

Childhood Nutrition

Development of a good diet and nutrition regimen for children or for anyone for that matter can present challenges. This is because if you ask 10 different people what is the best diet plan to follow you will get 10 different opinions. Couple this with family, cultural, advertising and societal pressures, and the task may seem like a never-ending battle. However, proper dietary patterns set down early in life will translate to better health and a decreased risk of disease development later on in life.

Proper dietary choices are important for children for several reasons. By introducing certain foods too early, before the intestinal tract and immune system are mature enough to digest and incorporate them as nutrients, the risk of developing food allergies and certain chronic diseases increases. For example, there is evidence that introducing dairy products too early can contribute to the development of type I diabetes in young children. Additionally, children who consume dairy products have higher rates of ear, bronchial, and kidney infections and are more prone to anemia. Breastfeeding generally begins to wane once children begin cutting teeth, and once complete, do not have any additional need for dairy products despite what the dairy council says. The nutrients touted in milk products are in abundance in other foods such as green leafy vegetables, fruits, eggs, fish and other meat protein sources.

As important as what is introduced is what is not introduced at too early an age. Breast-feeding is essential for early growth and development, as well as for maturation of the immune system and prepares the child's gastrointestinal tract to accept more complex foods.

At about six months of age, foods high in carotenoids such as carrots, yams, squash, peaches, pears, cauliflower and broccoli are important as the child's immune

system continues to develop its life-long immunity. This is often about the time when breast-feeding begins to wane either through lower production of breast milk or the child's indifference and need to explore newer foods. At about nine months of age, slightly more complex foods requiring more time to digest, such as oatmeal, lima beans, potatoes, and cabbage, should be introduced. This is also about the time where children like to eat with their hands as their tactile sense is developing further. More complex foods such as eggs, rice, barley, asparagus and avocado follow at twelve months, with fish, chicken, buckwheat, and beets at about age eighteen months. As children grow and their systems mature, increasingly complex foods can be introduced. The introduction of foods in an incremental manner such as this, allows for the maturation of the immune system while keeping up with normal gastrointestinal maturation. Certain proteins in foods help the immune system to identify and eliminate harmful viruses, parasites and bacteria which are present with certain diseases. Introduction of high complexity foods before the immune and gastrointestinal systems are able to handle them will result in poor digestive and bowel patterns as well as a weakened immune system.

Children will often resist foods which their parents have chosen, not out of a need to be stubborn, but out of an innate knowledge it is not yet time for them to be eating those foods. This mechanism is often overridden by plying them with sweets, which eventually perverts their taste buds. Sugar in its refined form is highly addictive and after repeated use children will then begin to crave sugar in abundance, foregoing the natural and highly beneficial forms found in fruit and ripe vegetables. This is a characteristic property of refined sugar not lost on food manufacturers in order to sell product. The hyperactive child whose breakfast consists of chocolate covered sugar frosted bombs will exhibit emotional ups and downs, hyperactivity, inattention, and is generally not a pleasant child to be around while being difficult to manage in school. I suggest children

not be introduced to sugar until they have had a chance to develop their tastes for healthy foods, usually some time in their teens.

On the other hand, children will often crave foods that are not good for them, or are more likely to cause an immune reaction according to their blood type. Craving for certain foods can occur for several reasons. The person can become habituated to the taste and contents such as in a sugar craving. This is akin to becoming addicted to it, which involves changes in the brain's chemistry. If the person needs something which the food contains, such as a certain vitamin or mineral, a craving will often ensue. These types of cravings are periodic as the deficiency becomes greater and are often seen in women around the time of their menstrual periods. Another type is the psychological craving. This often is set up early in life when a positive association occurs with a specific type of food. Advertisers take advantage of this by trying to make positive associations with the food they are selling.

In general, children seem to recover faster from food allergies than do adults but also have greater immune system responses. In some children who are very sensitive, and have strong vital forces, the reaction can become quite severe necessitating medical treatment.

The developing gastrointestinal tract becomes home to over 100 trillion microorganisms comprised of 400 to 500 different species. These are made up of largely anaerobic (without oxygen) and aerobic (oxygen loving) microorganisms that we live in symbiotic relationship with. This means that we benefit from their presence just as much as they do from ours. This ecosystem is essentially our largest metabolic organ being active in assimilation of nutrients and is essential to development of our immune systems. If this flora becomes imbalanced, development of allergies, inflammation, and systemic diseases such as IBS, cancer or other autoimmune diseases eventually occurs.

Newborns have sterile gastrointestinal tracts with the first introduction of microorganisms being from the birth process, unless delivered by c-section. This flora is quickly replaced by Bifidobacteria from breast-feeding which predominate and help keep potentially pathogenic bacteria from setting up house keeping. Children who receive antibiotics early on are more likely to develop allergies and other diseases than those who do not. Children who are given probiotics also suffer from fewer allergies than those who don't.

A child's diet must contain adequate amounts of protein, calories, fats, vitamins and minerals. Many a parent has experienced that a rigid adherence to a proscribed dietary regimen leads to frustration, as children will consume what is needed for them at their particular stage of growth. Flexibility, decreased fret and worry and making meals stress free are important to promote growth, intestinal absorption and motility.

Supplementation with a children's multivitamin is recommended as many of the current foods are considered nutritionally deplete. That is, that they do not provide adequate amounts of essential vitamins and minerals because of their being grown in mineral depleted soils. Organically grown foods fare better and are recommended not only for children, but the entire family as well. If goat, soy, almond or rice milk is utilized as filler foods for calories, iron supplementation may be needed if the child isn't getting enough meat.

Between ages 2 to 4 it is often observed that the child's appetite becomes poorer, with the child often refusing to eat regular meals. If you can get one good meal per day into them with little fuss or trauma, and feed them smaller nutritious snack like meals throughout the day, the same mission is accomplished than if you try to force them eat everything on their plate because "children in other countries are starving", or you are worried that they may waste away to nothing.

At about one year of age children begin to take better charge of their feeding habits, often eating something while playing. If their appetite begins to fall off a bit, make sure they are getting plenty of proteins, fruits and vegetables rather than milk, starches, and fats.

Consider that if your child isn't eating enough at meals they may be getting too many calories in the form of milk, soft drinks, or junk foods between meals. These should be limited so that junior or missy will eat a balanced supper. Calories from junk foods, milk and soft drinks or commercial juices will kill any appetite and eventually lead to weight gain and obesity.

Children are what their genetics dictate. So, some of them will consume large amounts of foods often and not gain weight, while others will eat smaller meals and put on a lot of weight. Children who are coerced or forced to eat more, in order to be healthy, often will rebel or put on excess weight and get the usual childhood illnesses anyway.

Babies and children require more water and protein than adults, as they need energy for growth. Therefore, they do not tolerate lower intakes of either of these the way adults do and can begin to show signs of wasting (Kwashiokor) sooner. Babies need an intake of water to be approximately 10% of their body weight which is dependent upon the climate, activity level and insensible loss due to illness and/or fever. Water loss occurs through the skin, lungs and feces as well as the urine. An infant that is urinating normally probably has enough fluid replacement whereas one who isn't urinating as much may not have enough. Certainly with fevers, vomiting and diarrhea, fluid monitoring is essential.

After a child has finished breast-feeding, they continue to build their immune function through diet. This is because foods and their protein contents mimic the "bad guys" in the environment such as yeast, fungi, viruses, bacteria and parasites. Therefore,

the body continues to develop immunity to these once breast-feeding has ceased. This continues throughout childhood in conjunction with the thymus gland so that by the time we are adults, immune system function should be optimal. Then, it is only a matter of every now and then reminding the immune system to be on guard against the “bad guys”. This is achieved through dietary variation.

Because of this it is not recommended that children follow diets based upon their blood types as the variations in foods help to build immune function. The exception becomes when the child develops problems with allergies. Then, a restriction is needed.

A child’s appetite closely parallels their growth or activity patterns which means that they will experience periods of increased appetite when going through one of these. Here too it is important that they be getting quality foods rather than junk foods or high sugar in the diet, so that they will grow adequately and optimally.

Diet and nutrition is one of the cornerstones of naturopathic medicine, but really should be for all forms of medicine, as it is one of the most important things that defines who we become as human beings. It is paramount in maintaining our growth and development as well as maintaining health throughout our lives. Poor diet and nutrition leads to a lesser quality of life and an increase in the development of disease. When good dietary habits are implemented early in life, they set a up a pattern of healthy choices not only for eating but in other areas as well.