

American College of Sports Medicine

## **Kids' Energy Expenditure High in Active Video Games**

2008 JUN 11 -- Active video games, such as the Nintendo Wii, are quickly becoming the most coveted gaming systems on the market. Beyond entertainment value, these systems appear to be helpful in encouraging youth to exercise, as profiled in three studies presented today at the 55th Annual Meeting of the American College of Sports Medicine (ACSM).

One of the studies presented today examined energy expenditure for active video games compared to sedentary games to see just how much more exercise kids get when playing systems like the Wii. Gregory Brown, Ph.D., FACSM and his study team found that Wii Boxing, Wii Tennis, and Dance Dance Revolution (a popular arcade and now at-home dancing game) burned two to three times as many calories as traditional hand-held games. Brown's study participants included 17 children around 11 years old.

"I would still recommend that kids get outdoors and play sports or dance with friends in the real world as opposed to a virtual one," Brown said. "But if you're going to play video games, you might as well play ones that get you active and moving."

Researcher Viki Penpraze conducted a similar study, comparing two active games to a hand-held game and simply watching a DVD. Participants included 13 children, all around the age of 10.

During Dance Mat Mania and Eye-Toy Boxing, where players simulate actual boxers, children's accelerometer counts of total movements per minutes were more than four times the DVD and hand-held game activities. In addition, Penpraze observed a higher level of enjoyment in active gaming.

"Although enjoyment wasn't officially part of the study, anecdotally I can say that enjoyment appeared to be much higher in the active games," Penpraze said. "These active games are more social in nature than watching a DVD or traditional hand-held games. While one player was competing, his or her partner would be cheering for them, which actually might have led to even more energy expenditure."

However, a third study from The Netherlands found that perhaps not all active games meet recommended oxygen consumption - and energy expenditure - for children. The research team studied six gaming systems: Dance Dance Revolution, Wii Tennis, Eye-Toy Beach Volleyball, Xerbike, Lasersquash and Apartgame. Results showed that Wii tennis and Eye-Toy Beach Volleyball did not achieve the level of energy output recommended for children by health and fitness experts in The Netherlands, but the researchers are in consensus that some activity is better than no activity at all. They say future studies on active games should focus on long-term use, effects on weight control, and risks.

"Parents should search for the most active games possible for their kids, in order to get children in the habit of exercise," said Sanne de Vries, M.S., lead author on the study. "But any active game is going to be better for your child physically than a hand-held one."

The American College of Sports Medicine (<http://www.acsm.org/>) is the largest sports medicine and exercise science organization in the world. More than 20,000 international, national, and regional members are dedicated to advancing and integrating scientific research to provide educational and practical applications of exercise science and sports medicine.

The conclusions outlined in this news release are those of the researchers only, and should not be construed as an official statement of the American College of Sports Medicine.

The American College of Sports Medicine 55th Annual Meeting is going on now at the Indiana Convention Center in Indianapolis, Ind. To reach the on-site press office, please call 317-262-1588.

Keywords: American College of Sports Medicine.

This article was prepared by Healthcare Finance, Tax & Law Weekly editors from staff and other reports. Copyright 2008, Healthcare Finance, Tax & Law Weekly via NewsRx.com.