



# THE SOLINGER METHOD

by Root Health L.L.C.

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## **Pediatric learning difficulties**

### **FUNCTIONAL WELLNESS SUPPORT PLAN**

Pediatric Learning Difficulties

Root Health L.L.C, The Solinger Method

**Dr. Sarah Solinger, PhD, ND, MSc, FCN**

Naturopathic Doctor, Functional Clinical Nutritionist, Master Herbalist

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## **What Are Pediatric Learning Difficulties**

Learning difficulties refer to challenges with acquiring, processing, retaining, or expressing information despite adequate instruction and opportunity. These challenges may affect reading, writing, math, memory, attention, processing speed, or executive function. Learning difficulties exist on a spectrum and may be situational, developmental, or persistent, often varying by subject and environment.

From a physiologic standpoint, learning depends on healthy brain energy metabolism, balanced neurotransmitter signaling, intact sensory processing, stable blood sugar, adequate micronutrients, restorative sleep, and a regulated nervous system. When one or more of these foundations are compromised, learning efficiency can decline even in highly intelligent and motivated children.

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# Expanded Education, Learning Difficulties, Conventional vs Naturopathic Perspective

## The Conventional Medicine Perspective

In conventional pediatric care, learning difficulties are commonly evaluated through psychoeducational testing, school based assessments, and behavioral observations. Children may receive diagnoses such as specific learning disorder, dyslexia, dyscalculia, ADHD, or processing disorders. Interventions typically focus on educational accommodations, individualized education plans, tutoring, and classroom modifications. In some cases, medication is recommended to address attention or behavioral components.

While these supports are essential and often beneficial, conventional care frequently views learning difficulties as primarily neurologic or developmental, with limited focus on underlying physiologic contributors. Families are often told that learning challenges are lifelong, that the goal is accommodation rather than improvement, and that there is little that can be done beyond educational strategies.

## The Naturopathic Medicine Perspective

Naturopathic medicine approaches learning difficulties as a functional output of brain physiology rather than a fixed limitation. From this perspective, learning is highly sensitive to metabolic, nutritional, inflammatory, and neurologic inputs, many of which are modifiable.

Rather than asking only how to accommodate learning challenges, naturopathic care asks why the brain is struggling to process information efficiently.

Common naturopathic contributors include:

- iron deficiency affecting oxygen delivery and dopamine signaling
- low ferritin impairing attention and working memory
- omega three fatty acid deficiency altering neuronal membrane function
- magnesium deficiency affecting neurotransmitter balance
- B vitamin insufficiency impacting energy metabolism and methylation
- blood sugar instability reducing cognitive stamina
- sleep disruption impairing memory consolidation
- gut inflammation or dysbiosis influencing the gut brain axis
- chronic stress or anxiety interfering with learning pathways

Addressing these contributors can significantly improve learning capacity and cognitive endurance.

## Why Children Are Often Told They Will Always Struggle



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Because learning difficulties may be identified early and persist over time, families are often told that the child's brain is simply wired differently. While neurodiversity is real and should be respected, this narrative can overlook physiologic barriers that are suppressing a child's potential.

When foundational systems are supported, many children demonstrate meaningful improvements in focus, processing speed, comprehension, and confidence.

## **What Naturopathic Support Offers**

Naturopathic care focuses on optimizing the internal environment required for learning.

Support may include:

- targeted nutrient repletion
- stabilization of blood sugar
- support for mitochondrial energy production
- reduction of neuroinflammation
- nervous system regulation strategies
- sleep optimization
- gut health support

The goal is not to eliminate differences in learning style, but to remove physiologic obstacles to learning.

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## **Common Signs and Symptoms**

- difficulty with reading, writing, or math
  - slow processing speed
  - poor memory or recall
  - difficulty following instructions
  - fatigue with schoolwork
  - frustration or avoidance of learning tasks
  - low confidence related to academics
  - headaches after mental effort
  - difficulty sustaining attention
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## **Foundational Support Strategies**

- consistent meals with adequate protein
- stable blood sugar throughout the day
- prioritize sleep quantity and quality



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- limit ultra processed foods and excess sugar
  - reduce artificial dyes and additives
  - encourage movement and outdoor time
  - provide learning environments with reduced sensory overload
  - support emotional safety around learning
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## Pediatric Supplement Blends for Learning Difficulties

### **Omega Three Fatty Acids, EPA and DHA**

Support neuronal signaling, attention, and cognitive processing.

- ages two to five, three hundred to five hundred milligrams daily
- ages six to twelve, five hundred to one thousand milligrams daily
- ages thirteen to seventeen, one thousand to fifteen hundred milligrams daily

### **Iron, only if ferritin is low**

Low ferritin is associated with impaired attention and learning.

- pediatric dosing, two to three milligrams per kilogram per day of elemental iron
- Use only with lab confirmation.

### **Magnesium Glycinate or Threonate**

Supports neurotransmitter balance and cognitive calm.

- ages two to five, eighty to one hundred twenty milligrams daily
- ages six to twelve, one hundred twenty to two hundred milligrams daily
- ages thirteen to seventeen, two hundred to four hundred milligrams daily

### **B Complex, methylated**

Supports brain energy metabolism and neurotransmitter synthesis.

- ages six to twelve, one half pediatric dose daily
- ages thirteen to seventeen, one full adult dose daily

### **Zinc**

Supports attention, memory, and executive function.

- ages two to five, five to seven milligrams daily
- ages six to twelve, ten to fifteen milligrams daily
- ages thirteen to seventeen, fifteen to twenty milligrams daily

### **Phosphatidylserine**

Supports memory, focus, and stress response.

- ages six to twelve, one hundred milligrams one to two times daily
- ages thirteen to seventeen, one hundred to two hundred milligrams one to two times daily

### **Probiotics**

Support gut-brain communication and reduce neuroinflammation.

- toddlers, ten to fifteen billion CFU daily



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- ages six to twelve, fifteen to twenty five billion CFU daily
  - adolescents, twenty five to fifty billion CFU daily
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## Accessing the Full Supplement Protocol

A complete supplement protocol for pediatric learning difficulties is available in Fullscript using clinical, pharmaceutical grade formulations. Parents may create a free account and access the curated protocol under the “Protocols” section by locating the corresponding condition name.

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## When Further Evaluation Is Recommended

Further evaluation is recommended when learning difficulties are accompanied by:

- poor growth or fatigue
- headaches or abdominal pain
- sleep disturbances
- behavioral changes
- anxiety or mood symptoms
- history of recurrent infections

Evaluation may include ferritin, vitamin D, magnesium RBC, B vitamin status, blood sugar markers, and comprehensive stool testing to assess gut brain axis contributors.

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