

Insight Into Children's Health

INTRODUCTION

Children and young adults are among those most affected by poor-quality diets and nutritional imbalances. In spite of medical advances, our infant mortality rate ranks 18th among the industrialized nations. The birth defect rate in America has doubled since 1950. Failure to thrive, attention deficit/hyperactivity disorders, depression, fatigue syndromes, anxiety and many other conditions are increasing in children and young adults.

Tissue mineral research provides many insights into the causes and correction of many children's disorders. Children often respond very well to nutrition programs. Even many serious conditions can be helped with scientific nutrition programs. Following are some of the major findings derived from tissue mineral research on children.

CHILDREN'S BIOCHEMISTRY

Every human being begins life as a fast oxidizer. This means their hair tissue calcium and magnesium levels are low in comparison with the tissue sodium and potassium levels. Some characteristics of fast oxidation include a rapid pulse and a high degree of nervous sensitivity or irritability. Fast oxidizing children are more active. Very fast oxidation produces extreme irritability, inability to relax and often aggressive behavior. Fast oxidizers require dietary fat and calcium such as that found in full-fat milk. Children may remain fast oxidizers for years. However, in general, as one ages the oxidation rate slows.

Over the past 20 years, a shift has occurred. Today many infants change to other oxidation types within a few years, or even sooner, due to stress and nutritional imbalances. The progression is to move from fast oxidation with a normal sodium/potassium ratio (about 2.5:1) to fast oxidation with a sodium/potassium ratio less than 2.5:1. This stage is usually followed by a shift to

slow oxidation. In this case, the calcium and magnesium levels rise and the sodium and potassium levels decrease on a mineral analysis. For more information about the oxidation types, please refer to other articles available from Analytical Research Laboratories, or the textbook, Nutritional Balancing and Hair Mineral Analysis. This is also available from Analytical Research Laboratories.

Causes for the early change in oxidation type include nutritional deficiencies, excessive toxic metals, or stress from any cause. Stress in turn depletes the adrenal and thyroid glands which are primarily responsible for the oxidation rate.

Today it is not unusual to encounter a 5-year-old, for example, with a very slow oxidation rate. Since the illnesses associated with each oxidation type are different, it is no surprise that children are experiencing different illnesses than 25 or 50 years ago.

Another metabolic pattern that was formerly never seen in children, but is appearing today, is called the four-low-electrolyte pattern. Dr. Paul Eck defines this pattern as a combination of calcium less than 40 mg%, magnesium less than 6 mg%, sodium less than 25 mg% and potassium less than 10 mg% on a mineral analysis. This is considered an exhaustion pattern. (See article # 1 *All Four Low Macro-Minerals*, available from the Eck Institute).

There are other possible causes for a change from fast to slow oxidation in children. Temperament can affect the oxidation rate. Fast oxidizers tend to be more aggressive and extroverted. Slow oxidizers tend to be more reserved and introverted. It is possible that changes in the environment or even genetics are affecting children's temperaments.

Children's Sodium/Potassium Ratios

A striking feature of the mineral analyses of many infants and children is a very low sodium/

potassium ratio. The ratio is often below 2:1 and many times below 1:1. New practitioners are often shocked by these ratios, which in adults indicate definite pathology.

Children seem to handle the low sodium/potassium ratio better than adults. However, the low ratio is associated with a tendency for infections, chronic stress, carbohydrate intolerance and at times other imbalances. Correcting the ratio is not always easy. However, any improvement in our experience will enhance overall health.

Children and Toxic-Metals

Children's mineral analyses often reveal extremely high levels of toxic metals. This is not a new trend, however. There are several reasons for these high levels of toxic metals:

- The faster the oxidation rate, the more the body is able to eliminate toxic metals. Children tend to have faster oxidation rates than adults. The high levels of toxic metals can simply indicate that elimination of metals is proceeding rapidly. Those with a slow oxidation rate also have toxic metals in their tissues. However, they are unable to mobilize them from the tissues due to low energy. Therefore, the metals are often not revealed on the first or even the second hair analysis.
- Toxic metals pass from the mother to the child through the placenta. We do not know exactly why this is so. Perhaps the child, with his faster oxidation rate, may be more able to eliminate the metals than the. Mother, whose oxidation rate is slower. Today, many mothers are in poor health. When the mother has a deficiency of vital minerals, the toxic metals can replace vital minerals in enzyme binding sites.

Birthing Practices and Biochemistry

It is hard to say exactly how much birthing practices affect a child's biochemistry. However, enlightened birthing practices can only help reduce

the stress of birth and enable babies to get a better start. Good practices include not exposing the newborn to bright lights, allowing the child to begin breathing on his own if possible and allowing the child to remain with its mother instead of being isolated after birth. For low-risk pregnancies, home birth is safer than hospital birth. Parent education classes can be excellent to help parents prepare for birth and to cope with the most important job they will ever have, that of raising a child.

Older Children and Teens

In the past, children between the ages of 5 and 12 were usually fast oxidizers. Now they are often slow oxidizers. The hair analyses of most teenagers and some pre-teens often reveal extremely slow oxidation rates. Most teens are exhausted, no matter how good they look!

Most teens are copper-toxic. Symptoms of copper toxicity in older children and teens include acne, fatigue, depression, 'spiciness', 'brain fog', mood swings, infections, hair loss, stunted growth, headaches and the beginnings of tooth decay and gum disease. Amenorrhea, dysmenorrhea and other hormone imbalances are common in girls.

Parents need to pay attention to a child, including a teen that is tired, does not feel like getting up in the morning, lacks interest in any activity and other symptoms of fatigue and burnout. In many cases, nutritional balancing can help this condition. Otherwise, the fatigue leads to other physical and emotional disorders. We will discuss particular conditions of teens and pre-teens later in this article.

CHILDREN'S ILLNESSES

Inherited or Congenital?

More and more health conditions today, from failure to thrive to diabetes, are blamed on faulty genes. This fatalistic pronouncement is not only depressing, but in many cases it is simply incorrect. While a genetic predisposition may be present, the

real cause of the condition is often nutritional imbalances in the child's mother, or even the father. This assertion is based on our clinical experience as well as on recent published research:

- Nutrients such as folic acid and zinc can actually prevent birth defects.
- Even so-called genetic diseases such as Down's syndrome and cystic fibrosis can often be helped by therapeutic nutrition.
- Hair analysis on many children with so-called genetic problems reveals high levels of toxic metals, vital mineral deficiencies and other mineral imbalances. When the mineral balance is improved, many health conditions improve. Published research proves that toxic metals such as cadmium, copper, mercury and others pass directly through the placenta, affecting the health of the newborn. Textbooks on toxic metals refer to babies as "sinks" for toxic metals.

Toxic metal poisoning, trace element deficiencies and imbalanced mineral ratios often go undetected unless a hair analysis is performed. The hair test must be performed correctly, without washing the hair at the testing laboratory. Washing erratically decreases the levels of the water-soluble elements.

An important principle of children's health confirmed by recent nutritional research is that children's health begins with the health of the mother. It follows that prenatal care must begin long before a woman becomes pregnant.

Usually a woman does not realize she is pregnant until she misses a period three or four weeks after conception. The first 8-12 weeks of pregnancy, are called the "critical period". By this time, all the organs and tissues are essentially formed. Prenatal care that does not begin until the fourth week or later is much too late. Many primitive cultures begin special nourishment for

women as soon as they are married, or even before.

The close relationship between children's health and maternal health is well known in animals. Somehow it has escaped attention in human beings except in a limited way such as drinking alcohol or using drugs during pregnancy. Biochemical imbalances in the mother that may not be readily apparent are associated with increased probability of prematurity, low birth weight and difficult labor. Screening for these imbalances is inexpensive and would be advisable for pregnant women and mothers-to-be.

Failure to Thrive

Failure to thrive syndromes has many causes. Some are nutritionally related. It can be as simple as a deficiency of a key mineral, such as zinc. Low zinc is associated with stunted growth.

Most often nutritional imbalances are multiple in nature. Toxic metal levels are often elevated. As a result, vital minerals are unable to activate key enzyme systems in a normal fashion. This can result in many developmental disorders. Fortunately, in some cases, if errant chemistry is corrected before puberty, growth and development may occur at a rapid rate making up for lost time.

The case of Charla comes to mind. She was diagnosed with a chromosome defect. At age two, she appeared no larger than a one-year-old baby. She had very poor motor control and could not talk or crawl. Her mother was told she would not progress. Fortunately, her mother did not give up and has taken a keen interest in her development.

Charla's hair mineral test revealed a fast oxidation rate, low sodium/potassium ratio and multiple mineral deficiencies. After a few months of supplementation with zinc, manganese, copper and B-complex vitamins, Charla began to grow. For several months, she grew an average of one inch every three weeks! She also began to make sounds and learned to crawl. Improvement has continued over the past 10 years. At age 12, she began to communicate with a key pad. It was found

her intelligence is above average. She entered regular school at age 12. At age 14, she announced she needed to study heliotropism. At age 15, she is taking a course at a local college.

Allergies and Asthma

Both fast and slow oxidizing children may have allergies. Children are often sensitive to foods, or some of the 3000 or so chemical additives, colors and preservatives in so many foods today. More and more children are also sensitive to building materials, household cleaning chemicals and hundreds of other chemical products used in homes and schools. A very comprehensive book about chemical sensitivity is [This is Your Child's World](#) by Doris Rapp, MD.

Weak adrenals are associated with allergies. Fast oxidizers can have allergies because they do not have adrenal reserves to handle allergic phenomena. Fast oxidizers also have excessive cell permeability due to low levels of calcium and magnesium. Most childhood allergies and asthma can be improved by eliminating allergic foods and chemicals from a child's environment and balancing body chemistry. If the child is a fast oxidizer, results can be very dramatic.

Infections

Much can be done to prevent infections in children by balancing and strengthening their body chemistry. Healthy children do not get sick very often. Many children are born with some weaknesses, but most can be corrected through a scientific nutrition program.

One young child I know spent the first nine months of life on antibiotics for chronic ear and respiratory infections. I was not surprised, since the mother also consulted me for her own health problems. The mother had a hair copper level of 20 mg% (normal is 2.5mg%). Copper toxicity is passed from mother to child and is often involved as a major factor in childhood infections.

Scientific nutrition can also reduce the severity

of any illness that does occur. Most infections are handled incorrectly. Never force feed a child who is ill. Fasting on water, juice or soup is often best. Children should be kept inside, preferably in bed when sick and never sent to school. Simple nutritional supplements such as vitamin C, vitamin A and products such as Limcomin, colloidal silver and herbal preparations of Echinacea, lomatium and others are helpful for both bacterial and viral infections.

We recommend antibiotics as a last, not a first resort. A good book on this subject is [Beyond Antibiotics](#) by M. Schmidt, D.C., L. Smith, MD and K. Sehnert, MD.

A short case history may be helpful. At the time she consulted the author, Mrs. Johnson took one or another of her three children, ages 3, 4 and 4 to the doctor about once a week for an infection. All three children had hair analyses and were placed on an improved diet and a few supplements.

Since the children began the program, they did not require a single visit to the doctor for an entire year. Now, three years later, Mrs. Johnson keeps the children on a healthful diet and supplements them with one Limcomin per day in the winter as a preventive measure. At the first sign of sniffles, she increases the dose of Limcomin and of Endo-AC (vitamin A and C). In this way the Johnson children have avoided any major infections.

Tonsillectomy is recommended for many children with recurrent throat infections and tonsillitis. Often, correction of the body chemistry, a diet appropriate for one's oxidation type, elimination of allergic foods and junk foods and simple nutritional supplementation can eliminate the problem and avoid surgery.

Mumps, Measles and Chicken Pox

Children who obtain enough sleep, eat well and are comfortable and happy are less prone to childhood diseases. A hair analysis performed on a child will reveal if the immune system is compromised. Indicators of a lowered immune system are

a sodium/potassium ratio less than 2.5:1 and/or elevated copper, mercury or cadmium. These imbalances can be corrected to enhance immunity.

If a well-nourished child contracts measles, mumps or chicken pox, the illness is usually benign if treated correctly. Bed rest and a very light diet of vegetable soup, fruit and water are important. Supportive nutrition such as Endo-AC 1-1-1 and Limcomin 2-2-2 are very helpful. Treated correctly, there should be no complications.

Vaccinations

Vaccination is a highly controversial subject. In our experience, most vaccinations are needless and may be dangerous. Many cases of polio and smallpox were the result of vaccination. The DPT vaccine has also been shown to have detrimental effects in some children. The author recently spoke to a mother whose child received the DPT vaccine at age 1. Soon after, the child contracted Pertussis. Afterwards, his development regressed and he now has persistent developmental disability.

Effects of vaccines years later are unclear and difficult to trace. The structure of vaccines is such that there is no question that illness could be triggered later by the use of vaccines.

The argument is made that vaccines prevent harmful diseases. This is no doubt true to some degree. However, we find that if a child contracts these diseases and if they are treated correctly, the illness is not life-threatening.

We suggest that parents become informed on this issue. Read the other side of the story, not just what the health department and doctors tell you. A few of the titles include Murder by Injection and The Poisoned Needle. Health food stores often have books regarding the dangers of vaccines. Books are also available from the National Health Federation, PO Box 688, Monrovia, CA 91017.

Skin Diseases

Children have delicate skin and are thus prone to rashes. Besides balancing body chemistry,

rashes may be helped by zinc oxide ointment, since zinc deficiency often plays a role. A tissue copper imbalance is a frequent finding in skin rashes. The mechanism may be that copper antagonizes zinc, thus causing a zinc deficiency. A B-vitamin deficiency and allergic reactions can also cause rashes.

Allergic rashes may respond to the bioflavonoids, although the cause should be ascertained. Vitamin A, vitamin E and aloe vera can be safely applied to rashes with excellent success. Many foods can cause various types of skin rashes, especially junk foods. These foods should be eliminated from the child's or mother's diet. Children whose diets are deficient in the essential fatty acids found in such foods as flaxseed oil, olive oil, tuna or salmon may experience eczema and other dry skin problems.

Acne is associated with elevated copper and low zinc and at times, low vitamin A. Improper diet can play a role. Poor elimination through the colon can play a very important role, even when constipation is not present. Changing the diet, taking supplements, good hygiene and colonic irrigation when needed will clear up most cases of acne. The extra effort is far better than taking tetracycline or another antibiotic. Continuous use of wide-spectrum antibiotics often leads to a candida albicans infection and other side effects including tooth discoloration and subtle immune system problems; Use of cortisone for acne can lead to even worse side effects.

Bed-Wetting

Children with a copper imbalance display this symptom more than other children. A copper deficiency or excess (bioavailability) can cause excessive nervousness that may result in poor bladder control. When the copper imbalance is corrected through a nutrition program, often the bed-wetting problem subsides.

Sugar and Carbohydrate Sensitivity

Many children are highly sensitive to sugar and any form of sweets in their diet. One reason for this is a fast oxidation rate. Fast oxidizers burn their food at a faster-than-normal rate. Many children are also born today with deficiencies of manganese, zinc, chromium and vanadium. These elements are involved in blood sugar regulation.

Sugar is a rapidly-absorbed food. When a high-sugar diet is coupled with a rapid rate of oxidation, it is like pouring gasoline on a fire. There is a dramatic-rise in the blood sugar level, stressing the sugar regulation mechanisms and altering calcium and phosphorus levels. This can have profound effects upon mood and behavior.

Avoidance of all sugar-containing foods is a necessity for many children, especially those prone to strong sugar reactions. A diet high in sugar and carbohydrates also aggravates a chronic zinc and magnesium deficiency. Yet zinc and magnesium are precisely the minerals needed to help calm down these children. Fast oxidizers require a diet higher in fat and lower in carbohydrates. In some children, extra protein will help control blood sugar fluctuations.

Supplementing deficient minerals and feeding children a nourishing, appropriate diet for their oxidation type can help prevent and correct excessive sugar sensitivity.

Obesity in Children

Abnormal weight gain in children is frequently due to a glandular imbalance, but most often is related to diet. Steps to take are:

1. Avoid *all* junk food; particularly refined sugar and refined flour, white rice, white bread, pastries, cookies, etc. These foods are deficient in zinc and magnesium and can cause sodium and water retention.

2. The child may eat protein, vegetables and some fats. If carbohydrates are limited, most children will lose weight on this regimen. Deficiency of protein however, can be dangerous

and may contribute to sweet cravings.

3. A hair mineral analysis will help identify the child's oxidation rate so that the correct diet principles can be applied for that child. This alone can diminish cravings. A scientific nutritional program may also help correct many causes of weight gain such as carbohydrate intolerance, sodium retention, excessive tissue catabolism and improper diet for one's oxidation type.

MENTAL AND EMOTIONAL CONDITIONS

Depression and Anxiety

A growing number of children are diagnosed with depression. Most likely, some children had this in the past, but were not diagnosed. Nutritionally, these children tend to have very slow oxidation rates. This causes a low energy level and psychological withdrawal. Copper toxicity is common in these children and young adults. A copper imbalance is associated with depression, anxiety, mood swings, despair, 'spaciness', schizophrenia and suicidal tendencies. While there can be many causes for depression in a child, we would suggest a nutritional evaluation, as nutritional imbalances can be improved through diet and supplementation. We would certainly suggest this before instituting drug therapy.

Anxiety in children can likewise have many causes. Nutritional causes include heavy metals, fast oxidation, very slow oxidation, copper and zinc imbalance. Once again, nutritional imbalances are common and can often be corrected rapidly.

Learning Disorders

Various kinds of learning disabilities now affect about one of every five children. The various labels include dyslexia, attention deficit disorder, concentration deficit, minimal brain dysfunctions and a half-dozen others. Some of these disorders stem from inappropriate learning environments. Not all children learn the same way. However, many times learning ability, school attendance and school performance can be improved drastically by balancing body chemistry.

Copper toxicity, impaired energy production,

imbalanced oxidation rate, carbohydrate intolerance, chronic candida albicans infections food and environmental allergies and toxic metal poisoning may all be involved in learning problems. As the underlying biochemical imbalances are corrected, learning often improves.

The hair mineral test, when correctly performed and interpreted, is an invaluable screening tool that may help prevent and correct many cases of learning disability and the poor self-esteem that accompanies it. The hair test is inexpensive, non-invasive and simple to perform. Besides pinpointing trends for health problems, it can guide dietary and supplemental correction of children's health imbalances.

Attention Deficit/Hyperactivity Disorder

There are presently about *four million* children taking Ritalin or a similar drug to control ADHD symptoms. These numbers stagger the imagination. Ritalin can have side effects and does not seem to improve school performance.

While there are several causes of ADHD, very little attention is paid to an area that offers so much help for these children and families - scientific nutrition. Hair analyses of hyperkinetic and learning-disabled children commonly reveal biochemical factors that can contribute to these conditions. They include:

- An excessively fast oxidation rate with a deficiency of the 'sedative' minerals. The sedating minerals - calcium, magnesium and zinc - are commonly less than half the normal value! Meanwhile, the sodium and potassium levels are usually elevated. This can produce a tendency for excessive irritability and oversensitivity to stress.
- Excessive toxic metals, especially copper, lead and cadmium. The medical literature confirms the potent neurotoxic effects of these metals.
- Derangement of carbohydrate metabolism. This

may be due to a diet high in refined sugar and starches, or due to mineral and vitamin deficiencies.

- Food allergies. Many children are allergic to common foods and to some of the 3000 food additives widely used in children's cereals and other food products.
- Chronic candida albicans infection is more common than imagined. It is often due to overuse of antibiotics for ear and throat infections. Candida infection is also associated with a copper imbalance. Candida can cause fatigue, allergies, "brain fog" and other symptoms. The candida organism ferments sugars to produce 'alcohol in the body.
- Increasingly, some ADHD children are exhausted slow oxidizers. They lack the energy to concentrate and function normally. They may also experience severe energy fluctuations that are reflected in their behavior.

Correction of these nutritional imbalances often causes dramatic improvement in sleep patterns, concentration and ability to interact socially. Research, at the Eck, Institute only confirms what is found in the medical literature. Excellent reference books on this subject are Mental and Elemental Nutrients by Carl Pfeiffer, MD, PhD, Is Your Child 'Hyperactive?' by Benjamin Feingold, MD and Diet Crime and Delinquency by Alexander Schauss. These books have long lists of research articles that support the validity of the nutrition-behavior connection.

Pre-teens and Teens

Nutritional imbalances that begin at birth or in childhood continue and often worsen as children approach puberty and the teen-age years. For example, behavior problems in childhood may lead to a tendency for delinquency. Depression and

anxiety can be the basis for teen suicide, drug, and alcohol problems. Infections in childhood can become chronic and debilitating fatigue syndromes.

Hypoglycemia can lead to sugar addiction and possibly alcohol addiction, as alcohol replaces sugar as an aberrant body fuel. A need for energy can even lead to cigarette smoking or drug use. The nicotine and cadmium in cigarettes will provide a temporary energy boost. Diets and eating habits during the teen years are often atrocious. It is a challenge for families to stick together and make sure teenagers eat well. The teenage years are not easy for anyone. A scientific nutrition program can help maintain physical, mental and emotional health during the teenage years.

The Case of Shawn Martin

This was a complex case, involving many of the factors mentioned above. It is also notable in this case that the child had been physically abused, yet he still responded well to nutritional correction.

Shawn, age 9, had been physically and sexually abused as a young child. He presently lives with his divorced mother. Shawn's mother suffered from severe fatigue, mood swings and other health problems of her own, but provided a stable environment for Shawn as best she could.

Shawn suffered from daily urinary incontinence, severe hyperactivity, disturbed sleep, frequent severe colds, sinus infections and hallucinations. At times he would become violent and on several occasions pulled a knife to threaten his mother: He was also diagnosed as mentally retarded. Shawn's hair analysis revealed the common child's mineral pattern of low calcium and magnesium levels, together with elevated sodium and potassium levels. His test also revealed 'a very high cadmium level and hidden zinc deficiency.

Shawn's diet was modified to eliminate all sweets, including fruits and fruit juice. He was allowed to eat all he wanted of fats, protein foods, nuts and seeds and a small amount of complex carbohydrates. All food additives were eliminated.

Shawn was placed on a vitamin regimen that included calcium, magnesium, zinc, copper, manganese, inositol, choline, methionine and niacinamide.

Shawn required nine calcium tablets per day (1800 mg), more than an adult dose to calm him down. Choline and inositol also had a very beneficial effect upon Shawn's behavior. He required an adult dose of these vitamins also. Within a few weeks Shawn's sleep improved, his urinary incontinence diminished and he became a little more manageable. His teachers and baby sitters all commented how much easier he was to care for. If he skipped his vitamins, within two days he was again uncontrollable.

Within a year Shawn began to have fewer sinus infections. However, his hallucinations persisted and he was diagnosed as a paranoid schizophrenic. The only solution seemed to be to place him in a state hospital for the mentally ill. At that point, we increased his dose of niacinamide, a vitamin long used by orthomolecular psychiatrists for certain types of schizophrenia. Within two days his hallucinations stopped and he became a sweet, cooperative child. His mother was speech-less!

Shawn has continued to improve over five years, as long as he takes his supplements. A startling change is that Shawn was retested in school and is no longer considered mentally retarded! He still becomes anxious under stress. His mother has learned how to adjust the supplement doses to compensate for EXTRA stresses such as long car rides. One advantage of nutritional therapy is that the therapeutic agents recommended are of very low or no toxicity, so that doses can safely be adjusted as the need arises.

Shawn had one serious setback at a summer camp, where an incident apparently triggered him emotionally and he began hallucinating again. When he returned home, his supplement dosage had to be slightly increased for a few weeks to bring him back to normal.

CHILDREN'S NUTRITION PROGRAMS

Diet is critical for children's health. It is no accident that milk is for babies. Babies are born as fast oxidizers and require the high fat content of whole mothers' milk. Cows' milk, which forms tougher curds and is higher in protein, is detrimental for newborns and must be diluted or it may cause intestinal irritation and bleeding. There are other reasons to recommend breast feeding including the antibodies transferred through the milk, the freshness and cleanliness of the milk and the psychological advantages of breast feedings.

As children grow, more foods can be added although many health authorities suggest that breast feeding should be continued for one to three years - often until the baby is no longer interested. Foods added should be whole natural foods only, grated, pureed or strained, until the child can chew for himself. Read labels on baby foods. Older children and teenagers are growing fast and need the highest quality food. We recommend only organically grown food and meats raised without antibiotics or hormones.

We do not recommend vegetarian diets because they tend to be low in essential nutrients. For example, children and teenagers have a great need for zinc. Our soil is low in zinc and most foods are low in zinc. The main sources are red meats, chicken, turkey and to some degree fish and eggs. Zinc from zinc tablets and from vegetable sources is not necessarily as well absorbed as zinc from meats. Meats also contain taurine, carnitine and other substances that many children need. Some children do well on vegetarian regimes, but we see many who do poorly in spite of their parents' best efforts to balance their diets.

Children and sweets don't mix

A common mistake is to give children sweets, either because the children ask for them, or worse, as rewards for good behavior. Since most children are fast oxidizers, sugary foods worsen the fast oxidation and can aggravate many problems such

as hyperactivity, anxiety, nervousness, irritability and poor concentration.

Sweets include fruit juices, even the unsweetened fruit juices. These are very high in glucose and other sugars and can have the same detrimental effects as candy and other sweets.

Small children who have not become hooked on sweets usually exhibit little desire for them. Often baby foods are sweetened for the benefit of the parents, not the children. It is best not to introduce children to sweets and to wean them off sweets if they are on them. Explain what you are doing and often the child will refrain from eating sweets on his own. Parents also should set the example.

To avoid sweet cravings, it is critical that the child has adequate protein, oils and fats in his diet. Otherwise the child be hungry and crave' sweets.

Children need dietary fat

Many parents withhold fats and oils from children to keep their cholesterol low or to avoid weight gain. The American Academy of Pediatrics and any nutritionist worth his title knows that children need fats to grow. Many vital body tissues including the nervous system require fatty acids: For the many children who are fast oxidizers, fats calm them down, provide steady energy and avoid the energy roller-coaster of hypoglycemia to which so many children are prone.

Children who are deprived of foods such as eggs, cheese, avocado, nuts, seeds and meats often crave and eat more sugar. This can lead to sugar addiction. It can also cause serious problems with weight, behavior and in some cases can elevate triglyceride levels. In contrast, a combination of exercise, diet and nutritional supplements can control weight and help prevent behavioral as well as physical illness.

Children should have good quality fats and oils only. Potato chips, french fries, fry bread, donuts and margarine are not good quality. These are heated oils that are not health-producing. The

best quality fats and oils are unprocessed oils such as olive oil or flaxseed oil. All other oils have been processed and are of lesser quality. Good fats include butter, meats, eggs, nuts, seeds and oily fish such as tuna, salmon and sardines.

Children's Eating Habits

Eating habits can be as important as what one eats. Simple rules are:

- **Don't force a child to eat.** Children will not starve and a poor appetite usually indicates a vitamin or mineral imbalance. Many copper toxic and zinc-deficient children are fussy eaters. When their mineral imbalance improves, appetites often increase dramatically.
- **Don't tell children to eat quickly.** Hasty eating makes for poor chewing and poor digestion. It can also cause choking on large food pieces. Mealtime should *not be* used to discipline and reprimand children for all the day's mistakes. A calm, quiet, relaxed eating environment is best for all concerned. Children who bolt their food need to be reminded to chew thoroughly and eat slowly.
- **Have regular, sit-down meals.** One of the worst aspects of modern-day life is the practice of regularly leaving children alone, perhaps with some food in the refrigerator and not knowing whether they bother to eat at all. Besides the questionable nutrition that results, this practice also diminishes the importance of meals, creates erratic eating patterns and sets up the child for bad nutritional habits later on in life.

Supplements for Children

Children require much smaller supplement programs to achieve excellent results. This is probably because the biochemical imbalances are less firmly entrenched and more energy is available

to assist the healing process. Children have fewer neuroses and fixed attitudes that can be detrimental to healing. Finally, children have fewer financial and other obligations so that more energy can be directed toward the healing effort.

Young children normally will not swallow tablets. The best method is to crush the tablets and mix them with foods having a strong flavor such as peanut butter, apple sauce, yogurt, tomato sauce, or soup. This method usually works very well. Tablets can also be placed in a blender in a smoothie.

Many older children can be taught to swallow pills, especially if parents make it a 'cooperative' effort by taking their own vitamins at the same time.

For crushing tablets, a new, easy-to-use device called EZE-Crusher is available from Analytical Research Labs. It quickly pulverizes tablets into a fine powder.

Vitamin and mineral dosages are reduced in proportion to a child's weight. It is essential to include a child's age when submitting a hair sample for analysis.

THE OUTLOOK FOR OUR CHILDREN

The most recent assessment of the health of children in America is poor. Many get a bad start due to inadequate prenatal care and the poor health of many mothers. Junk-food advertising and ignorance by any health professionals does not help the situation.

The tools and technology for assessing and correcting nutritional imbalances are available today. No additional research is necessary, except to convince the super-skeptical who usually remain unconvinced anyway. It is our hope in presenting this material that someday soon the screening tools such as the hair mineral analysis will be performed routinely and the knowledge gained through research will be applied to mothers and children everywhere.