

The Calming Effects of Swimming for People with ADHD

Most people have heard of Michael Phelps. You may know him as the “most decorated Olympian in history,” having accumulated [22 career medals](#) – 18 of them gold. You may know him as the troubled Olympic athlete who only recently returned to competition following a [six-month suspension from the USA Swimming team](#) after receiving a second DUI arrest. Most don’t know Phelps as the man who overcame the obstacles of an increasingly common disorder through his passion for swimming.



Image via [Flickr](#) by Katelyn Fay

While Phelps has certainly had his share of troubles as an adult, his love of the sport and tremendous success drew attention to the potential benefits of swimming for people with ADHD when information about his diagnosis (at age nine, for which he subsequently took medication for two years) leaked into news stories. Following this, in 2008, an article appeared in [Psychology Today](#) pointing to the potential benefits of swimming for people with ADHD. A number of studies have since examined the benefits of swimming for children and adults with ADHD with some promising findings.

The following guide includes information about the benefits – the calming effects, in particular – of swimming for people with ADHD, including background research on the prevalence of ADHD and information on how to obtain the positive benefits of swimming for both children and adults with ADHD. Additionally, you’ll find other tips and resources with information on how swimming can be used as a means to alleviate symptoms and strengthen both focusing skills and the ability to maintain positive peer relationships. If you’ve been searching for an outlet or an activity that can help manage the symptoms of ADHD, swimming may just be the solution you’ve been seeking.

How Many Children Have ADHD?

According to the [Centers for Disease Control and Prevention](#) (CDC), approximately 11 percent of children between the ages of 4 and 17 have been diagnosed with ADHD as of 2011. This figure, which comes from

community samples in U.S. studies, is higher than that estimated by the American Psychiatric Association (APA). In the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the APA states that approximately 5 percent of children have ADHD.

Boys are more likely than girls to be diagnosed with ADHD, with 13.2 percent of boys versus 5.6 percent of girls diagnosed with ADHD. The average age at diagnosis is 7 years of age, although children with more severe cases are sometimes diagnosed at an earlier age.

As the CDC points out, the rate of children diagnosed with ADHD is increasing steadily over time. The rates of ADHD diagnosis increased an average of [3 percent per year](#) between 1997 and 2006. And from 2003 to 2011, the rate of diagnosis increased an average of 5 percent per year. Consider the rates of ADHD diagnosis in the following years:

- 7.8% in 2003
- 9.5% in 2007
- 11.0% in 2011

Some children are treated with medications, while others are treated with behavioral therapy. Still other children are treated with a combination of medication and behavioral therapy, while others go without any treatment at all.

Whether more children have ADHD or practitioners are becoming more adept at identifying and diagnosing ADHD in children, the rate of children who are diagnosed and/or being treated for ADHD is on the rise. ADHD is a frustrating disorder for both the child and his parents, often leaving both desperately seeking solutions.

How Many Adults Have ADHD?

There are fewer studies examining the prevalence of ADHD in adults, although more adults today are also being diagnosed and treated for ADHD. The [National Comorbidity Survey Replication \(NCS-R\)](#), (*American Journal of Psychiatry*, April 2006), funded by the National Institute of Mental Health (NIMH), found that 4.4 percent of adults between the ages of 18 and 44 experience some symptoms and disabilities from ADHD.

[Best Practices in Adult ADHD: Epidemiology, Impairments, and Differential Diagnosis](#), a publication appearing in *CNS Spectrum: The International Journal of Neuropsychiatric Medicine* (August 2008), estimates that approximately 4 percent of the U.S. adult population has ADHD. In other words, approximately one in every 20 adults in the U.S. experiences symptoms and/or disabilities from ADHD – a figure that may also be on the rise as the increasing numbers of children diagnosed with ADHD enter adulthood.

The Challenging Symptoms of ADHD

To understand how swimming can have positive effects on children and adults with ADHD, it's helpful to first understand the various symptoms and other difficulties children and adults with ADHD experience. The following resources provide helpful information about the struggles of people with ADHD.



Image via [Flickr](#) by Simply Swim UK

[ADHD is one of the most common childhood brain disorders.](#) The National Institute of Mental Health points out that ADHD can last into adolescence and adulthood. This article cites studies that find that the brain development of children with ADHD is normal, but is delayed by approximately three years. This delay is most pronounced in areas of the brain affecting thinking, planning, and paying attention.

[The symptoms of ADHD include inattention, hyperactivity, and/or impulsivity – traits most children display from time to time.](#) As this article explains, the difference in a child with ADHD is that these symptoms are not appropriate for the child's age or so severe that they interfere with normal functioning.

[These symptoms can interfere with a child's ability to learn and to get along with others.](#) This article describes how to tell if your child's symptoms are normal behavior or if your child may have ADHD. Additionally, this article debunks some common myths about ADHD.

[In children with ADHD, the symptoms of hyperactivity, impulsivity, and the like are persistent and interfere with functioning or the child's normal development.](#) Psych Central points out that the symptoms must be present before age 12, and that ADHD is classified as a neurodevelopmental disorder even when it's not diagnosed until adulthood.

[Diagnosis is not a simple process – nor a single-test determination.](#) This article describes the DSM-5 criteria for diagnosing ADHD, as well as the three typical presentations that occur in children. Links to further information for adults with ADHD are also provided.

General Benefits of Physical Activity and Organized Sports for Children and Adolescents with ADHD

Numerous studies have demonstrated the benefits of regular physical activity for all children, but some studies are now looking at the specific benefits of regular physical activity and participation in organized sports for children and adolescents with ADHD. The following resources provide informative summaries

and analysis of recent research into the link between enhanced cognitive performance and physical activity.



Image via [Flickr](#) by PoolSafely

[Studies show that physical activity, such as regular exercise or participation in organized sports programs, is linked to important improvements in cognitive performance and brain function.](#) This article describes the use of mental exercises to improve attention span and describes promising results from several studies that show a clear link between regular physical activity and cognitive performance improvements.

[Exercise allows children with ADHD to burn off the restless energy that typically accompanies the disorder.](#) This article from WebMD describes the ways children with ADHD can benefit from participation in regular exercise programs to alleviate some of the symptoms of ADHD.

[Exercise can function as an alternative ADHD treatment without side effects.](#) This article discusses the benefits of physical exercise for children with ADHD, including how exercise acts to activate the attention system, or the brain's executive functions, including sequencing, working memory, prioritizing, inhibiting, and sustaining attention.

[Exercise can actually “work like a drug” for both children and adults with ADHD.](#) According to this article from Everyday Health, exercise can ease or treat the symptoms of ADHD for both children and adults. While no definitive cause of ADHD has been identified, researchers believe it may be linked to dopamine, a neurochemical. Exercise encourages the production of neurochemicals dopamine, norepinephrine, and serotonin in the brain, and therefore has the same effect on the brain as the stimulant drug, methylphenidate (Ritalin), often used to manage the symptoms of ADHD.

[Environmental influences can be helpful in the management of ADHD.](#) This article discusses research in ADHD, noting that ADHD cannot be cured but those who are diagnosed with the disorder can find coping

mechanisms that allow them to compensate. Physical activity is one such environmental influence that can help children with ADHD compensate.

[The idea that physical activity has a positive impact on ADHD isn't new.](#) However, recent studies linking physical activity to a decrease in the severity of ADHD symptoms and an improvement in cognitive functioning in children has experts discussing the promise of regular physical activity as a treatment option.

Swimming-Specific Benefits for Children and Adults with ADHD

Swimming, as an individual sport, offers a number of benefits for children with ADHD. The following resources and articles offer information on the specific benefits of swimming for children with ADHD.



Image via [Flickr](#) by Jack at Wikipedia

[Individual sports are often a better choice for children with ADHD whose symptoms are not well controlled.](#) As this article suggests, team contact sports require children to focus not only on their own role in the game, but the positions and actions of the other players on the field or court.

[Swimming exercise enhances the expression of tyrosine hydroxylase \(TH\) and suppresses the expression of the dopamine D2 receptor in ADHD rats in one study.](#) This article summarizes the research and findings in rats with ADHD.

[Children with ADHD can excel at swimming and other competitive sports with proper, consistent coaching.](#) As this article suggests, the discipline required to participate in swimming competitively provides structure and a point of focus for a child's attention.

[Swimming has been named one of the best sports for children with ADHD.](#) According to this article, ADDitude Magazine reports that children have fun swimming while simultaneously learning focus and discipline. Additionally, swimming provides the ideal balance for children with ADHD who may have

difficulty focusing on the many aspects of team sports: “it allows children to compete as individuals, while still being part of a larger team.”

[Water can provide a safe haven for children and adults with ADHD.](#) This interview with Debbie Phelps, the mother of Olympic swimmer Michael Phelps, says swimming helped Michael manage his ADHD symptoms during his childhood and adolescence. Juggling school and practice helps children with ADHD learn effective time management skills. Additionally, kids with ADHD function best when they have clear parameters, so focusing on swimming between two lines in the pool is the perfect outlet.

[Swimming can help people with ADHD burn off excess energy as well as improve concentration.](#) This article points out that swimming requires intense concentration, and the fact that a swimmer’s head is often underwater helps to eliminate surrounding distractions for people with ADHD.

How Swimming Creates Calming Effects for People with ADHD

Swimming is said to aid with relaxation and can help to improve moods. The following resources provide information on the calming and relaxing qualities swimming provides, particularly helpful for people with ADHD who may be experiencing difficulty focusing or other symptoms.



Image via [Flickr](#) by terren in Virginia

[Physical activity, such as swimming, is a recommended first step for children who are “dysregulated,” or exhibiting the symptoms of ADHD such as disruptive behavior and inattentiveness.](#) This article explains approaches to diagnosis and treatment of ADHD, including the use of extracurricular activities as an essential component of treatment due to the calming effect of physical activities on the brain.

[Michael Phelps’ mother, Debbie, reports that her son, who was unable to pay attention in school, could sit for hours at swimming meets waiting for his turn to compete for just a few minutes of races.](#) This article describes the success of several Olympic athletes who were diagnosed with ADHD as children. Additionally, Debbie Phelps describes the swimming pool as a sanctuary for her son, a place where he could burn off excess energy.

[Both children and adults report a better ability to focus when participating on a team that requires more individualized participation.](#) This article describes the potent effects of physical activity on the brain, noting that many children find swimming to be a relaxing and refreshing exercise.

[Sports like swimming help children with ADHD cope with feelings of isolation from their classmates.](#) Children with ADHD often struggle with their peer relationships, and the self-esteem boost that activities such as swimming provide can help these children bridge better relationships with peers.

[Swimming has a relaxing, meditative quality – whether you're swimming outdoors in the ocean, a river, or a lake, or in an indoor or backyard swimming pool.](#) This article describes the benefits of swimming for relaxation and mood enhancement, particularly if you follow the proper swimming and breathing techniques.

[Many people experience a mildly meditative, relaxed feeling when they're in or under water.](#) This article reviews a book, 'Blue Mind,' which examines the calming effect that water has on people.

[Swimming is a great stress-reliever, like other forms of exercise.](#) Physical activity such as swimming stimulates the brain to release neurochemicals that make the body feel good. When swimming, the added effect of water moving over the body creates a massaging sensation, promoting relaxation.

Both children and adults with ADHD can benefit from swimming as a way to release excess energy and improve concentration abilities. Michael Phelps is just one of many examples of athletes who have relied on swimming and other organized sports as an outlet with great success. If you're searching for an activity to keep yourself or a child with ADHD engaged and focused, improve relationships with peers, and calm the feelings of restlessness and anxiety that often accompany ADHD, swimming might just be the perfect solution.