



Chiropractic Newsletter

Well-Being

The Mental Health of Our Kids

Over the past several years, our kids have largely been “removed” from their lives.

Although we’re grateful for the slow pace and the one-on-one time, there is great concern over the impact that this has had on the brain development of our kids.

Our neurodevelopment depends on critical windows of time in which certain life experiences will act as a trigger for brain maturation. We are genetically designed to express appropriate brain development in response to specific interactions with our environment. These critical windows exist in age-specific clusters from birth until our early to mid-twenties.

How we experience our world in the first two decades shapes our neurological outcomes. Epigenetics teaches us that we have specific genes responsible for healthy development, but, these genes can remain dormant in the absence of specific cues. Missed critical windows will affect how we perceive our environment and how we interact with our world both physically and emotionally.

The birth of specific brain cells, beginning with the bottom of the brain (more primitive) and working up to the top front of the brain (responsible for cognition, behavior, and emotional well-being) are dependent on input through the senses. This means that everything from tummy time and eye contact as an infant, to rolling over, sitting up and crawling, to jumping and falling as toddlers, to emotional, social, and movement experience into our 20’s will cause the genes of healthy development to be “turned on.” Some of this continues until we’re 48 years old, but the meat and potatoes happens before age 25.

Our “progenitor cells” are descendants of stem cells. These have a pre-programmed destiny to differentiate into brain cells, which are necessary if we’re to become healthy and well functioning. The catch is that this destiny specific



differentiation is experience dependent!

Experiences of input through the senses, movement, and emotional connection are required for all of this to take place. **We have to fall, jump, get dirty, crash, run, make eye contact, interact, be loud, be heard, be social, be certain, be empowered, and build trust.** These aren’t just “healthy concepts” ...they are genetically required. This the concern over experiencing a year on the couch or on a bed, with screen-led academics...all packaged in fear, avoidance and isolation.

Several years ago, the CDC reported that 1 in 6 kids in the United States had a diagnosed neurological disorder. After what our kids have gone through since then, it appears that the diagnosis of ADHD, ADD, and mental health challenges are on the rise. So what do we do now? The following is a list of dangers to watch for and tools to implement to help our kids find and catch up on “neurological nourishment.”

Due to our present circumstance, there appears to be an increase in the prescribing of drugs like Ritalin. In a paper, written in 2013 in Med Hypothesis entitled Methylphenidate and the juvenile brain: enhancement of attention at the expense of cortical plasticity?, the authors look at young rats exposed to low doses of

methylphenidate (Ritalin). The authors note that these drugs may alter normal brain development by interfering with these critical windows of brain maturation, particularly in the prefrontal cortex.

It is in the prefrontal cortex that we develop motor skills, which are connected to language acquisition, problem-solving, memory, emotion, gratification, planning, and personality development. It's confusing that these drugs don't come with extensive informed consent for parents. Currently, 8% of children under the age of 15 are on a drug like Ritalin, with boys (1 in 7) being twice as likely to be diagnosed and "treated."

In our hearts, we know that our kids are perfect.

They may not be able to sit there for eight hours a day quietly reading and not moving. They may feel the need to crash and jump and be loud. When they can't, they may express frustration. They may become defiant. I know that's what happens to me when I feel stuck. This doesn't necessarily make us dysfunctional, maybe it actually means we're alive and paying attention to our innate needs. Maybe they're telling us that we owe them the finding of another way. Maybe, the fact that they don't fit the mold is a gift and not a disorder. Maybe we should look them in the eyes and tell them this.

Protecting them from certain foods, well, not foods, but the chemicals in foods which have a similar effect to drugs, is also big on the radar. Watching out for processed foods, including those with preservatives, MSG, and food coloring (particularly Red #40 and Yellow #5), is necessary. Many studies have looked at how these chemicals are brain altering, and can interfere with healthy function. In Europe, for example, foods with coloring must come with the warning label that "coloring agents can have an adverse effect on activity and attention in children." Take a look at natural dyes like beet juice and turmeric as an alternative.

For brain development and neurological harmony, our critical windows must let in the following:

- Sleep (no screens in bedrooms)
- proper food
- movement
- falling
- crashing
- emotional connection
- outside play
- jumping
- ball throwing and catching
- running
- balance recruiting play (remember that they need to fall)
- and limited screen time.

Our genetic code knows what it's doing. It behooves us to respect it, nourish it, and not interfere with the process. Our kids deserve the certainty that, given the proper foundation, they can trust in the expression of their health and their potential to flourish.

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