ADHD treatment is getting a workout

By Liz Szabo, USA TODAY March 27, 2006

Homework used to be an ordeal for Kat Orlov.

Kat, who has an attention disorder, once spent four hours a night on her assignments. These days, the 15-year-old can complete her work in about half that time.

Her salvation, she says, came from exercise. Kat joined a community crew team in September and now works out nearly three hours a day. Although Kat still takes stimulant medications during the school year, she and her family are thrilled by her progress.

"When I exercise, I feel much more energized and awake," says Kat, from Wayland, Mass. "I have more of a feeling to 'sit down and get something finished.' "

Across the USA, doctors are studying a variety of non-medical treatments for attention deficit/hyperactivity disorder, ADHD, and similar disorders.

About 4 million Americans take stimulant medications for ADHD, including nearly 10% of 10-year-old boys, says Steven Nissen of the Cleveland Clinic.

Nissen and other members of a Food and Drug Administration advisory panel were concerned enough about the drugs' safety last month that they suggested adding a "black box" warning about possible heart risks. Last week, another advisory panel recommended adding label information about the risk of hallucinations. The FDA has not yet acted on those recommendations.

Doctors haven't done many definitive studies about exercise and ADHD, says David Goodman, an assistant professor of psychiatry at the Johns Hopkins University School of Medicine. But Goodman says it makes sense that working out would help people cope with the condition. Studies show that exercise increases levels of two key brain chemicals — dopamine and norepinephrine — that help people focus.

"Your cognitive function is probably better for one to three hours after exercise," Goodman says. "The difficulty is that by the next day, the effect has worn off."

If kids could exercise strenuously three to five times a day, they might not need medications at all, says John Ratey, an associate clinical professor of psychiatry at Harvard Medical School. Ratey is so intrigued by the question that he's writing a book about how exercise can reduce symptoms of ADHD or at least help patients cope.

Team sports might help children with ADHD in several ways, says James Perrin, a professor of pediatrics at Boston's MassGeneral Hospital for Children. Children with the condition benefit from following a regular schedule. Coaches who lead kids through structured exercises also might help build concentration and organizational skills.

Yet many kids get little exercise, Perrin says. Studies show that children today are far more sedentary than they were a generation or two ago, a trend that has contributed to increasing childhood obesity rates.

"You could speculate that one reason for the increasing rates of ADHD is that kids are exercising less," Perrin says.

Researchers have looked at other habits to explain the rise in ADHD rates. But experts note that there isn't much research to clearly link lifestyles with attention problems.

More than a few parents and teachers suspect that sugary snacks — with their artificial colors, flavors and preservatives — contribute to the problem. Others suggest that vitamins might reduce hyperactivity. But most controlled trials show these substances have no effect on ADHD, according to a July review in the Journal of the American Dietetic Association.

Still, cutting back on sugar won't hurt children, so parents have no reason to fear giving it a try, says Martin Stein, a pediatrics professor at the University of California, San Diego School of Medicine.

Many parents also wonder whether television, computers and video games make it harder for children to concentrate.

A study in 2004 found that infants and toddlers who watch a lot of television are more likely to have trouble concentrating in their early school years. Every extra hour of TV raised the odds of having attention problems by 10%, according to the study, which was published in Pediatrics.

Stein cautions that parents shouldn't put too much faith in a single study. A study in March 2006, also in Pediatrics, did not find a link between TV watching and behavior problems. Yet few doctors consider TV a healthy habit.

The American Academy of Pediatrics recommends children watch no TV before the age of 2. Older kids should view no more than two hours a day of high-quality shows.

Many kids watch far more TV, though, and about half have sets in their rooms, Perrin says. Kids who watch a lot of TV may spend less time running around outside and more time eating sugary snacks. They also miss out on attention-building activities, such as reading.

Experts agree that parents should help children improve their concentration by reinforcing good behavior and helping kids develop organizational skills.

Teaching children to cope with ADHD is vital, says Goodman, who notes that half of kids struggle with symptoms even into adulthood.

"It's more than just crossing your fingers," Goodman says. "You have to empower a child with organizational skills that they can take into their adult life."