

*Scientific Study****Children's Cognitive Health in Chronic Fatigue Syndrome***

**“The more interference presented, the worse the performance of individuals with CFS.”**

Children with chronic fatigue syndrome (CFS) encounter the same difficulty completing complex information-processing tasks as adults do, according to the University Medical Center in the Netherlands. Cognitive problems are an important symptom of CFS.

Neuropsychological task performance with interference control was tested in a group of adolescents to determine the children's ability to respond and focus despite interference from interruptions.

As an example, a child might be presented with a task to press a button each time a triangle appears while circles also appear in between. A child without CFS would succeed in ignoring the circles and pressing the button only when the triangles appear. However, a child with CFS would exhibit compromised ability to press the button only when triangles appear.

Adolescents with CFS not only experience the same cognitive problems as adults with CFS, but like adults, they are also more fatigued than their counterparts.

The more interference presented, the worse the performance of individuals with CFS. This impairment of information processing is not due to depression or anxiety, indicating a physiological difference. School attendance is associated with reduced physical function, rather than anxiety.

Cognitive impairment includes impaired learning, impaired memory, decreased attention span, mental retardation, and developmental delays. Many toxicants and pollutants in the environment are known

for negatively influencing cognitive ability.

According to the Collaborative on Health and the Environment (CHE), “Cognitive impairment in children may occur as a result of exposures (to environmental chemicals) in utero or in early childhood during brain development.” Some of these exposures include lead, mercury, fragrance chemicals, household cleaning products, fire retardants, plastics, and other environmental pollution.

There is strong evidence for ethyl alcohol (ethanol), lead, mercury, nicotine, PCBs, and tobacco smoke being linked to cognitive impairment. Pesticides, carbon monoxide, nitrites/nitrates, PCB's, solvents have also been linked to both cognitive difficulties and reduced IQ. These cognitive declines may be permanent and irreversible.

Parents can take measures to reduce the use of fragrances, commercial cleaning products, pesticides, and tobacco smoke in the home by selecting unscented personal care products, eliminating candles, air fresheners, and incense, using alternative methods for pest control that do not involve pesticides, and quitting smoking.

**References**

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