



ADD/ADHD and Swimming

By: Nikki Miller

There has been lots of buzz lately around anything Michael Phelps. He has earned his place in American Sports History, and we haven't even begun to see the ripple effect of his wins.

With that said, his mother, Debbie, has been very forthwith about his struggle with ADHD and how swimming helped him. As a 25 year licensed psychotherapist who specializes in ADD/ADHD, and a 30 year swim school owner, I feel qualified to clarify.

First, a brief explanation of Attention Deficit (Hyperactive) Disorder: ADD/ADHD is so much more complicated than just the "active child" or "couch potato." There are 12 different areas of symptoms for ADD, and each of these areas may be over active or under active.

Someone with ADD may be over active in one symptom, while under active in two others, and have no symptoms in 9 areas. This leaves us with the equation $12!$, (or 12 exponential,) which translates to over 479 million different combinations of ADD/ADHD symptoms.

You can't know a few people with ADD and then compare them with anyone else who thinks they have it to even begin making a diagnosis.

The fundamentals for a diagnosis of ADD/ADHD are that there is a problem with focus and/or attention that dramatically interferes with academic/occupational, social, or behavioral life.

What isn't included in the diagnosis is the potential for greatness that I have seen in most people I have come across who have ADD/ADHD.

Too often, the diagnosis and treatment focus on identifying weaknesses, which a child has had pointed out to them for a lifetime, taking a toll on confidence and self-esteem.

Debbie Phelps seems to have balanced this quite well by building Michael up for all of his wonderful traits.

The hyperactive side of ADD includes an amazing enthusiasm, which, when channeled and supported properly, has potential for magnificence. Even ADD, without hyperactivity, has a quiet, unfailing determination that has accomplished feats which seem superhuman.

Of the 12 symptom areas of ADD/ADHD, swimming aids in:

1. Focal Maintenance

The inability to concentrate long enough, or even too long, is dictated by the amount of time spent in the water. With very few choices, concentration tends to last as long as the task at hand.

2. Arousal - alertness

Have you ever splashed water on your face to wake up? Often, the hyperactivity of a child is an effort to keep the brain "awake."

Think of when you are driving and need to stay alert. You may roll down the window, turn up the radio, sing along, even bounce in your seat a little. In effect, you become temporarily hyperactive.

This is how a hyperactive child lives each day. In water, there is no need. In fact, hydrostatic pressure and resistance in water slows the world down, and can be quite calming and soothing to someone who always has to be wound up to stay awake. There are also very few injuries in water that a "klutzy" kid would stumble into daily on land.

3. Mental activation

Underwater is a perfect forum for daydreaming and free association, which is what ADD children get in trouble for. Underwater, there are no complaints of the mind wandering off, leaving plenty of time for dreams and aspirations without reproach. Muscle

memory takes care of the swim and flip turns, so that the heart can condition the athlete.

4. Processing Depth and Detail

With kinesthetic practice, more and more physical detail is required, starting with the “big picture” and then fine tuning the details.

Usually, in life skills, there is too much clutter around to notice the details. In swimming, it can start with 1 detail at a time, until muscle memory gets it and adds it to the “big picture.”

5. Saliency Determination

The barrage of sounds and background noises that so often distract the student are not present in water. This sensory deprivation leads to better focus on the task at hand.

6. Satisfaction Control

The noticeable restlessness that craves excitement can be satisfied in competition and swim meets, which also breaks up the routine of workouts, including peaking and tapering.

7. Mental Effort

The difficulty in getting started with work, or finishing work that has been started, is ended when a coach is on deck holding the athlete accountable for the daily workout.

With good coaching, very little goes undetected, and when the athlete slacks, the workout gets harder, reinforcing working hard to begin with next time.

8. Previewing

Impulsivity, and failure to look ahead and see possible consequences can be dooming and habitual.

A good coach, again, holds the athlete accountable, but also dreams with the athlete and holds those goals vividly before the athlete as the reward for hard work.

9. Facilitation and Inhibition

Hyperactivity itself is calmed and soothed in the aquatic environment, and in a tough workout, there is little ability to say or do inappropriate things while underwater or while panting for breath in between sets. One learns to be silent, and actions speak louder than words.

10. Tempo Control

Timing is completely controlled by the coach. Swimming too fast leads to quick burnout and a painful workout, while swimming too slow earns extra pushups or being “lapped” by other swimmers.

After months of daily swimming, the athlete learns the correct pace, and may apply this to other areas in life.

11. Self-Monitoring and Self-Righting

In a workout, it's hard to lose track of what you are doing. All you have to do is look around and see what everyone else is doing. You also always have



the goal of finishing the task at hand so you can rest. This becomes the singular focus.

Unlike the inability to read social cues and fix whatever you did or said, the cues come from your own body and there is some pain when you fail to correct behaviors.

12. Reinforceability

People who fail to learn from their mistakes, or those who do not respond to rewards are reinforced in the pool. As mentioned before, when a small change in the way an arm is propelled leads to an easier swim or a win in a competition, the reinforcement is so immediate that it is hard to ignore, and punishes the body when it is ignored.

People with ADD are smart; often, very smart. But they are better aware of what is going on internally than they will ever be aware of what else is going on. We often try to reinforce or punish with all the other stuff going on and they miss it.

Exercise, itself, is an amazing detoxin. The increased blood flow through the muscles helps clear up toxins and acids that accumulate in the muscle, and the increased blood flow to the brain helps to keep the brain alert and stimulate thinking. Putting a workout between two, two-hour blocks of study can accomplish more than a full six-hour block of study alone.

So Michael Phelps has joined the ranks of other GREATS with ADD, including Walt Disney, Benjamin Franklin, and Winston Churchill, to name a very few, with the help and guidance of a devoted and wise mother and the talent and efforts of his coaches.