Move More, Eat Less: It’s Time for Americans to Get Serious about Exercise

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I am the sole author of this manuscript and am responsible for the contents.
Walk down any street in the US, and the evidence is all around you: Americans are getting fatter.

Waistlines have been expanding for years, and our junk food, white carb, high-fructose corn syrup diet is often blamed for our tight clothes.

In this issue of *The American Journal of Medicine*, new research examines the role chronic inactivity has played in the US obesity epidemic. Ladabaum et al analyzed 22 years of National Health and Nutrition Examination Survey (NHANES) data on obesity, abdominal obesity, physical activity, and caloric intake. They found that declining physical activity—and not caloric intake—has contributed significantly to the increased prevalence of obesity in the general population.

Comparing 1988-94 NHANES data with 2009-10 data, the proportion of adults who reported no physical activity increased from 19.1% to 51.7% in women and from 11.4% to 43.5% in men. Average body mass index (BMI) increased in all age and race/ethnicity subgroups, with young women (ages 18-39) having the greatest increase in obesity. When Ladabaum et al grouped respondents to the most recent NHANES survey by race/ethnicity and age, they found that more than 50% of the workforce-aged adults in 8 demographic subgroups reported no leisure-time physical activity: all women (51.7%), black women ages 18-39 (59.9%), Mexican-American women ages 18-39 (57.2%), black women ages 40-64 (71.1%), Mexican-American women ages 40-64 (70.3%), Mexican-American men ages 18-39 (52.8%), black men ages 40-64 (57.4%), and Mexican-American men ages 40-64 (63.2%).

To study physical activity, NHANES survey respondents were grouped by activity level: no reported physical activity, intermediate physical activity, or ideal physical activity. Physical activity was categorized as moderate or vigorous. In this research study, the underlying standards for “ideal” physical activity...
activity paralleled the US government’s long-time recommendation: 30 minutes of moderate activity on 5 or more days per week or ≥75 minutes of vigorous activity per week or ≥150 minutes with a combination of moderate and vigorous activity.²

Much has been written in the popular press about the quality of the American diet and our gradual shift in recent decades from fresh foods to processed foods. Ladabaum et al didn’t study participants’ diet in detail—only how much they ate. They found that caloric intake didn’t change significantly overall or by race/ethnicity but did differ by age, gender, and level of physical activity. Average daily caloric intake increased for women who didn’t exercise at all and decreased for men who were in the ideal exercise category.³

**SOCIETAL CONTEXT**

What is missing from the Ladabaum et al paper is societal context. The finger-wagging Puritan in me wants sedentary folks to get up off the couch and exercise, but my public health background cautions me to go beyond the data tables and look at the lives of Americans today.

Life, work, and leisure have changed dramatically in the US since 1988. With the blossoming of the Internet; the widespread use of computers and mobile devices at home and at work; and the increasing popularity of video games, our lives have been transformed. On an economic level, the prosperity of the 1990s dissipated after the September 11, 2001 terrorist attacks; years of war; the off-shoring of manufacturing jobs; and the Wall Street crash of 2008. Ubiquitous home foreclosures, lay-offs, and continued unemployment/underemployment have fueled historic income inequality.

Are Americans too lazy to exercise or just too busy keeping food on the table to jog around the block?
The US Bureau of Labor Statistics (BLS) analyzes how we spend our time. A 2012 report studied a range of leisure time activities, including sports, exercise, and recreation; watching television; socializing and communicating; reading; relaxing or thinking; playing games and computer use for leisure; and other. According to the BLS, Americans spend an average of 5 to 6 hours per week day and 6 to 7 hours per weekend day engaged in leisure time activities; unfortunately, our most popular leisure time activity is watching television (2.8 hours per day on average). Although seniors watch the most television (4 hours per day on average), when you look at the workforce, the lowest paid, least educated workers spend more hours and a greater percentage of their leisure time watching television, compared to higher paid workers or college-educated workers.

As with Ladabaum et al data, the BLS report reveals that leisure-time physical activity is a just blip in most Americans’ lifestyles. Compared with women, men have more overall leisure time, spend more time watching television, and spend more time engaged in leisure-time physical activity. Men spend an average of 21.6 minutes per week day and 32.4 minutes per weekend day being physically active, while women average of 15 minutes per week day and 12.6 minutes per weekend day. Active people are averaging more than 1 hour per day in leisure-time physical activity (1.9 hours per day for men, 1.4 hours per day for women). When broken down by income, everyone is more physically active on the weekend—except the lowest wage workers, who average 9.6 minutes per week day engaged in leisure time physical activity and only 2 minutes more per day on the weekend.

Factoring in poverty, we find that single moms, African Americans, Hispanics, and people with less than a high school education are more likely to live in poverty. Approximately 25% of African American and Hispanic women and 34% of Native American women were living in poverty in 2012. In the same time
period, the poverty rate of households headed by single moms was 41%\textsuperscript{5}. In 2011, 35.7\% of US births were to unmarried women\textsuperscript{6}. In the District of Columbia, Mississippi, Louisiana, and New Mexico, nearly half of all births are to unmarried women\textsuperscript{6}. Looking at income and education, it’s no surprise that the poorest and least educated women are most likely to be single moms\textsuperscript{6}.

Obviously, there are millions of Americans living at the bottom of Maslow’s pyramid\textsuperscript{7}. Many are unemployed, while others are working multiple jobs to make ends meet\textsuperscript{8}. Single mothers have been hit the hardest. Is it any wonder that Ladabaum et al found such a dramatic increase in leisure time inactivity among young women? If you are spending your time and energy just eking out a living for your family, it’s not surprising that you’re not exercising.

**Society’s Role in Obesity Prevention**

What can society do to help Americans—particularly American women—lead healthier lives? It is time to go beyond website exercise recommendations that encourage us to walk 30 minutes per day on most days\textsuperscript{2}.

The Institute of Medicine’s (IOM) obesity prevention report details a “systems approach” to tackle the problem of obesity in the US\textsuperscript{3}: “…because obesity is such a complex and stubborn problem, a bold, sustained, and comprehensive approach is needed. (Figure 2) Action must occur at all levels—individual, family, community, and the broader society…” Recognizing that “obesity risks are often disproportionate among minority, low-income, less educated, and rural populations” and that “inequities often result from polity decisions”, the IOM’s recommendations go far beyond “Just Do It!”
Looking at 4 environments where change could take place—school environments, physical activity environments, food and beverage environments, and health care and work environments—the IOM report is built around 5 basic goals and dozens of strategies:

1. Make physical activity an integral and routine part of life
2. Create food and beverage environments that ensure that healthy food and beverage options are the routine, easy choice.
3. Transform messages about physical activity and nutrition.
4. Expand the role of health care providers, insurers, and employers in obesity prevention.
5. Make schools a national focal point for obesity prevention.

Wang et al predicted that by 2030, half of all US adults will be obese. Medical costs for obese individuals are roughly 42% higher than medical costs for normal weight people. If we as a country truly want to take control of our health and our health care costs, the Ladabaum et al paper should be our clarion call and the IOM report our plan of action.

From encouraging communities to provide safe places for physical activity to ensuring an ample supply of healthy food to empowering Americans to take control of their health, we must launch a concerted, comprehensive effort to control obesity.

References


Figure 1 Caption

When Ladabaum et al grouped respondents to the most recent NHANES survey by race/ethnicity and age, they found that more than 50% of the workforce-aged adults in 8 demographic subgroups reported no leisure-time physical activity. (Data source: Ladabaum et al.)

Figure 2 Permission to reprint:
Reprinted with permission from the National Academy of Sciences, Courtesy of the National Academies Press, Washington, D.C.