

IMPROVING PHYSICAL FITNESS AS AN OLYMPIC LEGACY: FACT OR FICTION?

By Dan Lee

For more than a century, the modern Olympic Games have given us moments of high drama, athletic glory, national pride, political controversy and even tragedy.

But in recent years, members of the Olympic movement have turned their attention toward creating a legacy in each host country that lasts well beyond the 16 days of the Games. They have focused on how nations will use the Olympic competitive venues – often built at substantial cost – after the Games are completed; how they can help reduce pollution and wasted resources that harm the environment; and how they can either enhance or detract from a city's image and reputation.

Many host cities and nations also have used the Olympics generally as an opportunity to encourage physical fitness and build up sports groups. For example, the LA84 Foundation received \$93 million in surplus funds from the 1984 Summer Olympics in Los Angeles to donate toward local youth sports programs.¹ Since those Games, the foundation has distributed more than \$180 million. Beijing presented the most concerted effort to improve fitness to date, and Vancouver also sought to motivate people to exercise during the Winter Olympics earlier this year.

But how effective are these efforts? How much are people motivated by the athletic accomplishments at the Olympics to change their lifestyles? How many will make the time and stop sitting in front of the TV and exercise?

This paper will review the research and documentation from past Summer Olympics' efforts to boost physical fitness and public health. The issue is of vital interest to Londoners: one of the neighbourhoods closest to the Olympic Park is also one of the unhealthiest. More than one third of the residents in Canning Town South in Newham are obese, and nearly half of the residents said they had not exercised in a month, according to a recent study.²

The London 2012 Olympics has already billed itself as the “greenest” Games through the extensive use of renewable energy sources and conservation measures. It remains to be seen whether to it will have the same impact on Londoners' health and fitness.

¹ Ascribe Newswire. “LA84 Foundation Awards \$635,000 to 16 Sports Programs for Youth in Southern California.” 15 October 2008.

² Sophie Goodchild and Miranda Bryant. “Obesity Problem is at its Worst in Boroughs Near Olympic Stadium.” The Evening Standard. 23 April 2010.

Other Host Cities' Experience

Los Angeles (1984)

Anecdotal evidence suggests that these Games boosted already-strong demands for exercise clothing and equipment in the United States. One manufacturer reported that sales of a rowing machine quadrupled after a TV sports broadcaster reviewed it. Gymnastic equipment sales also increased in the United States, likely influenced by Mary Lou Retton's gold-medal performance in the women's all-around competition. Business owners opened new private gyms, and existing clubs reported waiting lists of people wanting to join. Total athletic and sport footwear sales were projected at \$2.3 billion in 1984, a 7 percent increase over the previous year. Warm-up suit sales were expected to reach \$758 million, about 20 percent over 1983.³

One should also keep in mind that this was the era when aerobics was popular, led by actress Jane Fonda in her leg warmers and reflected in Olivia Newton-John's "Physical" music video. In addition, eight years had passed since the United States had participated in a Summer Olympic Games. There was likely a pent-up American interest in the Games, along with the patriotic fervor that came from hosting the Games.

Youth sports clubs in Southern California also reported increased enrollment and inquiries about membership after the Olympics started.

"It does have an impact," one YMCA director said. "We've had people call and want to know about team handball and synchronized swimming. Gymnastics always gets a boost. Every time ABC's 'Wide World of Sports' shows gymnastics, we get calls for a week."⁴

Enrollment of girls at gymnastic schools in the United States reportedly doubled less than two months after the Games finished, and Retton's performance was cited as the reason. Seven years later, this led to the "largest pool of young, talented gymnasts the United States has ever had."

"I always have said that we would see the results of 1984 in about seven years, and that's what we are seeing now," U.S. Gymnastics Federation Executive Director Mike Jacki told a reporter. "And it's just beginning. It's just starting. We will do real well this year and next year at the Olympics, but by 1996 (and the Games) in Atlanta, we could repeat what happened in 1984 with the Soviets and all the rest of the world there."⁵

³ Kuzela, Lad. "Cashing in on the Fitness Boom." *Industry Week* 12 November 1984. 54.

⁴ "Gold Rush Spawns Gym Rush at Southern California Recreational Centers." Associated Press. 4 August 1984.

⁵ Hudson, Maryann. "Delayed Reaction puts U.S. on World Mat; Gymnastics: Retton's '84 performance produces a large pool of girls with international talent." *Los Angeles Times*. 16 May 1991. Home edition: 8.

Jacki's comments were prophetic: the U.S. women's team won gold in 1996, a performance that is largely remembered for Kerri Strug's dramatic vault with an injured ankle.

Los Angeles was the first Games to make widespread use of corporate sponsorships to pay expenses. These sponsorships enabled it to become the first Games to record a surplus – a massive sum of \$232.5 million. Sixty percent went to the U.S. Olympic Committee to fund athletic development programs, but the remaining 40 percent was donated to a new not-for-profit organisation, the Amateur Athletic Foundation (now known as the LA84 Foundation).

AAF's mission was and is to contribute money to youth sports organisations in an eight-county area of southern California that is now home to more than 22.5 million residents as of 1 January 2010, according to state estimates.⁶ The main focus was on communities that were underserved by traditional sports; and programs that served girls, minorities or children with physical or developmental disabilities.

Since its inception in 1985, it has donated \$191 million to various programs.⁷ For example, about 8,000 children from more than 50 elementary schools in Los Angeles got to try their hands in 10 different Olympic sports in 2000, including basketball, cycling, rowing, soccer, softball, team handball, tennis, track and field and volleyball. They also got a fencing demonstration.⁸

It's unclear, however, what the long-term impact on fitness and health has been, because we were unable to find any studies on the subject. However, southern California probably would be worse off without such funding, especially in light of recent budget cuts to school physical education and team sports programs.

Seoul (1988)

Nothing under health, fitness or exercise in LexisNexis, at least under English-language publications.

Barcelona (1992)

Nothing under health, fitness or exercise in LexisNexis, at least under English-language publications. But organizers did create a new maritime quarter and five beaches for the Olympics that have provided space for exercise.

Atlanta (1996)

⁶ "E-1 Populations Estimates for Cities, Counties and State with Annual Percentage Change – January 1, 2009 and 2010." State of California, Department of Finance. Sacramento, California. May 2010. <http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/2009-10/>

⁷ "About LA 84. Mission: Life Ready Through Sport." http://www.la84foundation.org/who/who_fmst.htm

⁸ "8,000 L.A. Compton Inner-City Your Participate in Amateur Athletic Foundation's Olympic Sports Program." Ascribe. Newswire 8 May 2000.

We did not find any organized effort the by the Atlanta committee to encourage physical fitness. But a few corporations did take advantage of the Olympics as an opportunity to encourage exercise.

As part of its P.L.A.Y. Participate in the Lives of America's Youth national fitness and sports program, Nike donated \$500,000 to create a world-class running track home to a local track club and a training facility for other countries preparing for the games. It was the second such track, following one in Nike's home state of Oregon, and it was also built out of recycled Nike shoes.⁹

The Blue Cross and Blue Shield health insurance system also launched a nationwide health and fitness campaign starting in 1995 as part of its Olympic sponsorship and official health insurance sponsor of the U.S. team. The campaign included public education brochures and an adopt-an-athlete program, where local insurance plans supported athletes, and the athletes represented plan at community/employee events.¹⁰ Blue Cross and Blue Shield of North Carolina supported a state-wide promotion offering official Olympic license plates for North Carolina drivers. The proceeds went to support fitness programs for youth in North Carolina and U.S. Olympic athletes.¹¹

As with Los Angeles, there was anecdotal evidence that Olympics did motivate some to go to the gym. At least three fitness clubs in the San Francisco Bay area reported increased signups, attendance by regular members or longer workout times.

"It does have a definite influence on you when you see these slim, sleek trim bodies and you go, 'Wow! A human body can actually look like that!'" said Fatima Walsh, an aerobics instructor at the club.

One club member said the Olympics can be inspirational, but also discouraging.

"They do what they do with their bodies and I do what I do with mine," she said.¹²

Gymnastic clubs in the United States also reported an increase in enrollment with the success of the American women's gymnastics team, which won the gold medal.¹³

Sydney (2000)

⁹ "Joyner-Kersey, Salazar, Wilkens and Nike team up for QuicksilverTrack Dedication for Atlanta Youth." PR Newswire. 13 September 1995.

¹⁰ "BC and BS System announces Olympic sponsorship programs, fitness campaign." PR Newswire. 10 November 1994

¹¹ "BC and BS of NC Joins U.S. Olympic Committee to Promote Fitness." PR Newswire. 29 April 1996.

¹² Estrin, Robin. "Olympics Inspiring Some to Achieve Tauter Tummies, Buns of Steel" Associated Press 31 July 1996.

¹³ Witherspoon, Wendy. "Olympic Dreams; Interest in Gymnastics Increases with United States' Atlanta Success." Los Angeles Times. 24 September 1996. 1.

We did not find any coordinated public effort to emphasize health and fitness in Sydney during the Olympic Games there. Two leisure companies launched promotional campaigns in Australia that were intended to motivate members to exercise by providing access to fitness centres.¹⁴ At least one swimming complex reported a 20 percent increase in usage after the Games began.

“We’re really noticing the difference during the times when the pool is normally quiet, like midmorning. There are a lot of people coming in and it’s been happening since the Games began. I guess they’re being inspired by what they see on TV,” said Brenton Booth, manager at the Cook and Philip Park swimming complex in Sydney.¹⁵

But post-Olympic research contradicted this observation, showing that the Sydney Games did not change peoples’ attitudes toward exercising. A study found that more than 40 percent of adults got no exercise – exactly the same percentage as before the Olympics.

“There was no bulge during the Olympics or straight afterwards. We thought that if there was to be a trickle-down effect [from the Olympics], it might last a few weeks while people felt good about Australia and themselves, but we didn’t see it,” University of South Australia Professor Kevin Norton said.¹⁶

“I think that things like the Olympics tend to turn us more into observers than participants,” Adelaide-based physical fitness expert Rick Atkinson said. “I think there’s so much emphasis on superstars that it elevates them into a position that’s almost unattainable.”¹⁷

The New South Wales government created a “Gold Medal Fitness” program to encourage young people to exercise, using Olympic stars such as swimmer Ian Thorpe. However, it was unclear what level of change it was able to make, if any.

Athens (2004)

We could find little about any Greek efforts to boost physical fitness prior to the Athens Games, at least among English-language publications. That is perhaps not surprising, given that Greek officials were focused on completing venue construction in time for the Opening Ceremonies. It’s clear that little thought was given to utilizing the venues after the Olympics: many remained unused and became magnets for rubbish and graffiti.

¹⁴ “Games used to promote clubs.” *LeisureWeek*. 21 September 2000.

¹⁵ Hornery, Andrew. “Suddenly, everybody wants to be an athlete.” *Sydney Morning Herald*. 29 September 2000. 23.

¹⁶ Cameron, Deborah. “A nation that loves its Games but won’t come out to play.” *Sydney Morning Herald*. 30 May 2001. 5.

¹⁷ Astbury, Sid. “Olympics didn’t peel Australia’s couch potatoes.” *Deutsche Presse-Agentur*. 2 April 2001.

However, McDonald's Corp. promoted "Go Active! Day" in Athens. The event emphasised varying menus, nutritional education, and regular exercise. McDonald's created a multilingual website with the International Olympic Committee that offered consumer fitness and diet tips. It also employed past Olympic champions in its campaign.¹⁸

Within the United States, 24 Hour Fitness began an ad campaign to link the workout gym chain with American Olympic athletes, such as softball star Jennie Finch and wrestler Rulon Gardner.¹⁹

In the United Kingdom, Prime Minister Tony Blair said he wanted to use the Olympics as a catalyst toward improving fitness, mindful of the rising obesity rate and associated health costs. Government officials said they wanted to get 70 percent of the population physically active by 2020, and they planned to spend £2 billion over the next three years on sport. General practitioners would be encouraged to write patients prescriptions for gym memberships rather than medications.²⁰

Beijing (2008)

Well before China won the right to host the Olympic Games, government officials created a nationwide physical fitness program. The program established the goal that more than 40 percent of Chinese nationwide would participate in regular exercise between 1995 and 2010. About 28,000 people volunteered in Beijing to train others in sports skills.²¹

After China was awarded the 2008 Games, its government started a five-year plan aimed to increasing physical fitness and creating sports facilities throughout the country. This included building more than 12,100 stadiums and gymnasiums at a cost of about \$100 million. Developers also were required to build public sports facilities for new residential housing projects.

By the time the Olympics began, Chinese government officials boasted that 70 percent of Beijing residents were regularly exercising, playing table tennis or basketball, jogging, shadow boxing, or participating in some other activity.²² They did not describe the methodology used to reach that number.

However, at least one report by a Western journalist cited a study that 47 percent of Chinese retirees exercised, while only 14 percent of working-age Chinese did so. Younger people were too busy making money or studying, people suggested. Sixty percent of urban residents told the China Youth Daily that they had no place to

¹⁸ "McDonald's Invites People Around the World to Step with It and 'Go Active!'; Gold Medal Legends Carl Lewis and Jackie Joyner-Kersey Join International Olympic Go Active! Day in Athens; 30 Million Stepometers and Counting." PR Newswire. 24 August 2004.

¹⁹ "The Game: '04 Games Fit 24 Hour Fitness; Team 7-Eleven Ready for Indy." *Brandweek*. 24 May 2004.

²⁰ "Blair's Keep-Fit Plan for Britain." *Sunday Mercury*. 12 October 2003. 14.

²¹ Xinhua General News Service. "Fitness-for-all program to grow in China: official." 11 August 2008.

²² Coonan, Clifford. "Games drive China to fitness." *The Irish Times*. 28 October 2008. 17.

exercise. In contrast, the United States has about 16 times more space dedicated to exercise than China.²³

In addition to the Olympics, China's growing prosperity aided the increased interest in fitness. People had more money to spend on fitness clubs, which are no longer viewed in China as a decadent bourgeois indulgence.²⁴

After the Beijing Games, the Chinese government declared 8 August 2009 – the first anniversary of the Opening Ceremonies – as National Fitness Day. More than a dozen of its Olympic champions have pledged to volunteer in national fitness programs, aimed at encouraging ordinary people to exercise and showing them how to do it.

"The launch of the National Fitness Day is also a vivid reflection of the legacy that the Beijing Olympics has left for the people and the society," Chinese Olympic Committee President Liu Peng said. "It is an important step to further improve people's health and a great power to enhance the Chinese sports."²⁵

However, there does not seem to be any follow up study or publication that we could find, tracking Chinese progress – or lack thereof – in taking regular exercise.

²³ Magnier, Mark. "Host of Olympic Games seems out of shape." Los Angeles Times. 3 August 2008. A12.

²⁴ Tang, Didi. "China's new prosperity fuels fitness craze." Associated Press. 7 September 2008.

²⁵ Xinhua General News Service. "Olympic Champs to Volunteer in Chinese Fitness Program." 16 August 2009.

Analysis and Other Factors

At least one expert concluded that the Olympic Games are unlikely to increase sport participation rates over the long term after studying those rates following the 2000 Sydney Olympics.

“What the Australian studies did seem to indicate was that there were blips here and there of increased participation, but overall they didn’t have a significant impact on the way Australians integrated sport or physical activity into their lifestyles after the games,” said Doug Brown, a kinesiology professor at the University of Calgary.²⁶

Although Calgary hosted the 1988 Winter Olympics, and Canada has produced some of the best speed skaters, the average Canadian would be hard pressed to find a pair of speed skates, Brown said.

Earlier this year, the Centre for Sport, Physical Education and Activity Research at Canterbury Christ Church University released a study saying that no previous Olympic Games had ever established a specific goal of increasing participation in sport or physical activity, much less try and measure the Olympics’ impact on participation rates. (The report’s authors ruled out Beijing, arguing that China’s social and economic systems were too incompatible for easy comparison.)²⁷

The Olympics are not a “magic bullet,” but simply one factor that could help increase regular exercise rates. Organizers must make the most of the opportunity and create a strategy that includes educational and community programmes, has broad community support, and creates a national festival-type atmosphere in which local leagues, the reports’ authors argued. London must create an integrated legacy strategy with “opportunities for coaching and well-planned, accessible facilities which serve an existing need.” Both local and regional sport programmes must tape into the wider legacy and “national legacy” activities without sacrificing their relevance to their communities, they argued.

It may be possible to use the Olympics and increase people’s participation rates in sport and physical activity, but there is more to good health than just exercise. A growing body of research suggests that city planning – and the proximity to parks, grocery stores, fast food restaurants and public transportation – can have an impact on health.

Open space and parks are linked to lower rates of depression and higher rates of physical activity, while good public transportation means fewer car accidents and

²⁶ “Exercise legacy of Games debated.” CBC News. 13 January 2010.

²⁷ Weed, et al. “A Systematic Review of the Evidence Base for Developing a Physical Activity and health legacy from the London 2012 Olympic and Paralympic Games.” Centre for Sport, Physical Education & Activity Research (SPEAR). Canterbury Christ Church University: February 2009. <http://www.canterbury.ac.uk/social-applied-sciences/sport-science-tourism-and-leisure/SPEAR/Documents/OPASHFull.pdf>

cleaner air, according to one article.²⁸ Poorer neighbourhoods in the United States are often found in areas that lack access to jobs; don't have safe affordable housing; are likely exposed to more pollution; have more access to tobacco, liquor and fast food, but not fresh produce; and have fewer parks and open space areas.²⁹ These areas also are likely to have lower life expectancies, higher rates of poverty and diabetes and – perversely – obesity.³⁰

Some cities have decided to impose new regulations, particularly on fast-food restaurants. For example, the city of Baldwin Park, a blue-collar community just east of Los Angeles, is the home of the first In-N-Out restaurant. It also is believed to be the first-ever drive-thru restaurant in California, and In-N-Out has since become a popular hamburger chain restaurant. But Baldwin Park decided this year to ban any new drive-thru restaurants from being built, citing the public health concerns and traffic problems. City planners estimated that liquor stores and drive-thru restaurants outnumber grocery stores and sit-down restaurants by a 6 to 1 ratio.³¹

Other jurisdictions and agencies are adopting new regulations or laws on public health grounds. Schools have banned soda vending machines. Santa Clara County, which is in the heart of California's Silicon Valley, has banned restaurants from offering toys to children as part of meals high in fat, sugar and sodium. The ordinance seems aimed particularly at McDonald's popular Happy Meals.³² New York City's Health Department asked food manufacturers earlier this year to reduce salt in their products by 25 percent voluntarily.³³

Perhaps these are other factors that governmental and voluntary and community service advocates can consider when discussing London's Olympic legacy. The Olympics, after all, is giving London a chance to reshape and revitalize the boroughs in the East End.

²⁸ Price, Andrew. "Taking the Health Impacts of City Planning Seriously." Good Blog. www.good.is. 3 May 2010. <http://www.good.is/post/taking-the-health-impacts-of-city-planning-seriously>

²⁹ "Unnatural Causes: Place Matters." California Newsreel. <http://www.newsreel.org/nav/title.asp?tc=CN0228>

³⁰ Dolnick, Sam. "The Obesity-Hunger Paradox." The New York Times. 12 March 2010. New York edition: MB4. <http://www.nytimes.com/2010/03/14/nyregion/14hunger.html?ref=health>

³¹ Rogers, John. "City where drive-through eating began is full." Associated Press. 3 July 2010. <http://www.google.com/hostednews/ap/article/ALeqM5ih78nUafFue3LXxF114fxCuD-54wD9GNLDF80>

³² Seipel, Tracy. "Santa Clara County: Supervisors ban toys with fast-food meals." San Jose Mercury News. 27 April 2010. http://www.mercurynews.com/ci_14968786?source=most_viewed&nlick_check=1

³³ Lucdamo, Kathleen. "New city plan pushes for 25% reduction of salt in nearly all food products." New York Daily News. 11 January 2010. http://www.nydailynews.com/ny_local/2010/01/11/2010-01-11_new_city_foe_salt_plan_would_urge_whopping_25_reduction_in_nearly_all_food_produ.html

Ideas for Improving Fitness and Health

- Conduct an informational campaign and outreach to neighbourhood and not-for-profit groups about the importance of exercise.
- Utilize social media in addition to traditional methods. (This deserves some more discussion, because the goal is to get people OFF the Internet and TV and outside to exercise.)
- Work through schools and the Ministry of Health and the Ministry of Culture, Olympics, Media and Sport
- Employ the royal family (Princes William and Harry), Olympians and star rugby or football players in campaigns to encourage exercise and healthy living.
- Connect exercise with games (football, cricket, table tennis, badminton, tennis, swimming, basketball, bicycling; kids can play dodge ball, tag, other games) that are social, not just general exercises that are individual and can become tedious.
- Create recreational programs and sports leagues that teach skills and fitness.
- Exercise in neighbourhood or family groups, senior or youth groups. Make it social.
- Make message campaign for young people about being fit, alive, about play. (continue British Military Fitness campaign)
- Make message campaign for adults about lifestyle and health, not patriotism. That will wane after the Games end.
- Keep it realistic, not Olympic-calibre; instead of big, long workouts, try starting with shorter, smaller, more frequent workouts. Focus on long term.
- Measurement: focus groups (pre); pre and post survey; longer term quantification of results, separated between young and older people, males and females, income levels and geographic location.
- Consider re-designating or designating places and parks for sports and exercise, public transportation. (look for correlations with survey data.), especially as the East End is redeveloped.
- Consider adopting new standards for salt, tobacco, sugar, sodas, nutritional information, locating parks, provision of supermarkets, bicycling lanes, etc. One could argue that the taxpayers have to pay for the consequences of too much salt, sugar, and tobacco through increased health costs.
- Consider incentives to exercise (partner with fitness clubs and insurance carriers)
- Consider contributing and surplus Olympic funds to youth sports programs or sports facility construction. This would leave a lasting legacy.