



ADHD & Obesity

by Roberto Olivardia, PhD

EATING is one of the most routine things people do, yet healthy eating and weight regulation remain a challenge for many individuals. This is especially true for those with ADHD. Several recent research studies looked at the relationship between ADHD and obesity, citing it as an under-recognized problem.

A longitudinal study found that men with childhood ADHD had significantly higher BMI and obesity rates than men who did not have ADHD (Cortese et al., 2013). This was the case even after controlling for socioeconomic status and lifetimes of psychiatric disorders. The study had recruited subjects when they were eight years old, then interviewed them when they were eighteen, then at twenty-five, and finally at forty-one years old.

In a Dutch sample of 372 children with ADHD aged five to seventeen years old, the children with ADHD had four times the risk of being overweight (Fliers et al., 2013). Another study found similar risk in a group of Korean children with ADHD (Kim et al., 2014).

An Under-Recognized Problem

In a study of 215 adults seeking gastric bypass surgery due to morbid obesity, Altfas (2002) found that 27 percent had inattentive ADHD. When the sample was narrowed only to patients that had a body mass index (BMI) over 40, the prevalence of ADHD increased to 43 percent. There was also a significant difference between ADHD and non-ADHD groups when it came to weight loss after the surgery, with the ADHD group losing less weight.

Another group of researchers conducted a lab experiment with a sample of ten- to fourteen-year-olds (Hartman et al., 2013). They found that children with ADHD ate more. What was of particular interest was that this was not related to a negative mood state, level of hunger prior to food exposure, or even the liking of the food eaten.

Although impulsive eating or unhealthy diet choices are prevalent in ADHD populations, the rates of obesity can also be explained by a lack of physical activity. One study found that children with ADHD, when followed through adolescence, were less physically active overall in adolescence, and that this held a stronger association to obesity than their eating habits (Khalife et al., 2014).

Factors that predispose people with ADHD to obesity

The role of poor executive functioning plays a role in the risk of obesity in ADHD groups (Graziano et al., 2012). Eating healthy requires a healthy level of executive functioning. Planning healthy meals requires organization and time management skills.

If one is to eat dinner at 6:00 PM, the planning of that meal may need to happen hours beforehand. Deciding what to cook or eat, making sure all the ingredients are available, any necessary thawing or defrosting, are just some of the things required to do before one sits down to eat. People with ADHD have difficulty with being future-oriented around time, as Russell Barkley points out (1997). Oftentimes, thinking about planning the meal occurs simultaneously to the time one wishes to eat a meal. Impulsivity and impatience set in, leading to reliance on fast foods or prepared foods that are often laden with fat, sodium, sugar, and carbohydrates.

Impulsivity is also a major factor. Many people may crave sweets, but have an easier time resisting them. The ADHD brain makes it more effortful to say “no” even though the brain is screaming “YES!” This applies to food in the house, in restaurants, or in the supermarket while shopping. Many individuals with ADHD are on a “see food” diet. If they see it, they eat it.

People with ADHD often lack mindfulness of hunger and satiety cues. Other than eating beyond the point of fullness, it is also common for them to skip meals due to not wanting to interrupt a consistent level of attention at something (often referred as hyperfocus). Skipping meals, however, sets the body up to later overeating or binge eating, especially on foods high in simple carbohydrates, sugars, and saturated fats. It is not uncommon for people with ADHD to eat while watching television, driving, or working. Since attention is paid to the other activity, calories consumed often do not enter the cognitive radar.

Emotional factors can predispose anybody to overeating or binge eating. Having a bowl of ice cream after a stressful day at work is not an anomaly. For those with ADHD, emotional eating can be a daily occurrence. Boredom, anxiety, stress, low self-esteem, and even happiness can trigger overeating for those with ADHD. Food can be a quick, accessible, legal remedy for these difficult emotions. Since those with ADHD are sensory-seeking individuals, food can supply a high dose of sensory stimulation.

Biological and genetic factors can also predispose people with ADHD to become obese. Serotonin and dopamine are two of several neurotransmitters in the brain that are implicated in ADHD. Both serotonin and dopamine levels rise when we eat high-carbohydrate and high-sugar food. It is possible that those with ADHD are gravitating to overeating as a biological means to raise certain neurotransmitter levels. Due to insufficient levels of dopamine in the brain, people with ADHD may exhibit a “reward deficiency syndrome,” whereby they seek external sources to adequately raise dopamine levels (Blum et al, 2008).

What treatment strategies will help?

For individuals with ADHD, regulating healthy weight requires engaging in strategies that also work with ADHD. For them, structuring their day and especially night is important to keep themselves stimulated and engaged in activities that prevent boredom. Setting alarms or reminders at meal times can alert them that it is time to eat. Preventing skipped meals goes a long way in achieving a healthy weight. Working with a nutritionist unburdens many individuals with ADHD from making decisions about food that may seem overwhelming.

Mindful eating practices have been shown to be helpful in managing weight. Deep breathing for five minutes before beginning to eat can result in the person’s being a more accurate observer of food intake. Simple practices, such as putting their utensil down, out of their hand, until they have swallowed the food they have in their mouth can make an impact on their caloric intake in a day. Using smaller plates and bowls when eating can make a difference. Before they go out to eat, they can check the menu online and make a healthy choice beforehand.

Skipping breakfast results in later starvation—which results in overeating. Eating foods rich in protein have been found to be helpful for the ADHD brain, as well as providing sustenance so that the person isn’t hungry an hour after eating a full meal.



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Setting smaller, measurable goals is best. For people who have ADHD, setting these goals with a friend can increase the chances that they will stick to their plan, since they will have friendly accountability. Strategies that work for people who don't have ADHD may not apply, and those with ADHD should not feel shame around that.

Healthy weight loss is typically one pound a week for women and one to two pounds per week for men. People with ADHD are attracted to fad diets that purport to enable them to lose twenty pounds in a month. The problem is that even if someone loses so much weight so quickly, maintaining that weight loss is the real battle. The body will often engage in a rebound that results in their gaining that weight back, plus some.

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Stimulant medication has been found to be effective in aiding people with ADHD with regulating their eating and weight. The medication targets the executive functioning deficits that make eating healthy and losing weight very difficult.

A longitudinal study assessed the effects of medications on weight change in obese patients over 466 days (Levy et al., 2009). There was a significant difference between the medication and nonmedication groups. Members of the groups that received the medication lost 12.36 percent of their initial weight, whereas those in the nonmedication group actually gained 2.78 percent of their initial weight. This is not to say that one needs to take medication. Many of the behavioral strategies alone can be effective. However, a combined approach, particularly in moderate to severe cases, may be the most effective approach.

Especially for individuals with ADHD, healthy eating and weight maintenance require much more effort than one might think. It is imperative to screen for ADHD in doctor's offices and obesity clinics, since adequately treating the ADHD will make

problems with food and weight much easier to treat. Most important of all, therapy can help reduce any shame due to cultural biases and discrimination against people who struggle with both ADHD and obesity. 

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