

# Active Video Games: Good for You?

## The new generation of video games has kids (and the elderly!) jumping at the chance to be a **Guitar Hero**—but are they really good for you?

The latest wave of video games, including the ubiquitous Wii from Nintendo, has certainly struck a cord with players: High-tech, interactive games are attracting devotees of all ages, from grade schoolers to grown-up gamers to octogenarians. What sets these games apart are their motion-detecting controls, which require users to get off the couch and virtually box, bowl or play a fierce guitar solo in a simulated rock band. Guitar Hero, for example, lets users jump around “playing” the guitar to on-screen musical notes that correspond to fret buttons on the controller. It recently set a world record with sales reaching more than \$1 billion.

Elderly players have shared in the craze, having discovered a way to return to playing sports through simulated games like fishing and baseball, which allow them to mimic the motions of casting a line or pitching an inning (one Maryland retirement home even hosted a “Wii Home Run Derby” that got residents swinging at fastballs). And while these games have been lauded for enticing users to be more active, many parents are wondering if they really should be encouraging their children to plug in and play.

While the benefits and drawbacks of new video games are being studied, Bickham is careful to point out that encouraging children, especially those who are overweight, to reduce their overall time playing video games may no longer be as advantageous as it has in the past.

Researchers at Children’s Hospital Boston are asking the same question. “We’re working to find out what all the links are between media use and health,” says David Bickham, PhD, a researcher in Children’s Center on Media and Child Health (CMCH). Bickham and his colleagues have examined previous studies that have shown that some video games are, indeed, capable of getting kids up off the sofa for extended periods of time. For example, Dance Dance Revolution (DDR), a game where players step on a special mat in response to on-screen prompts, has been successfully used in schools, homes and after-school programs to encourage

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kids to exercise. “Playing DDR for 45 minutes has been found to raise heart rates to a high enough level to burn calories and speed up metabolism,” says Bickham. “For new games to be equally successful, they must require consistent and relatively strenuous movements—not just simple arm swings and wrist movements.”

They’ve also got to have substance and style. “If the active games rely on the novelty of the movement instead of on good game design, then young people will quickly revert to the more fun, sedentary games.”

This new generation of active games is also causing doctors to look at research done on TV watching to determine if kids who play a lot of video games are actually heavier and less healthy. “It turns out that decreasing television viewing for young people slows their weight gain, but it does not increase their physical activity,” Bickham says. This indicates that watching television does not influence obesity simply by replacing more active pursuits.

So what’s happening? Two theories have been put forth: effects of food advertising on nutritional choices and eating while watching television. So far, the new, active games don’t have food ads, and given their physical requirements, don’t allow for simultaneous eating and playing. So if these games stay free of advertising, then children who use them may be at less of a risk for negative health effects than if they were spending the same amount of time watching television.

The potential benefits of active video games demonstrate one reason why parents shouldn’t group all video games into a category of unhealthy behavior. However, Bickham points out one major drawback: Some games have players act out extremely violent acts in very realistic ways. “Research has repeatedly demonstrated that violent video game play increases young people’s aggressive thoughts and behaviors,” he says. On the Wii, for example, actual stabbing and punching motions replace simple button presses in certain games. “Going through the motions of the violence may have a stronger influence on later behaviors than traditional violent video games,” Bickham says.

While the benefits and drawbacks of new video games are being studied, Bickham is careful to point out that encouraging children, especially those who are overweight, to reduce their overall time playing video games may no longer be as advantageous as it has in the past. “With the advent of high quality, active video games comes the potential to include them in the treatment for obesity rather than simply blaming them for contributing to the epidemic,” he says.

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