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## ADHD - or sleep deprived?

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Warning to parents: If your children aren't getting enough sleep, they may start acting like they have attention deficit hyperactivity disorder.

A new Finnish study reveals that young children who sleep less than 7.7 hours a night score much higher on measures of hyperactivity and impulsivity than kids who get more shut-eye.

These behavioural problems are often associated with ADHD. But, in this case, the study was based on 280 healthy boys and girls, seven to eight years of age, who were apparently free of the disorder.

The lead researcher, Juulia Paavonen of Finland's National Institute for Health and Welfare, noted that numerous studies have investigated the effects of sleep deprivation on adults. Far fewer trials have looked at the consequences of short sleep duration in children.

One American study, however, estimated that one-third of children in the United States suffer from inadequate sleep. Dr. Paavonen suspects children in many other countries aren't snoozing enough.

Lots of children go to bed too late, get up too early or have specific disorders that prevent them from achieving a full and restful night's sleep, she said in a telephone interview from Helsinki.

It's possible some otherwise healthy children who don't get enough sleep could be incorrectly diagnosed with ADHD, she suggested. "Whenever a child is suspected of having ADHD, it's important to see ... if there are any sleeping difficulties that might contribute to the behavioural problems."

So how much sleep is enough? There isn't one simple answer because different people require different amounts of sleep and that applies to children, too.
"The only way to know whether the child is sleeping enough is to follow his or her behaviour during the daytime to see if there are any symptoms of inadequate sleep such as tiredness or other problems," she said.

To further complicate matters, many parents seem unaware of just how much sleep their children are getting. In the Finnish study, published in the journal Pediatrics, parents were asked to keep a oneweek sleep record for their children. As well, each child wore a wrist device called an actigraph, which measures movement and provides a relatively accurate measure of time spent asleep.

Many parents overestimated their children's sleep time by an hour or more - compared with the data provided by the actigraphs.

