

## **A Guide to Nutritional Supplements and Dietary Interventions in Children by Judith Aronson-Ramos, M.D.**

The following guidelines are intended to support families in their search for safe and scientifically validated approaches to the use of nutritional supplements and dietary interventions.

There is a wealth of information available on "complementary and alternative medicine" (CAM) in bookstores, on the Internet, in health food stores and in the popular press. It can be confusing to sort through all of this information. It can often be contradictory and it is difficult to know what is based on sound research and valid evidence.

There have been numerous claims made regarding the use of various alternative approaches in treating learning, behavior and psychiatric problems in children. Even though a substantial body of research does exist, very often families and their physicians are unaware of the research. Studies have shown that quite often people rely on advice from friends and family, popular news shows, manufacturer advertisements and claims, and health food store personnel to guide them in their search for reasonable and effective alternatives.

To help families, I would like to offer a "top ten list" of pointers useful in evaluating any potential nutritional or dietary intervention. As physicians we take an oath that states: "Do no harm". In the realm of "natural" and "alternative" products this still applies. A natural product has the same potential to be harmful, as does a standard medication or procedure. The purported health benefits of many supplements and the actual contents of these products are not yet evaluated by any nationally recognized independent agency. You can never be sure what you are actually taking. There are also risks of contamination with heavy metals and other toxic substances. This must be understood when choosing to try different supplements and nutritional products.

### **A Top Ten List of Alternative Medicine Guidelines**

1. **Know yourself and your child.** Don't begin a diet or nutritional plan you or your child will not be able to successfully follow. Be realistic. Be reasonable. There are isolated examples of diets that have cured diseases (gluten free for celiac disease, the ketogenic diet for seizures, etc). However, in general, diets are very difficult to prove or disprove and scientifically sound evidence is lacking for many of the popular diets. If a family is committed to try a particular diet, and proper supplements are used to prevent nutritional imbalance, a diet can be tried for a reasonable period of time. In general 4-6 weeks of a dietary intervention should be sufficient to judge whether or not there is a beneficial effect.
2. **Know exactly what you are taking.** Dietary and nutritional supplements comprise an essentially unregulated industry. The Dietary Supplement Health and Education Act (DSHEA) enacted by the federal government in the late 1990's stipulates that botanical (herbal products) and other dietary supplements

are not "drugs" and are therefore not held to the same regulatory standards as drugs. This means that any product sold on the market does not need to demonstrate evidence of both safety and efficacy. Companies can make statements that do not have to be proven by scientific research. (This is why products carry the label, "This statement has not been evaluated by the FDA".) Additionally, what the bottle states and what is actually in the product may vary.

There are however several good independent laboratory groups that perform third party testing on products and the results are available to consumers. (Examples include Consumer Labs - [www.consumerlabs.com](http://www.consumerlabs.com), and The Council for Responsible Nutrition - [www.crnusa.org](http://www.crnusa.org)) . These organizations do not receive financial support from companies making the products they are analyzing. This is essential to prevent a conflict of interest that could bias results. Products that pass their analyses can be labeled with their seal of approval. Be sure you look into the validity of "certifying" groups. Keep the following points in mind: who pays for their research, are there financial links to specific industries or companies, and who serves on their scientific advisory boards.

3. **Know where to get good information.** The federal government created the National Center for Complementary and Alternative Medicine (NCCAM) in 1997. This is a branch of the National Institute of Health. Their website has a tremendous amount of information available to consumers and professionals ([www.nccam.nih.gov](http://www.nccam.nih.gov)). This agency provides information about products that may be harmful, as well as potentially dangerous interactions between supplements and medications.
4. **Know what is affecting what.** Oftentimes when children are placed on a diet or given a supplement there are many different variables changing at once. In this setting it is impossible to know what products were, or were not effective. A reasonable stepwise approach will allow you to better evaluate what is truly making a difference. Some practitioners will state certain products need to be given in combination to have an effect. Be wary if the list is long and costly.
5. **Know the difference** between self-interest on the part of a practitioner and good clinical practice. When the person recommending a product is also selling you that product beware of conflict of interest and ethical issues.
6. **Know when to stop.** There are an unlimited number of diets and products to try. Constantly jumping from one thing to another can be a time consuming pursuit.
7. **Know what is based on good scientific research and what is not.** All "studies" are not equal. A good valid study is well designed, published in a reputable journal, and others have duplicated the results. With the Internet families can do their own research if they know where to go. Information can be shared with the professionals involved in your child's care. If done in the spirit of mutual understanding a good professional will not be defensive. Some helpful websites include the following, of course you may find others in your own research:

[www.quackwatch.org](http://www.quackwatch.org)

[www.jointcommission.org/](http://www.jointcommission.org/)

[www.fda.gov/medwatch/](http://www.fda.gov/medwatch/)  
[www.childrenshospital.org/holistic](http://www.childrenshospital.org/holistic)

8. **Know what is reasonable.** As the old adage goes, if it sounds too good to be true, it probably is. Do not rely solely on the advice of those individuals actually selling you products. It is imperative to do your own research or consult with practitioners involved in your care.
9. **Know what are the significant side effects and precautions** for anything your child takes. Potential side effects and drug interactions may not appear on product labels. It is important to do some research and be sure of the safety of any products you give your child. The following websites have extensive information on product safety and product interactions. Remember the liver metabolizes many products, and children may be particularly vulnerable to toxic metabolites at different ages. Always keep the poison control center hot line on hand, in the event of an accidental ingestion 1-800-222-1222. In the case of a serious or concerning side effect noted from taking a supplement you should immediately go to your nearest emergency room. Take the bottle of the product in question with you.  
<http://medicine.iupui.edu/flockhart/> - Continuously updated information on liver metabolism and different drugs and supplements.  
<http://dietary-supplements.info.nih.gov/> - Impartial information provided by the United States office of Dietary Supplements, a branch of the National Institute of Health.
10. **Know what tastes good!!** If you find something tastes terrible don't expect your children to take it. Similarly, there are times when a product does not appeal to your taste buds but may be delicious to your child. Be persistent and resourceful to find a product that will work, often there is a solution.