

# Nutrifitness™

Life-Changing Fitness and Nutrition

## The City – Obesity Connection

By: Rande Bryzelak M.S. R.D.

### A Growing National Problem

The conditions of being overweight and obese have reached staggering proportions in the U.S. population. According to data collected in the National Health and Nutrition Examination Survey (NHANES), 65% of adults are considered overweight based on the body mass index scale of overweight identification<sup>1</sup>. More alarmingly, 33% of adults are considered obese<sup>1</sup>. No one questions that being overweight puts one at increased risk of developing diseases such as cardiovascular disease, type 2 diabetes and certain types of cancers as well as aggravating such conditions such as lower back pain, arthritis and other musculoskeletal conditions. In fact, it is estimated that \$117 billion dollars are spent annually on medical costs directly related to excess weight and obesity<sup>1</sup>. Interestingly, physical inactivity, regardless of weight status, has also been shown to contribute to disease. Physically active overweight adults may have a lower risk of disease than sedentary healthy weight adults<sup>2</sup>

The causes of becoming overweight are multifactorial. Unquestionably, a chronic intake of excess calories coupled with insufficient energy expenditure is a prime contributor to the problem. Current marketing and advertising practices as well as energy-dense, nutrient-poor food production and food availability don't help. However, the role of the physical landscape in terms of available access to resources that encourage physical activity is often overlooked.

### Bringing Physical Activity Back into Our Daily Lives

The solution to this exploding problem lies in redesigning our personal habits, but government and business must play key roles too.

With the rise of the Industrial Revolution, humankind began to transfer physical labor to machines, to do our work and to transport us. By the end of the 20<sup>th</sup> Century there was little need to “raise a finger.” And now reaching this point, human beings have to make a deliberate attempt to exercise — either as entertainment (at best) or a painful chore (at worst).

Expending energy may be accomplished by deliberate attempts at exercise, such as working out at a gym, and with the reduced demands on physical activity in our daily lives, those of us without medical restrictions should have a regular gym program of resistance and cardio-fitness exercises.

Conveniently though, exercise can also be incorporated in the physical activity we routinely do as part of a normal day. It is strange to think that, although we can walk to work rather than spend 45 minutes on a treadmill that goes nowhere, we rarely choose the former. Due to time constraints, expending energy as we go about our normal day would be extremely beneficial.

Of course, each of us must build new habits and think about ways in which we might get exercise as we move through our normal daily schedule — walking to work, taking the stairs, not riding the escalator, riding our bikes to school, to give just a few examples.

### The Role of the City Landscape

However to “exercise” as we go through our day requires that the city structure in which we live and/or work be conducive to a safe and efficient means of being active. Additionally, the working environment would also have to allow for the encouragement of physical activity.

Safety of roadways, proper lighting, traffic speed and volume, attractiveness of neighborhoods, and terrain conditions all play in to a person’s decision about whether to self-propel themselves to and from work or school.

The largest cities, Chicago, Los Angeles, and New York City, have tremendous automobile congestion, but all large cities in the U.S. share similar problems, if on a different scale. The administrators of these cities have traditionally responded to crowded roadways by constructing more traffic lanes. Eventually, these additional lanes become overcrowded. In the case of most downtown areas, more traffic commuting to the city means impossible congestion. Why? Because the one thing that administrators did not realize until recently is that the geographic area of the inner city is not infinitely expandable.

This creates a system in which there too many automobiles in a given area to be sustainable. From an ecological perspective, the air quality greatly suffers, leading to a greater incidence of breathing problems, discouraging people from enjoying the outdoors. Also, the safety of the streets for pedestrians, bikers and skaters is diminished, also discouraging outdoor physical activity.

Building structures in the U.S. also discourage physical activity. Buildings are often designed in an upward direction due to footprint constraints. It is unlikely that someone would take the stairs to the 23rd floor. However, if a building were only five floors, a person might decide to walk up each day. Also, elevators tend to be attractively designed while the stairs are dreary and

generally undesirable places. I have been in many buildings in which the stairs cannot be used without setting off the fire alarm.

Once in the office, our access to computers, e-mail and advanced multi-number phone systems coupled with the intensity of deadlines add to the problem. The slightest bit of activity that can be gained by walking to a co-workers office and personally delivering a message or having a conversation is discouraged. How many of us have seen people call or e-mail the person sitting just across from them?

### Municipalities like New York: The Bad News

I live in New York, and so I am most familiar with the challenges to incorporating physical interventions in the normal course of day, so let's use that as an example.

The landscape of New York is similar in some ways to other U.S. cities, but its challenges are magnified due to the enormous population in a generally small space. New York has the largest population of any U.S. city<sup>3</sup>. Brooklyn one of the five boroughs of New York City, if considered as a city in its own right, would be the second largest city in the U.S.<sup>3</sup> Compounding that, millions of commuters and visitors come to New York daily. 1 in 16 Americans live in the tri-state New York metroplex.

In Manhattan where I live and work, the streets are extremely overcrowded with traffic. A few streets do have bike lanes but they can be scary to use. I skate throughout the city but I make a beeline for the West Side bike path whenever I do, because on city streets, traffic laws are continually broken with little police intervention. It appears that most cars, when no traffic jam exists, are traveling much faster than the allowable 25-mile-per-hour speed limit. Cars are also continuously running red lights. (I tracked one traffic light — on 96th and Broadway, and I observed at least one car running the light every single time the light turned red. I stayed for 10 minutes and counted 17 cars that ran the red light.) This is a scary, when you're thinking about riding your bike or skating to work. Even in planned bike lanes, cyclists and skaters are not safe.

I also know that cars are allowed in Central Park during the week. As an experienced skater, I can tell you that this too is no place to exercise safely. I would never let my child ride a bike or skate in Central Park with cars whizzing by at 50 miles per hour. The park is supposed to be an escape from the city; a place to unwind, get some fresh air, play sports, and exercise. So long as cars are allowed in, these activities are hampered. (I took the liberty of questioning people in the park about their attitudes about cars in the park. I asked 10 pedestrians what they thought, and surprisingly, only six of them said that the park would be better off without cars. When questioned further, it seemed that the remaining four were commuters that most likely drive into the city. I was also fortunate to witness a traffic jam on a warm day when drivers had their windows down and asked them the same thing. Not surprising, all seven that I asked were against the notion of

a traffic free park. They stated that there was already too much traffic congestion in the city and that disallowing cars in the park would add to the problem.

### **Municipalities Like New York: The Good News**

Not everything about the New York City landscape is negative. As other major cities, New York is coming to realize that trying to find more space for vehicular traffic will never solve the problem and new solutions must be found.

The west side bike path (a.k.a. the Hudson River bike path), which I mentioned earlier, now extends from the south harbor to well past the George Washington Bridge. The east side path is not quite finished, but it too will extend for quite some distance. According to the Bloomberg administration, plans are underway to connect the west side path to the east side path so that people can bike around the whole island of Manhattan without encountering traffic.

An organization named Transportation Alternatives is currently working on a car free Central Park<sup>4</sup>. The agency is attempting to get 100,000 signatures on a petition to end auto traffic in the park. A quote from author Edward Abbey really says it best. "We have agreed not to drive our automobiles into cathedrals, concert halls, art museums, private bedrooms and the other sanctums of our culture; we should treat our parks with the same deference."<sup>4</sup> In December, 2004, the work of the group was rewarded by a small victory which extended the car free hours of the park<sup>4</sup>. Unfortunately, during the week cars are in the park in the mornings and evenings when pedestrians could potentially use it the most.

Recently the Bloomberg Administration has introduced European traffic control measures to reduce traffic lanes, especially on Broadway and most notably in the "Crossroads of the World," Times Square. As of this writing, these efforts are too new to assess and it is unknown what other efforts are being planned to increase safety for pedestrians and cyclists in these new spaces. Nevertheless, we are already light years away from the previous administration's approach to inhibiting pedestrian traffic to allow for a freer flow of cars and trucks.

### **State and National Efforts**

States and the U.S. Government are not really engaging in any concerted effort to change the physical landscape of the country. As with most things, this task is left primarily to industry and this, of course, comes down to dollars and cents. If companies think that it makes financial sense to promote physically activity, they will. Powerful lobby groups, such as the auto and oil industries also push extremely hard to keep things as they are.

To often when a bill is passed by congress, it strives to reduce oil prices by increasing the supply<sup>5</sup>. This does not address efficiency standards at all, which is like putting a small bandage over a

gaping cut. The bleeding may slow down for a bit, but the increased supply of oil will come from an increased dependence on foreign oil and the opening of protected Alaskan land to oil drilling. How our government and its citizens think this will solve any problems is hard to fathom. Our steadily increasing dependence on cars will continue to reduce the fresh air and safety of outdoor physical activity. That increased dependency will continue to grow with cheap fuel prices, and there will be no pressing demand to find cleaner, more efficient, healthier ways to move about.

Smart mass transit networks, an efficient robust national railway system, fuel efficiency, car pooling, and taxation must be looked at as means to effect a national policy to reduce pollution and increase national wellness by cleaning the air, making the environment safer for those who'd like to self-propel themselves to work, school or play and encouraging exercise fitness.

### Corporate Efforts

Part of the in-office landscape includes the way in which corporations deal with the issue of the health of their employees<sup>6</sup>. Corporate wellness programs have been shown to be successful<sup>7</sup>, and they may include nutrition and physical activity interventions, flu shot initiatives, stress-reduction seminars and a variety of other programs. Their purpose is to reduce corporate expenditures by reducing insurance costs, lost productivity, missed work and stress while increasing productivity, overall moral, job satisfaction and team spirit<sup>8</sup>.

This landscape seems to be improving as employers are desperately trying to control costs. A 1999 survey of 1,020 U.S. employers by the U.S. Department of Labor found that 81% of companies with 50 or more employees have some form of health promotion program<sup>8</sup>.

Reducing corporate costs by way of health promotion interventions have been very successful in many cases. The Coors Brewing Company is a prime example of how successful corporate wellness programs can be. The Coors Health Intervention Program (CHIP) was started in 2000 as a result of employee health screenings. The program included nutrition and exercise education classes and supervised exercise targeting cardiovascular disease. Employees that met the high-risk criteria, as established by the Framingham Study, were offered free enrollment in the program.

At the completion of the intervention, 80% of the participants showed an increase in functional capacity, 56% showed a decrease in total cholesterol, and 44% showed a decreased body mass index. Questionnaires supported these improvements by indicating an overall improvement in lifestyle choices had made a great impact on health<sup>9</sup>.

A similar intervention was conducted on a larger scale at a national telecommunications company that prefers to remain anonymous. The program lasted three years and included over 1,600 employees. Its purpose was to evaluate a worksite health promotion program on employee short-term disability days due to illness. The intervention consisted of assessing health risks,

conducting nutritional counseling and providing an exercise facility. The results of the intervention showed that the control group (the total group in the study not included in the intervention) had an average of 10 more lost days per year than the intervention group. The findings resulted in an estimate that this intervention could save more than \$600 million per year, if used company wide<sup>10</sup>.

The list of companies that have introduced successful wellness programs is long. In fact, The International Health, Racket, and Sports Association analyzed wellness programs and identified 11 companies that were dramatically successful at saving company money. For every dollar spent on an intervention, anywhere from \$1.81 to \$6.15 was saved<sup>8</sup>. This is a good start, but much more can and must be done.

## References

1. The National Center for Health Statistics. (2002). The National Health and Nutrition Examination Survey. Retrieved April 16th, 2005 from [www.cdc.gov/nchs/nhanes.htm](http://www.cdc.gov/nchs/nhanes.htm)
2. Lee CD., Jackson AS., Blair SN. US weight guidelines: is it also important to consider cardiorespiratory fitness? *Int J Obes Relat Metab Disord*. 1998 Aug; 22 Suppl 2:S2-7.
3. The U.S. Census Bureau. The U.S. Census Report. (2000). Retrieved April 20th, 2005 from <http://www.census.gov>.
4. Transportation Alternatives. Editorial. (2005). Retrieved April 20th, 2005 from <http://www.transalt.org>.
5. The 6:00 National News. Editorial. CBS.
6. Sherphard, R., Gorey, P., Renzland P., Cox, M. The influence of an employee fitness and lifestyle modification program upon medical care costs. *Canadian J Public Hlth*. 1982; 73:259-263.
7. Baun W., Bernacki E., Tsai S. A preliminary investigation: Effect of a corporate fitness program on absenteeism and health care costs. *J Occup Med*. 1986; 28(1):18-22.
8. The International Health, Racket, and Sports Association. Public Policy Capital Report. (2001). Retrieved April 22nd, 2005 from <http://www.ihrsa.org>.
9. Perkins CR., Segrest W., Fickes K., Castillo A. Impacting Cardiovascular Health Risks with Existing Company Resources. *ACSM'S Health & Fitness Journal*. May/June 2004. 8(3):10-15.

10. Serxner S. The Impact of a worksite health promotion program on short-term disability usage. *Journal of Occupational and Environmental Medicine*, 2001 Jan;43(1):25-9.

© Rande Bryzelak 2009