CEREBRAL PALSY
Magazine

Organic Nutrition…
Hype or Healthy Option for Children with Development Disabilities?

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The organic movement isn't a recent fad for the environmentally conscious family. As far back as 1990, Congress passed the Organic Foods Production Act giving the U.S. Department of Agriculture (USDA) the authority to develop national standards to assure that any food labeled as organic was grown, processed and handled according to these standards. Compliance with these standards was reinforced by USDA through the creation in 2002 of a National Organic Program (NOP) office to assure that all foods labeled as organic are sourced from farms and processors certified by a USDA-accredited agent.

Choosing organic foods may be for ethical reasons such as humane treatment of farm animals and no use of antibiotics and hormones that push animals beyond their natural limits; or a "green" choice to reduce the use of harsh chemical herbicides, pesticides and genetic modification of food crops that pose environmental and food safety concerns. However for many people, organic foods eliminate artificial flavors and colors and prevent hidden food sensitivities caused by chemicals used to grow and produce foods.

But is there a real health reason for going organic? According to a 2006 research report prepared for Contemporary Pediatrics, 51% of 698 pediatricians surveyed believe organically grown foods (versus conventionally grown foods) can play a positive role in patient health.[1] From a nutrition standpoint, research studies back these doctors' inclinations and provide evidence that organic foods do offer health benefits to some people. For example, children have higher exposure to many environmental contaminants because they drink more water, eat more food, and breathe more air on a per unit weight basis when compared to adults. Children also metabolize, detoxify, or excrete environmental agents differently than adults.[2]

Numerous research studies have documented the nutritional superiority of organic foods[3] including a recent study from the United Kingdom that reported on the benefits of consuming organic foods.[4] Of particular interest is the finding that organic milk can contain up to 60% more antioxidants than found in conventionally produced milk. Antioxidants such as Vitamin C and Vitamin E are molecules that help to prevent damage to the body's cells. We can anticipate many more studies and scientific reports being published soon that further document the benefits of organic eating. It is reasonable to believe that future studies will support theories that the human body must work harder to rid itself of chemicals and hormones used in conventional farming and food manufacturing.

Parents should be aware that there is growing confusion between the terms "natural" and "organic." Don't be fooled by the term "natural" when reading food labels. A "natural" or "all natural" product is not an organic product that meets rigorous standards and certification.[5] The US Department of Agriculture (USDA) presently defines "natural" rules for only the meat and poultry industry.[6] No other foods are covered and, in fact, other food manufacturers can create their own definition of "natural" for the foods they produce.

Consumers may also be under the false impression that "natural" foods are "greener" than their organic counterparts. For example, "natural" milk may come from dairy herds where hormones are not used. However, these cows are usually fed in factory farm feedlots rather than roam on chemical-free pastures as required for organic dairy farms. With more large corporations looking to the "health food" industry as an avenue to increase profits, parents need to become better informed shoppers.

The nutritional status of a child with developmental disabilities can be supported by going organic. Think about the many needed medications prescribed to help support a child with a developmental disability and how they can affect nutrients. For example, anticonvulsants are known to decrease nutrient absorption or body stores of Vitamin D, Vitamin K, Vitamin B6, Vitamin B12, folate and calcium.[7] On the other hand, physical limitations and malabsorption are common problems for children with medical challenges. These children would certainly benefit from consuming organic foods that are higher in certain nutrients such as important vitamins and minerals compared to the same "conventional" foods.

For the child with impaired feeding skills and oral-motor dysfunctions, adequate food intake to support growth and development can be a challenge. Medical nutritional supplements are often times recommended by doctors and dietitians to help meet daily nutrient needs. For the organic family, this has been a problem because an organic option was not available.

Most recently, Nature's One, Inc., the leading manufacturer of organic pediatric medical foods, expanded its product line to include PediaSmart®, an organic and nutritionally complete supplemental beverage for children 1 to 13 years. PediaSmart® contains 237 calories per 8 fluid ounce feeding. This product can be used orally as part of a child's daily meal or as a snack. PediaSmart® has been scientifically formulated to meet or

exceed 100% of the Dietary Reference Intakes (DRI) for protein, fat, carbohydrate, vitamins and minerals.

Because PediaSmart® is available in powdered form, this product can be concentrated to a higher caloric level if determined to be appropriate based on a child's overall nutritional assessment by a pediatric dietitian. For the child requiring supplemental or complete nutrition via a feeding tube, PediaSmart® can be an option with special direction and supervision of a child's healthcare team. Many parents, like Glenn Langdon, whose nine year old son's nutrition is completely dependent upon tube feeding, have been in search of an organic meal replacement supplement. "As we became more and more concerned with what we were reading in regards to the genetic modification of food, our family began to take a closer look at what we were eating. In the end, our searching and researching finally paid off with the relief of finding PediaSmart®. Our son's nutritionist and pediatrician were both unaware of it®, but after looking into it they were very positive about us changing from Ensure® to PediaSmart®. [I did] need help calculating the appropriate mixture to give the necessary calories and water per feed."

PediaSmart® is USDA certified organic and the ingredients used in this product do not contain artificial flavors, colors, or sweeteners. Ingredients are grown without chemical pesticides, insecticides or herbicides. PediaSmart® is also FREE of lactose, gluten, corn, and genetically modified ingredients.

For patients using PediaSmart® under the direction of a healthcare professional, PediaSmart® is assigned code B4160 by the Center for Medicare & Medicaid Services for reimbursement purposes. Additionally, Nature's One® offers a 30% discount to patients who suffer from serious medical conditions (chronic illness, growth failure, eating disorders, injuries, and recovery from surgery), but do not qualify for reimbursement from Medicare/Medicaid or private insurance. For more information, visit www.NaturesOne.com or contact the company at CP@NaturesOne.com.

1. Advanstar Communications. "Healthcare Research 2006 Prepared for Contemporary Pediatrics Omnibus Survey Participant," 2006.

2. Landrigan, PJ, et al "Children's health and the environmental public health issues and challenges for risk assessment," *Environ Health Perspect*. 2004;112:257-265.

3. Benbrook, C, et al. *New Evidence Confirms the Nutritional Superiority of Plant-Based Organic Foods.* Boulder, CO: The Organic Center, 2008.

4. Butler, G, et al. "Fatty acid and fat-soluble antioxidant concentrations in milk from high- and low-input conventional and organic systems: seasonal variation," *Journal of the Science of Food and Agriculture, 2008; 88(8): 1431-1441.*

5. http://www.nal.usda.gov/afsic/pubs/ofp/ofp.shtml Sourced July 13, 2009.

6. http://www.fsis.usda.gov/FactSheets/Meat_&_Poultry_Labeling_Terms/index.asp Sourced July 13, 2009

7. Lucas, Betty L. (ed). *Children with Special Health Care Needs Nutrition Care Handbook.* Chicago, Illinois: The American Dietetic Association, 2004, page 43.