Fitness goes digital: 'Exergaming' combines video games and exercise

With Dance Dance Revolution pulsing on the big-screen TV at the Sumner County YMCA, 9-year-olds Joshua Crow and Chaselyn Drake rhythmically stomp their way to fitness.

"It's a challenge for your feet and it's good exercise," Joshua says. "I sweat a lot when I do it. It really wears you out, and you have to concentrate a lot."

Video games, long held as a possible cause of childhood obesity, have now joined the fight against it. Fitness facilities, well aware of technology's hypnotic hold over kids, are going digital to get kids off their duffs. It's a trend called "exergaming," and it may be a glimpse at how kids keep fit in the future.

Hitting the Sportwall

The YMCA of Middle of Tennessee has latched onto this concept; at least seven of its facilities have some sort of exergaming activity. The Sumner County Y has both DDR and a Sportwall, a pair of walls wired with a timer, lighted targets, scoreboards and music.

Sportwall games involve smacking the lighted targets in certain ways, either with your hands or feet or with bags, beanbags or noodles. Kids can choose the level of intensity and game length.

"They want that constant stimulation," Hastings said.

The Mayo Clinic earlier this year reported kids spend an average of eight hours a day in front of the TV either watching shows or playing video games. A small study of 25 children showed that any
addition to a game that involved significant movement, like adding a treadmill or a dance pad, kicked up the amount of energy they burned by several times.

That's a shining window of opportunity to help improve fitness, researchers pointed out. The very thing keeping kids sedentary can help make them active again.

**Schools run with it**

Schools are paying attention. All of West Virginia's 765 public schools bought DDR this year. California Gov. Arnold Schwarzenegger has made it part of his K-12 fitness initiative.

How much of a workout is the game?

A recent study by the American Council on Exercise shows DDR's light mode burns calories at a rate comparable to an easy walk on a treadmill. Standard and difficult mode ups the aerobics to the equivalent of cycling 12 to 14 mph — "similar to the benefits people get with high-impact aerobics," researchers said.

Exergaming got a big boost earlier this year with the release of the Nintendo Wii game console.

It features highly interactive gameplay, requiring motions like throwing a punch, swinging a tennis racket or reeling in a fish.

"When the Wii came out, you heard reports of kids being sore and there were injuries," said Dr. Greg Plemmons, director of the pediatric weight management clinic at the Monroe Carell Jr. Children's Hospital at Vanderbilt.

"That's basically because they'd been inactive for a long time."

Nevertheless, there haven't been any large-scale studies on the benefit of exergames, Plemmons said. Most of it's anecdotal. He's had, for example, one patient lose 10 pounds through DDR.

"Clearly, they are a video-game kind of generation," he said.

"The good thing about these items is that a lot of times, they set short-term goals. Part of the success we see with weight loss is if you set short-term goals. You can conquer one level and then you go up."

**Keep kids moving**

Nevertheless, though exergames do play a role in helping youth stay fit — particularly with obese kids who may not feel comfortable working out in public — Plemmons would rather see kids turn off the Wii baseball in favor of playing the real deal outside with real friends.

But for those kids weaned on a steady diet of video games, there will be exergames at the ready to coax them to get fit while still getting their gaming fix.
The North Rutherford County YMCA in Smyrna, for example, is stocked with two video-game bikes plugged into PlayStations. Kids peddle and steer with them to play driving and racing games.

"For the child obesity rate, we really wanted to help kids get in motion and stay in motion, doing something besides sitting there playing the PlayStation," said wellness director Carrie Peck. "This gives them the opportunity to play the game but also be active."