



Exergaming

Exergaming or exer-gaming (a [portmanteau](#) of "[exercise](#)" and "[gaming](#)")^[1] is a term used for [video games](#) that are also a form of exercise.^[2] Exergaming relies on technology that tracks body movement or reaction. The genre has been credited with upending the stereotype of gaming as a [sedentary](#) activity, and promoting an active lifestyle.^{[3][4]} Exergames are seen as evolving from technology changes aimed at making videogames more fun.^[5]

The effectiveness of maintaining interest in exercise using traditional fitness machines has been examined with [Gamerzize](#) and found to be six times more sustainable than exercise alone.^[18]

While the Wii has been seen as being more physically demanding than sedentary game consoles,^[19] a study published in the [British Medical Journal](#)^[20] found that while playing the Wii uses significantly more energy than playing sedentary computer games, the energy used when playing active Wii games is not of high enough intensity to contribute towards the recommended daily amount of exercise in children.^[21]

Benefits of exercise on mental ability and productivity are in the early stages of research, but indications from using [Gamerzize](#) with a computer have been reported as providing a 17% productivity improvement.^[22] Combining cardiovascular exercise and balance practice has been shown to increase academic success among students in grades K-12. According to the 2009 Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth, children who are physically active perform better in school than those who are not. Interestingly, academic performance improves even when academic learning time is reduced to allow time for physical activity. ^[23]

[Electronic Arts](#) commissioned a 2010 study by the University of Wisconsin which found that [EA Sports Active](#) passed fitness guidelines for an "effective workout" put forth by the [American College of Sports Medicine](#).^[24]

CatEye Gamebikes

The Gamebike is an [exercise bike](#) designed to work in concert with [video game consoles](#) such as the [GameCube](#), [PlayStation](#), [PlayStation 2](#) and [Xbox](#). It is made by [Cateye Fitness](#).

Dance, Dance Revolution

Dance Dance Revolution, abbreviated DDR, and previously known as Dancing Stage in [Europe](#) and [Australasia](#), is a [music video game](#) series produced by [Konami](#). Introduced in [Japan](#) in 1998 as part of the [Bemani](#) series, and released in [North America](#) and Europe in 1999, *Dance Dance Revolution* is the pioneering series of the rhythm and dance [genre](#) in video games. Players stand on a "dance platform" or stage and hit colored [arrows laid out in a cross](#) with their feet to musical and visual cues. Players are judged by how well they time their dance to the patterns presented to them and are allowed to choose more music to play to if they receive a passing score.

Sony PS2 Eye Toy

The EyeToy is a color [digital camera](#) device, similar to a [webcam](#), for the [PlayStation 2](#). The technology uses [computer vision](#) and [Gesture recognition](#) to process images taken by the camera. This allows players to interact with games using motion, color detection and also sound, through its built-in [microphone](#).



Wii

The Wii (pronounced /'wi:/, like the pronoun [we](#)) is a home [video game console](#) released by [Nintendo](#) on November 19, 2006. A distinguishing feature of the console is its [wireless controller](#), the [Wii Remote](#), which can be used as a handheld [pointing device](#) and [detects movement](#) in [three dimensions](#). Another distinctive feature of the console is [WiiConnect24](#), which enables it to receive messages and updates over the Internet while in [standby mode](#).^[1]

Jackie Chan- Xavix- Boxing

Boxing is a wonderful way to increase your cardiovascular system, tone your arms and back and basically keep in great shape. Jackie Chan and XaviX have teamed up to bring you and your family interactive boxing that combines several key exercises with in the ring action. You will get a great workout with Jackie Chan as your trainer in the Comfort of your Home while you tone your body and improve your overall endurance in the process.

PowerBoxing Gloves are made of soft, flexible materials that have been engineered to withstand the test of time. Your action is wirelessly picked up by Optical Sensors that detect the swing and direction of the PowerBoxing Gloves.

Xbox Kinect

Kinect for Xbox 360, or simply Kinect (originally known by the [code name](#) *Project Natal*),^[1] is a "controller-free gaming and entertainment experience" by [Microsoft](#) for the [Xbox 360](#) video game platform, and may later be supported by PCs via [Windows 8](#).^[2] Based around a [webcam](#)-style add-on [peripheral](#) for the Xbox 360 console, it enables users to control and interact with the Xbox 360 without the need to touch a [game controller](#), through a [natural user interface](#) using gestures and [spoken commands](#).^[2] The project is aimed at broadening the Xbox 360's audience beyond its typical gamer base.^[1] Kinect competes with the [Wii Remote](#) with [Wii MotionPlus](#) and [PlayStation Move](#) & [PlayStation Eye](#) motion control systems for the [Wii](#) and [PlayStation 3](#) home consoles, respectively.



The Benefits of Exergaming for Kids

Exergaming is a new form of gaming that has been developed. The games require players to perform physical activities in order to play a game, therefore combining games and exercise. Physical activity includes anything from window washing to dancing, aerobics, martial arts and a variety of sports moves. Kids can play a game of tennis right in their living room. In the safety of their homes kids can go virtual skiing, flying down snow covered mountains and dodging trees.

Exergaming Facilitates Exercise

In the past, technology has been a hindrance to exercise. Technology such as television and online gaming has prevented many kids from getting the exercise they need to stay healthy. Gaming is popular among children, and many kids spend hours in front of games without exercising. With exergaming, technology is now facilitating exercise, and it's growing in popularity. There are different exergaming categories such as camera exergaming, rhythm exergaming, exergaming machines, workout exergaming and sensory exergaming. Exergaming can be enjoyed by anyone, as there are games to suit people of any gender, ability, fitness level or age. Games consist of different levels, so even beginners can enjoy the games. These games are accessible in many forms such as online, in arcades or at home.

Exergaming Promotes Good Health

Exergaming combines kids' enthusiasm for gaming and exercise. Games are fun and engaging, therefore encouraging children to exercise more. Exergaming promotes exercise among kids and motivates them to exercise more frequently. The physical exertion involved in the games has positive effects on health and fitness. With concerns about obesity rising, it's important to note that exergames can assist in calorie burning and weight loss. Exergaming can help improve coordination and body movements. Another benefit of exergaming is that it helps to decrease stress levels, as it provides a way to have fun and relieve stress. Kids get an aerobic workout while playing, and exergaming has cardiovascular benefits. Exergaming promotes sensory motor learning and has positive effects on cognitive performance for children.

Exergaming Creates Variety

For children who are not talented at sports, this provides a way for them to get exercise without the pressure to perform on a sports team. Kids who feel self conscious playing sports now have another alternative. It's also an option for kids who find other forms of fitness training boring. Kids who do not often have friends around and whose parents are too busy to play sports with them can play against virtual players.

Exergaming as a Social Activity



Get Up, Get Active, Get Fit!



Although exergaming can be played alone in the privacy of your living room, it can also be a social way to keep fit. Online exergaming communities offer a place where exergamers can meet and compete. Exergaming can be played when kids have their friends over. It can also be a family activity, facilitating family bonding, because exergaming has options for all ability levels and ages. Playing against other people promotes competition and therefore offers more of an incentive to exercise. Virtual trainers are available, so gamers can go through fitness programs where their progress is saved and reviewed.

<http://www.fitday.com/fitness-articles/fitness/exercises/the-benefits-of-exergaming-for-kids.html>