after the general nutrition and allergies of the child have been treated, so that the parent does not rely upon pills alone to solve the child's problems. Children must have access to education, habit, and character training, psychological care, as well as correction of physical deficits, in addition to specific therapies for problems. The use of castor oil packs, suggested by the McCareys, may be another valuable adjunct to total therapy for these children. For the few severely ill children who do not respond to treatment in the office, encouragement can be given to the parents that new approaches to the problem are continuing to evolve.

## USE OF A ROTATED DIET WITH AUTISTIC CHILDREN

Studies show that many autistic children are allergic, or come from allergic families. There are reported case histories of autistic children becoming normal when the specific food allergens were permanently and totally removed from the diet. There are some allergists who desensitize to foods; but long-term studies by other allergists indicate that this is not nearly as satisfactory as total elimination of the offending food(s).

### What is Allergy?

Allergy is an abnormal or pathological reaction to a substance, or substances, which is tolerated without reaction by non-allergic persons. The substance, which is called an allergen, may be eaten, inhaled, or come in contact with the skin. Drugs which are injected may also be allergens, but need not concern us here. Allergens come under the broad groupings of (1) food; (2) chemical additives to food; (3) household inhalants, which include dust, dog, cat, and other animal danders, wool, the microscopic house dust mite, feathers, glue, etc.; (4) pollens, which may be airborne as far as 50 miles from their source; (5) resins from grass, Christmas trees, and other plants, which may be either airborne or contact the skin; and (6) hydrocarbons and their breakdown products as found in paint, perfume, insect sprays, automobile exhaust, fumes from gas stoves and other gas appliances.

Any allergen may affect any organ or body system, for instance, the skin, respiratory tract, intestinal tract, genitourinary tract, or, as in the case of the autistic child, the central nervous system. According to Dr. Theron Randolph, the most serious of any allergy is that of the CNS, which includes also some atypical forms of epilepsy, headache, irritability, emotionalism, dullness, and failure to think clearly.

The problem, reduced to its simplest terms, is to determine what the offending substances are, and to eliminate them from the individual's environment, either internal or external.

### Food Allergens

The greatest offender of all allergens is food, because that which is eaten remains in intimate contact with the body during approximately 36 hours as it travels through 20 or more feet of intestinal tract. When the offending allergen is reintroduced by repeated ingestion, it can be seen how great the exposure is for the sensitive person, and how difficult it may be to obtain relief from the troublesome symptoms. As a means of discovering the food(s) causing an allergic reaction, and at the same time bringing a measure of relief from chronic allergy, a rotated diet regime has been developed which has brought about positive results when followed carefully. The method is entirely safe, inexpensive when compared to other methods, and carries the added advantage of being nutritionally balanced and beneficial for any or all members of a family.

In fact, it is recommended that an entire family follow the diet together, so that the affected member will have fewer problems in adhering to the diet and not be tempted by the availability of forbidden foods.

Other methods of diagnosing specific food allergens are available. However, scratch tests and intradermal tests are notoriously inaccurate. The provocative food tests of Hinkle are painful if done by needle; but whether done by needle or sublingually (that is, placing the substance underneath the tongue by dropper), they consume many hours in a doctor's office or associated laboratory, and many autistic children would not adjust well to day after day of this type of investigation. Precipitin tests on the blood, if positive, show specific food allergens, but many persons are allergic who do not have blood precipitins to the specific foods. There is a method which has been developed by the Bryans in which the patient's white blood cells are tested against food extracts. This, while good, is not only expensive, but usually not available outside of research laboratories. Therefore, a long-term but absolutely harmless method of diet regime has been worked out which, if followed carefully over a period of months, will show which foods are causing trouble. **(NOTE:** This diet is not designed to show allergy to chemical additives in the food, either from sprays or the linings of cans, although special diets can be worked out to do this, too. Also, pills containing cornstarch and other binding powders will not be indicated by the diet alone. However, 80 to 95 percent of the food problems can be determined in this way.)

**Instructions that may be given to the parent on how to rotate the diet**

Two sample rotated diets are given. Certainly you may work out your own, provided the principles of the diet are maintained. You will observe that no food is repeated within a week's menus, and also that many of the most common offenders, i.e., milk and all milk products, egg and all egg products, chocolate, nuts, wheat and all wheat products, rye, barley, and oats have been completely eliminated. The only grains are corn and rice. In making up your own diet, if you prefer different food combinations, a vitamin C-containing fruit or vegetable should, as far as possible, be used daily. These are the citrus fruits, raw tomato, raw cabbage, pineapple, and, to a lesser degree, papaya, apple, and other raw fruits.

Once you have established the diet for the week, it must remain the same for succeeding weeks. The reason for this is that it takes four to five days for the effect of food allergen to completely wear off, so that a seven-day rotation provides a greater margin of safety than a five- or six-day rotation. Also, it is easier to remember. Foods left over from any day may be eaten by the rest of the family the next day, or they may be frozen and saved for the following week.

**A word of caution:** Be sure to have enough food for each day. When milk and the grains, including bread, are removed from a diet, a large part of the bulk and calories are removed with them, and the child will need far greater amounts of meat, fruits, and vegetables than one might think. The child should not be hungry. If necessary, feed him several extra times a day.

The first few days of the diet will be the hardest. The child will want the foods to which he is accustomed; his body will crave the foods to which he is allergic; and he may be more irritable than usual. Clinically, one characteristic of the autistic child has been his food faddism. This may or may not represent his specific food allergens. Adults have described their first four or five days of this diet method as being "just like coming off drugs" in the severity of the craving. This is an excellent reason to have all foods not on the day's diet removed from the home or placed beyond the reach of the child. If your child is upset the first week, it may indicate that he does, indeed, have a food allergy.

**Detecting the Allergens**

The basic rotated diet may contain one or

more foods to which your child is allergic. If, after three weeks, the original diet indicates that on a certain day of each week the child has problems, then the foods of that day are interchanged with foods of other days, but no two foods are interchanged on the same day. For example, if the problem day is Tuesday, the protein is changed with Monday, the fruit with Wednesday, the vegetable with Thursday, and the starch with Saturday, keeping to this revised schedule for the next two or three weeks before new foods are tested by adding to the diet.

If there are no problems with the original diet and the child has improved, one food in its **pure** form is added twice a week, either Monday and Thursday, or Tuesday and Friday, for one or two weeks. The food is added every third or fourth day in order to give a booster effect. Some foods cause such severe allergic reactions that you will recognize a problem immediately. Others to which the child may be less sensitive may need more frequent and repetitious eating, in order to be sure that the food is an offender. It is a matter of personal choice which food is tested first, second, third, etc. Many will wish to test milk, in which case, pure milk should be used and not ice cream, sherbet, cheese, or any food mixed with milk. Wheat may be greatly missed and therefore tested next. In this case, it is very important that pure wheat be added and not bread, cake, or cookies containing many other products. By this time the family cook will be adept at reading labels. When eggs are tested, it should be done several days after the chicken is eaten.

It will probably take about six months to investigate all foods with this system. After about two months, when it is known that the child may eat certain foods with impunity, it is easier if, for example, the foods for Monday are purchased and then used on Monday and the remainders used up on Tuesday, along with Tuesday's menu, so that the rotation may actually be less rigid but the basic rotation principles maintained.

**Questions Most Frequently Asked By Mothers — and Their Answers**

**(1) What do I feed him for breakfast?**

It is absolutely essential to become accustomed to eating "lunch" for breakfast, lunch, and dinner — in other words, the same food all day long — and to ignore or forget the standard American eggs, toast, milk, and cereal breakfast. Some children enjoy calling this their "cave man" diet, because, after all, the cave man probably had no milk, refined sugar, or cultivated grain.

**(2) Why rotate foods over an entire week instead of over a shorter period of time?**

It takes four to five days for the effect of an allergenic food to wear off after it has been eaten, providing it has not been re-eaten during the same period of time.

**(3) Does a "little bit" of any food really mat ter?**

Yes, it does. In order to get results from this "detective game" with diet, it must be followed scrupulously. If mistakes are made, make a note of them and observe any effect in the child's behavior. Don't kid yourself and ignore mistakes or pretend that they don't matter. For example, the flour in gravy or on fried chicken is wheat. With a wheat-sensitive child, this is quite sufficient to maintain his symptoms.

**(4) What do I do if the child obtains for bidden foods?**

Don't despair if mistakes have been made, the child steals food, or the diet is broken in any way. Add these events to your notes and use them in your detective game of finding the food allergens.

**(5) What do we do about social occasions?**

There are several ways to meet these. The child's food may be taken with him. The hostess may be asked to prepare his food; but, if so, the plainness of the cooking must be stressed, as most cooks mix several foods together in almost every dish and become almost unaware that they are doing it. There is no need to tell the parent of an autistic

child that help for his child is more important than social good manners or the social custom of the guest eating what he is served.

**(6) What about the child who attends school?**

Most schools are very cooperative about allergy diets. However, if there is a problem, lunch may be eaten at home or carried to school, in which latter case, supervision will be necessary to prevent the younger child from trading food with his neighbor. Some children will present no problem this way if they understand what the parent is trying to do and can cooperate.

(7) **What kind of snacks can I provide?**

The diets presented are in their simplest forms. Dried fruits may be included on the day of the same fresh fruit. Also, there are unusual foods such as coconut, lechee nuts, olives, and others in delicatessens and health food stores. As time goes on, various species of nuts may be tested, and these, if tolerated, make excellent snacks.

**(8) May we use potato or other types of bread and cookies that are said to contain no wheat?**

The answer is "No." These common products have been tested and found to contain wheat or other grain glutens, despite the label.

**(9) May canned fruit be used?**

Canned fruits are not allowed because the type of sugar, whether beet, cane, or corn, is never specified.

**(10) Why the plainness of the diet?**

Salad dressings, including mayonnaise, catsup, and other commercial sauces contain a potpourri of ingredients and must not be used. Many foods and most margarines contain powdered milk. Sandwich meats are allowed 50 percent cereal by law, and it may not be listed on the label. As the household cook becomes sophisticated in handling an allergy diet, especially after the major food allergens have been identified, she will be able to make safe types of dressings and sauces in order to spice up her menu.

**(11) What about canned soup?**

Soup must be homemade. One glance at the label of a can of tomato soup, for example, shows that it contains far more than tomato.

**(12) Why weren't corn and rice eliminated from the diet?**

They can be, and perhaps should be. If so, then rotate the starches on a five-day pattern, i.e., white potato, sweet potato, peas or beans, tapioca, and buckwheat.

**(13) Why continue rotating the diet for many months?**

(a) Food allergens in an allergic child are not yet fixed, as they are in the allergic adult. In other words, if a child is found to be allergic to milk, and this is removed from the child, but he continues to eat wheat, corn, eggs, chocolate, white potato, beef, or other common foods daily, he may develop within months or years an allergy to one or several of these substances.

(b) Another reason for rotation of a diet is to provide the widest variety of food substances, with as many of them uncooked as possible, so that not only the known proteins, vitamins, and minerals will be eaten, but that the child will receive many yet to be isolated but necessary vitamins and trace substances.

(c) It may be that with optimum nutrition there will be much less likelihood of allergenic foods being absorbed in such a chemical form as to be allergenic to the body proper.

(d) Optimum nutrition will reduce the frequency and intensity of all infectious illnesses.

**Shopping for the Rotated Diet**

Shopping is easiest done at the meat counter and the fresh fruit and vegetable counter, with packaged foods and mixed foods avoided, especially during the early months of this diet. Large ball tapioca and buckwheat in bulk are easiest found at a health food

store. Dried peas and beans are in all stores. It is easier to feed the child pure foods from the meat, fruit, and vegetable counters than to get involved with any commercially prepared foods.

The expense of this kind of diet is very little greater than an ordinary American diet that contains so many luxury foods and soft drinks, such as candy, soda pop, packaged cake mixes, Cracker Jack, potato chips, etc. Certainly, if the child happens to have autism caused by food allergy, the time, effort, and extra food expense will be worthwhile. If this does not help your child, it cannot have nutritionally hurt him in any way; and while the family is partaking of such a regime, other members may well find their specific food allergens and considerable relief from chronic symptoms such as headache, post nasal drip, muscle cramps, stomach ache, fatigue, irritability, and mental sluggishness.

**If Food Allergens are not Found**

If no results are obtained for your child, it may be that he is allergic to corn. A corn-sensitive child can be very difficult, because of the ubiquitous use of cornstarch in such unlikely places as the glue on postage stamps and envelopes, the lining on a paper cup, tooth paste, baking powder, and almost all medicine. That which is put into peanut butter is at least labeled. Corn starch and other binders (excipients) are used to make tablets, such as vitamins and tranquilizers. Before testing this by removal of medicine, your private physician **must** be consulted.

If you still suspect food allergies in your child and have not found them, more detailed methods may be necessary to search for possible chemical sprays or additives to foods, including coloring, or for the chemicals of can linings and of plastic wrappers, as on meats and frozen foods. To test for chemical sprays, a source of organically grown spray-free food must be found. Pure spring water may also be substituted for chemically treated tap water.

**Do not Stop a Successful Diet**

Once you have determined food allergens, do not try to re-add them to the diet, even in small amounts. Although a very small amount causes no symptoms today, the effects may accumulate over a period of time. If, however, food allergens are scrupulously avoided, the very occasional accidental eating as a single occurrence may be tolerated by the child without serious or long-term relapse of symptoms. An occasional eating of even a very large amount is less likely to produce symptoms than daily eating of small amounts, but neither is recommended.

If you find this concept of a rotated diet unusual or difficult, do not be surprised. It is my custom to take at least an hour to present this to a new patient, and then, on follow-up visits every few weeks, to answer questions and help with details of the diet. Usually it is not necessary to help a parent with observations if the child improves. Improvements will be obvious — but short-lived if the family returns to their previous patterns of eating.

## ROTATED DIET

**Contains one protein, starch, fruit and vegetable daily**

| | PROTEIN | STARCH | FRUIT* | VEGETABLE |
|---|---|---|---|---|
| MONDAY: | beef | tapioca (cook tapioca and prunes together after soaking all night) | dried prunes | asparagus (may be canned) |
| TUESDAY: | seafood | white potato | papaya, or dried figs | squash |
| WEDNESDAY: | chicken | rice | fresh pineapple | carrot |
| THURSDAY: | lamb | buckwheat | orange | artichoke |
| FRIDAY: | fish | peas or beans | banana (gr. or dried) | lettuce tomato |
| SATURDAY: | pork (no ham or bacon) | sweet potato | apple | raw cabbage |
| SUNDAY: | turkey | corn | grapefruit Mazola marg. | spinach |

May add salt. Drink only water, except *any pure fruit juice may be used the same day the fruit is on the list. Sugars and spices are *food* and should be tested as such (see p. 3 of instructions). Meats are to be fried in their own grease, baked, or broiled. Fruit and vegetables are eaten raw or cooked at home. Additional fruits and vegetables may be added if found in the market — use only once a week.

## ROTATING DIET WORKED OUT BY A MOTHER FOR A TEENAGER

| | SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|---|---|---|---|---|---|---|---|
| Citrus Fruit | Grapefruit | Oranges | Tangerines | Berries | Limes | Pineapple or Papaya | Lemon |
| Carbohy Fruit | Apples | Dates | Plums or Prunes | Bananas | Pears | Grapes or Raisins | Apricots or Peaches |
| Entree | Beef | Poultry Chic, or Turk. | Deer or Buffalo | Shellfish | Lamb | Pork | Fish |
| Starch | Com | Yams or Sw. Potatoes | Peas (gr or split) or Beans | Buckwheat | Irish Potatoes | Rice | Tapioca* |
| Vegetable Leaf | Parsley | Brocolli | Cauliflower | Artichokes or Watercress | Lettuce | Cabbage | Spinach |
| Vegetable | Squash Zucchini Summer | Beets Cucumbers | Celery | Onions | Tomatoes | Carrots | Radishes |
| Bonus | Honey | | | | | Wine Vinegar** | Olives |
| | Mazola Margarine with no milk in it | | | Safflower Oil | | Garlic | Olive Oil |

'Tapioca is cooked with the fruit — no added milk, egg, sugar.

**Vinegar contains yeast. Use only once a week until sure that yeast causes no trouble — then add cider vinegar on apple day.