

Boost Childrens IQ, Improve Behavior, and Get Your Child Off Ritalin with Flax Oil

Do school officials want you to put your child on Ritalin because of his or her poor behavior or learning skills? You'll want to know about the growing medical evidence that flax may be able to provide children with vital nutritional support for maintaining healthy behavior.

Like many readers of [The Doctors Prescription for Healthy Living](#) and [Health Perspectives](#), you probably desire your children to be both bright and well-behaved, and certainly don't want them to need a drug like Ritalin, if at all possible.

That's why in addition to a quality, chewable, multiple vitamin/mineral formula, you may want to make sure that your children receive additional important nutrients from flaxseed oil. Thanks to a growing line of medical evidence, we are more confident than ever that flax offers important help in supporting healthy behavior and IQ development.

Omega-3 Fatty Acids and Childrens IQ and Behavior

Two types of fatty acids are considered essential to the human diet. Omega-3 and omega-6 fatty acids cannot be synthesized in the body and must be obtained from the diet.

Generally, children receive adequate amounts of the omega-6 fatty acids, but their diets are woefully lacking in omega-3 fatty acids. Flax is rich in omega-3 fatty acids, particularly the parent compound of all omega-3 fatty acids, alpha-linolenic acid.

The omega-6 fatty acids are distributed evenly in most tissues, but omega-3 fatty acids are concentrated in a few tissues including the brain. Learning specialists now believe omega-3 fatty acid deficiency is associated with childhood behavioral problems.

The evidence is becoming more and more persuasive:

- In 1981, researchers first hypothesized that children with attention deficit/ hyperactivity disorder (ADHD) may have reduced nutritional status of essential fatty acids because they showed greater thirst (a symptom of essential fatty acid deficiency) compared to children without ADHD.
- These results were further confirmed in 1983. When essential fatty acids were examined in 23 maladjusted children and 20 normal children; essential fatty acid blood levels in poorly behaved children were significantly lower.
- In 1987, researchers further documented that 48 children with ADHD reported significantly greater thirst, more frequent urination, and more health and learning problems than children without ADHD. Significantly lower levels of two omega-6 fatty acids and one omega-3 fatty acid were found in the children with ADHD symptoms.
- In a 1995 study comparing plasma essential fatty acid levels in 53 boys with ADHD to a control group of 43 boys without ADHD, researchers found significantly lower levels of EPA and DHA (two key omega-3 fatty acids synthesized from alpha-linolenic acid contained in flax).
- In 1996, Laura J. Stevens, of the Department of Foods and Nutrition, Purdue University, and co-investigators published an extremely important paper in *Physiology & Behavior*. The researchers found that boys with lower levels of omega-3 fatty acids in their blood showed more problems with behavior, learning, and health than those with higher levels of total omega-3 fatty acids.
- ADHD children also tend to have more allergies, eczema, asthma, headaches, stomachaches, ear infections and dry skin than non- ADHD youngsters, note Donald Rudin, M. D. and Clara Felix. (Rudin received his medical degree from Harvard Medical School and from 1957 to 1980 served as the director of the Department of Molecular Biology at the Eastern Pennsylvania Psychiatric Institute, Philadelphia. Felix received her B. S. in nutrition from the University of California, Berkeley. Together, they authored [Omega-3 Oils: A Practical Guide](#).) Rudin and Felix claim that behavioral problems, including ADHD, have arisen because our modern diets are deficient in omega-3 fatty acids.

How Omega-3 Fatty Acids Help ADHD Children

All cells throughout the human body are enveloped by membranes composed chiefly of essential fatty acids in the form of phospholipids, notes Michael Murray, N. D. Phospholipids play a major role in determining the integrity and fluidity of cell membranes. What determines the type of phospholipid in the cell membrane is the type of fat consumed. Unfortunately, our childrens diets, which are filled with fast foods and prepackaged meals, contain high amounts of saturated, polyunsaturated and trans fatty acids from beef, dairy, corn and other hydrogenated oils. These interfere with the optimal balance of phospholipids in cell membranes.

A phospholipid composed of a saturated fat or trans-fatty acid differs considerably in structure from a phospholipid composed of an essential fatty acid, notes Dr. Murray. In addition, there are differences between the structure of an omega-3 oil composed membrane and an omega-6 composed membrane.

Up to 80 percent of the fatty acids in the cerebral cortex of the brain should be composed of omega-3 fatty acids. It is thought the cell is programmed to selectively incorporate the different fatty acids it needs to maintain optimal function. In actuality, what becomes incorporated into the cell membranes is determined primarily by diet. The American diet, composed of largely saturated fat, animal fatty acids, cholesterol, and trans-fatty acids, causes membranes to become less fluid compared to the membranes of a child consuming optimal levels of both essential fatty acids.

"A relative deficiency of essential fatty acids in cellular membranes makes it virtually impossible for the cell membrane to perform its vital functions," says Dr. Murray. Because the brain is the richest source of phospholipids in the human body and accurate nerve cell function is critically dependent on proper membrane fluidity, it only makes sense that alterations in membrane fluidity could dramatically impact behavior, mood, and mental function, he adds.

In addition studies have shown the biophysical properties, including fluidity of synaptic membranes directly influences neurotransmitter synthesis, signal transduction, uptake of serotonin and other neurotransmitters, and neurotransmitter binding. All of these factors have been implicated in depression and other psychological disturbances in children.

Personal Counsel...

- Do not think of flax oil as a cure for a disease. Rather, flax oil offers nutritional factors vital for the support of healthy childhood behavioral development. It should be part of a comprehensive program individually tailored for each child.
- While all children with ADHD are not deficient in omega-3 fatty acids, we believe that this may be important for at least a significant number of ADHD children.
- This is crucial information for our children, especially those who are diagnosed with ADHD and who are presently being prescribed Ritalin.
- We shouldn't be prescribing medicine simply because that's the easiest way to go, notes Dr. Mark Stein, who runs a University of Chicago clinic for children and adults with the disorder.
- In fact, studies show that children whose treatment program includes only medication, educational and psychological therapy continue to be at high risk for vandalism, petty crime, frequency of alcoholic intoxication, and possession of marijuana.
- Parents of ADHD children and ADHD adults who wish to utilize omega-3 fatty acids as a method of modifying their behavior should use both flax and seafood sources of omega-3 fatty acids. Flax seed oil provides alpha-linolenic acid, the master omega-3 fatty acid from which other omega-3 fatty acids are synthesized. Seafood provides docosahexaenoic acid which appears to be a vital omega-3 fatty acid for supporting healthy childhood neurological function. The rate of conversion of ALA to DHA is low. However, alpha-linolenic acid may be important to behavioral improvements as well. Therefore, a combination of flax and seafood is best.

Although DHA is available in some types of seafood such as wild salmon, mackerel and sardines, many children simply will not consume those species of fish rich in omega-3 fatty acids. Thus, flax, which can be inconspicuously incorporated into childrens meals, holds many benefits.

Flaxseed and flax oil may be used in baking (e. g. , muffins and bread), salad dressings and in smoothies as well as many other tasty dishes. Use flaxseed oil as a butter or margarine substitute for bread. Children love fruit smoothies and won't even know that you have added a tablespoon or two of flaxseed oil.

We recommend the equivalent of one to two tablespoons of a quality flax product, used either in baked goods, used in stir fries or in other recipes. The choice of a flax oil product is critical.

How to Find the Best Lignan-rich Flax Oil

Be sure your flax oil is made to order. Most flaxseed oil today is dated for freshness for up to one year. This is too long for a perishable, electron-rich, live food, like flaxseed oil. What's more, these products are typically shipped by ground transportation resulting in prolonged delivery and conditions such as high heat that may degrade the oil. Worse yet, some companies have resorted to refining and or filtering their oil in order to artificially extend shelf life. Be sure your flax oil is made to order, and that the oil is pressed the day it is ordered.

Once fresh pressed, be sure your flax oil is rushed by air delivery manufacturer-direct to your favorite natural health center or health professional, arriving within days of being made.

Be sure your flax oil comes coded with both a Fresh Pressed date and a Freshest Before date stamp spanning a period of only four months for maximum potency and freshness. Many brands stamp their

oil for six to twelve months. Good for them, not so good for you.

You will find this type of extremely high-quality, lignan-rich, flax oil in the refrigerator sections of natural health centers or your pharmacy.

References:

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Ritalin Dangers

According to an October 20, 1995 Drug Enforcement Administration bulletin:

- Ritalin (methylphenidate [MPH])ranks in the top 10 most frequently reported controlled pharmaceuticals stolen from licensed handlers.
- Abuse of MPH can lead to marked tolerance and severe psychic dependence.
- Organized drug trafficking groups in a number of states have utilized various schemes to obtain MPH for resale on the illicit market.
- MPH is abused by diverse segments of the population,from health care professionals and children to street addicts.
- A significant number of children and adolescents are diverting or abusing MPH medication intended for the treatment of ADHD.
- In 1994, a national high school survey (Monitoring the Future)indicated that more seniors in the U.S. abuse Ritalin than are prescribed Ritalin legitimately.
- Students are giving and selling their medication to classmates who are crushing and snorting the powder like cocaine. In March of 1995,two deaths in Mississippi and Virginia were associated with this activity.
- DAWN statistics on estimated emergency room mentions indicate that there were 271 mentions in 1990,657 mentions in 1991, 1,044 mentions in 1992 and 725 in 1993 (of which 28%to 40%were associated with abuse for dependence for psychological effects). The number of mentions for MPH was significantly greater than mentions for Schedule II stimulants (6 mentions in 1992 and 1 mention in 1993 for Schedule III stimulants).
- The U.S.manufactures and consumes five times more MPH than the rest of the world combined.
- MPH aggregate production quota has increased almost six-fold since 1990.
- Ritalin may be cancer-causing.

Flax Recipes for Children

Carob-Peanut Butter Bars (makes six bars)

1/2 cup carob powder
2/3 cup soy powder
2 tablespoon organic flax oil
1/4 cup peanut butter
1/4 cup rice polishings
2 tablespoons brewers yeast,optional
2 tablespoon wheat germ
raw honey

chopped walnuts and almonds to top

- Place all ingredients in a bowl,,adding enough honey to make a kneadable consistency.
- Spread in a square pan..Press the chopped nuts over the top.Chill.
- Cut into bars and serve.

Blueberry-Almond Smoothie (serves 2)

1 cup frozen blueberries

1 frozen banana

6 cup soft tofu (optional)

6 cup raw almonds

2 tablespoons organic flax oil

2 tablespoons pure maple syrup

1 cup water or rice milk

- In a blender,,combine ingredients in order listed and puree to a smooth consistency.