“Mythunderstandings” about Physical Activity

Beyond Exercise Prescription to Advocating for Active Living

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Why Aren’t Canadians More Active?

Obesity is on the rise. So is Type 2 diabetes. Oh, and our age as a nation is going up too. One thing that isn’t keeping pace is Canadians’ level of physical activity. While traditional interventions have encouraged people to add physical activity to their daily activities or to change their daily routines, we have not focused much on the context within which these changes must be made (Giles-Corti & Donovan, 2002). These traditional approaches have much to recommend them, but the success rate of individualized exercise prescription interventions can be very low (Dishman, 1994). People can slip back into their normal, less-healthy behaviour patterns in environments that do not support an active lifestyle.

Despite the irrefutable evidence linking physical activity with physiological and psychosocial health benefits for people of all ages (Bouchard, 2001), Canadians find little time to be physically active. Approximately 57–64% of all Canadians are not active enough to reap health benefits (Canadian Fitness and Lifestyle Research Institute, 1999; Federal, Provincial, and Territorial Advisory Committee on Population Health, 1999). Of all the health practices needing change in their lives, Canadians cite physical activity the most often (Federal, Provincial, and Territorial Advisory Committee on Population Health, 1999).

Canadians seem to know that they should be more physically active, but concerns of cost, safety, time, accessibility (as well as a lack of opportunities appropriate to culture, gender, age, and skill) thwart even the best intentions (Canadian Fitness and Lifestyle Research Institute, 1999). As

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community-level initiatives that involve multiple stakeholders and citizens’ participation.

Rather than focusing on risk factors, we need to emphasize coping skills and resources and to strengthen community policies and opportunities that facilitate and support decisions to be physically active (e.g., Frisby & Fenton, 1998; Wharf Higgins & Reed, 2001). Social policies to create subsidized recreation services, quality daily physical education, community playgrounds, or bike paths are all examples of community-wide “interventions” that can nurture an active population.

We need to do more than educate and motivate. We need to take a look at the context within which we are asking people to be active.

Is physical activity
• safe?
• culturally acceptable?
• affordable?
• accessible?
• possible within busy family and work schedules?

We also need to acknowledge that physical activity may not be a priority for some people experiencing poverty, abuse, discrimination, or social exclusion/isolation. While physical activity can help people to work through such issues, they may be more likely to attend for the supportive and social aspects—not to lose weight or lower blood pressure.

The traditional principles guiding exercise prescription (frequency, intensity, and duration) have worked wonders in encouraging motivated Canadians (who have access to the required resources) to adopt an active lifestyle. Yet, if we do not consider the broader circumstances that influence life choices, these traditional principles can become simply a set of external rules or expectations imposed on people. Achieving a positive prognosis for active living means expanding our role as practitioners to advocate for changes in the physical, social, and economic settings that influence physical activity.

References available on request or from the Alberta Centre for Active Living (www_centre4activeliving.ca).
Aren’t Physically Inactive People Simply Lazy?

Greg Hart, Job Performance and Health Systems Specialist, Beyond Compliance Inc., Calgary, Alberta.

Sometimes, overweight people may blame their weight on “genetics.” Is there some flaw that causes them to store fat at an unusually high rate? Have you ever thought that these people were undisciplined and lazy? You may have thought such things about yourself.

Certainly, our society and culture (e.g., friends, family, and the media) contribute to our attitudes, values, and habits. However, humans are also a product of an evolutionary past with deep roots. Our evolutionary heritage may also influence our behaviour. Among other things, we have to deal with several generally applicable “genetic” issues—including a propensity to laziness.

In the Beginning

Try to picture 10,000 years ago, when virtually all humans operated in hunter-gatherer tribes. This may be difficult to imagine when we do most of our hunting at the local grocery store or on the Internet. Members of these bands spent a good part of each day looking for and preparing food. Other parts of the day were spent avoiding predators and rival groups. The rest of the day passed in building shelters and constructing or maintaining crude tools.

With such demands on their time, it makes sense that humans (like all other animals) looked for the most energy-efficient way to do things, so that they could maximize their rest and recovery time. The animals that adopted these methods were more successful than their counterparts in competing for scarce resources—an essential part of evolution.

...at the moment we are stuck with Stone Age evolutionary changes in an environment that includes few of the physical changes we adapted to originally”—Greg Hart.

What Happens Now

Resources may not be as scarce for most people reading this article, but, importantly, we do not require the same energy to get these resources. Sure, you have to work hard at your job. But, for an increasing number of people this means sitting for most of the day, after sitting at the breakfast table, sitting in the car or bus to and from work, sitting at the dinner table, and, finally, sitting on the couch watching television or playing video games.

Humans evolved over several million years (that just counts the time since parting ways with the bonobos and other apes). Evolution operates by selecting for the traits that best ensure the survival of the species. The difficulty is that humans have not evolved in any substantial way since we were nomadic.

About 13,000 years ago, humans developed agricultural methods, including the domestication of livestock. These changes fuelled the rapid rise of large, specialized societies and eventually of our modern world. The 20th century, particularly the last 20 or 30 years, gave rise to our energy-efficient society, with its widespread adoption of sedentary work and transportation. For example, the average British citizen has decreased daily energy expenditure by 800 kcal since 1975 (James, 1995). Take a look at your own activity habits. Do you take the elevator instead of the stairs? Do you cut corners when you are out for a walk?

Human invention and cultural development have outstripped the slow march of evolutionary change. Interventions in public health have meant that more people survive to reproduction age, further reducing the pressure on evolutionary change. In just over 10,000 years, we have expanded these early sedentary cultures into the dominant form of human social organization.

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In fact, the end of the last hunter-gatherer tribes is expected within the next ten years.

The incidence of the so-called lifestyle diseases and obesity has waxed as the energy-expenditure numbers have waned. The key is that we now need to adjust our behaviour to the demands of the environment, just as we did 75,000 years ago. However, at the moment we are stuck with Stone Age evolutionary changes in an environment that includes few of the physical challenges we adapted to originally.

**What Can We Do?**

Appreciating our evolutionary heritage and understanding how this heritage affects individual and group behaviour are important in devising effective strategies to increase physical activity. To counter our evolutionary tendency to “laziness,” we need to make our society and community environments more supportive of physical activity. For example, we could

- make elevators harder to find and stairwells more attractive;
- reverse the current retail trend of large stores to smaller, regional stores;
- locate shopping centres closer to workplaces to make commuting easier;
- organize our days around daily living activities, such as biking or roller-blading to and from work, walking to the grocery store, raking leaves, shovelling snow, and gardening;
- make physical activity at school a mandatory daily requirement.

To significantly reduce the decline in physical activity, we again can make activity part of getting the things we need. Physical activity cannot simply remain a question of personal willpower alone. We must embrace the evidence about the power of the context, especially the most basic one—our evolution—a process that has certainly left us with some baggage.

*References available on request or from the Alberta Centre for Active Living (www.centre4activeliving.ca).*

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**Health Canada Releases Support Materials for Canada’s Physical Activity Guides for Children and Youth**

In April 2002, Health Canada and the Canadian Society for Exercise Physiology launched Canada’s Physical Activity Guides for Children and Youth. Demand for these guides has been high, with more than a million copies distributed across Canada. The newly released support documents include resources for families, teachers, physicians, and community leaders—all designed to encourage our children and youth to be more physically active.

These new materials reinforce the importance of daily physical activity. Research studies show that over half of Canadian children are not active enough for optimal growth and development. The rapid increase in overweight and obesity, combined with low levels of physical activity, seriously threaten the healthy physiological and psychological development of children and youth. For example, physicians are seeing an increase in cases of Type II diabetes mellitus, hyperlipidemia, and hypertension in severely overweight children.

Health Canada has set up a toll-free telephone service at 1-888-334-9769 for ordering the Guides free of charge. You can also order the Guides online at www.hc.sc.gc.ca/hppb/paguide-guides/en/order.html.
Resistance to Exercise: Questioning the Myth of the Fit Female Body

Kerry R. McGannon, PhD, Research Associate, Alberta Centre for Active Living

“Burn fat faster: losing flab isn’t about magic potions and mega-selling diet books. It’s about intense effort...” (Runners’ World, Nov. 1999).

“...this is what 24 hours of flawless fat burning looks like. Apply often enough and you’re sure to develop the lean, fit body you want” (Men’s Fitness, June 2001).

The Myth of the Fit Female Body

The conventional wisdom about physical activity is that a healthy and fit body is linked to an idealized “look.” If you perform the right exercises with the right amount of effort, you will achieve both this “look” and good health.

Women are especially vulnerable to a “tyranny of slenderness” (Bordo, 1990) that emphasizes a fit and healthy body that is small, slim, and toned. However, most women’s bodies will not fall within these narrow confines.

Moreover, studies show that the health benefits of physical activity (e.g., reduced risk for coronary heart disease) are not linked to a particular look. Rather, people can benefit from a physically active lifestyle regardless of their weight classification and appearance (Blair & Connelly, 1996).

Although the “fit female body” is a myth, many women will exercise hoping to achieve it. This belief could have negative psychological and emotional consequences (e.g., anxiety, guilt, shame) (Markula, 2001). My own involvement in exercise has led me to believe that exercise can be a double-edged sword for women—some become empowered, others feel powerless, and still others experience both empowerment and powerlessness. How does a supposedly “normal” and healthful practice such as physical activity, promoted as something women should do to better themselves, become linked in a negative way with how women view and experience themselves?

The Panoptic Power

Foucault’s notion of the body as a site for the operation of different forms of power is useful in analysing how a “fit body” gains importance in women’s lives, so (re)producing the myth of the fit female body. Foucault (1979) argues that the body is subtly disciplined through practices that regulate its existence (e.g., the school, the hospital). These regulatory practices produce “docile bodies” that willingly obey regimes of power in society—individuals internalize the control mechanisms through body discipline. This internal repression, which is the result of these disciplinary practices, means that people are governed and controlled by themselves, rather than by visible and openly repressive sources of power.

Foucault’s panopticon analogy illustrates this power arrangement (Foucault, 1979). In a circular prison, the invisible guard in the centre sees all the inmates. Each prisoner is disciplined by his or her awareness of the guard (and the guard’s power), not by the guard’s actual presence.

Applying this analogy to exercise and the fit female body, exercise practices (e.g., aerobics, weight-lifting) and the way(s) in which the media and fitness industry promote these practices (e.g., linking the practices to weight loss and appearance) represent effective forms of disciplinary power over women. The exercise discourse (i.e., the various ways “exercise” is talked about) therefore invisibly persuades women to control their bodies and appearance in the service of society (Markula, 2001).

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When women exercise to mould their bodies to the ideal, they willingly take on the responsibility to control their bodies. This practice of self-control is further perpetuated when women feel good about themselves as their bodies approach the ideal (Markula, 2001). Ironically, while society’s standards define this ideal body, by pursuing that ideal, women keep the myth of the ideal body alive. Thus, even the enhanced self-esteem that results from a “better body” serves the ultimate purpose of the powerful (e.g., the media, the fitness industry)—to oppress women.

The panoptic power arrangement ensures that women are so occupied in obtaining the “healthy look” that they have little time to wonder why they are doing it.

Is Resistance to Power Futile?

The conclusion above is depressing! Is this power over women so entrenched that whatever women do to better themselves (e.g., exercising) all serves some invisible power (e.g., the media and the fitness industry)? The invisible power of the panopticon certainly shapes the thoughts and behaviour of women in relation to their bodies (Markula, 2001). However, if this “power grip” were complete, women would never question the ideal body and would passively exercise solely to attain that ideal.

Research suggests that, in fact, women’s relationship with the ideal body is contradictory. For example, Markula (2001) concludes that women do aerobics for reasons other than improving their bodies (e.g., increased energy, social opportunities). Similarly, my research shows that while women do exercise to conform to the ideal body, they are also aware of the futility of this quest (and participate for reasons besides appearance) (McGannon, 2002).

Popular cultural discourse (i.e., ways of speaking) about the fit female body is oppressive. However, women can give different and alternative meanings to the ideal fit female body. Exercise does not have to be a vehicle for oppressive body discourses. Women can resist these discourses by

- rejecting the dominant ways of speaking about women’s bodies in relation to exercise and fitness;
- opposing appearance-related reasons for participating in exercise; and
- resisting exercise practices that perpetuate this myth (e.g., non-functional “body shaping” exercises).

References available on request or from the Alberta Centre for Active Living (www.centre4activeliving.ca).

“Don’t Children Get all the Exercise They Need from Playing?”

John Valentine, MA, Chair, Physical Education, Grant MacEwan College, Edmonton.

Dutch historian Johan Huizinga recognized the importance of human play in his famous text Homo Ludens, the “playful human” (1950). More than half a century later, the culture of play has changed drastically.

Children’s games, once so visible on our streets, are disappearing (Postman, 1994). Even the idea of a child’s game seems to be slipping away. At one time, children’s games required no instructors or referees or spectators—games used whatever space and equipment were at hand and were played simply for pleasure. Now that obesity and inactivity rates in children are soaring, perhaps the culture of play needs to be revisited.

“What can happen is that children get the idea that play is not important for its own sake, but for some external purpose, such as fame, money, physical conditioning, upward mobility, or national pride”

—John Valentine.

Play Is Serious Work for Children

Play for grown-ups remains play, the opposite of work, but for a child, play is work. Play “is the work of children and perhaps the single most serious activity human beings are capable of, yet we call it cute” (Teitel, 2002, p. 93). Although this may seem a contradiction, play needs to be taken seriously. Huizinga (1950) identified seriousness as one of the most
important characteristics of real play, Nietzsche (1989) felt that adults could mature through rediscovering the seriousness of children in playing.

Play is the manifestation of freedom in childhood. Aristotle remarked that play is the closest thing most human beings come to contemplation, the highest of human activities (Aristotle, 1986). Aristotle means that play is something that exists for its own sake, something that need not exist, something that is free. Today, adults often view play as a waste of time, as our 21st-century work ethics all value to productivity (Driver, 1998; Meltz, 1999; Teitel, 2002).

Play introduces children to real life—introducing concepts of sharing, playing fair, and including everyone. Children can experience more real life than many adults do in their real lives. Play is also important for cognitive, social, and emotional development. In play, children expand their understanding of themselves and others, their knowledge of the physical world, and their ability to communicate with peers and adults. The most important learning experience that children can have is self-directed play—undisturbed time when they can decide for themselves what to do (Gadd, 1996). Self-directed play, e.g., making up rules for a game or exploring your surroundings, can result in children learning about important issues such as leadership, priorities, and ethics (Teitel, 2000).

**The Fear Factor**

Children don’t play outside as much anymore because of their parents’ heightened sense of danger (Gadd, 1996; Teitel, 1999). Today, children are more likely to play video games or surf the net than play tag or kick the can. Parents may prefer this arrangement because they know where their children are—at home and safe out of harm’s way. The computer and the television keep children quiet, pacified, and tied to the home.

The idea of young children running around in the streets now seems foreign to our experience, yet a few years ago this was quite natural. Polls show that Canadians feel that the threat to their physical safety is increasing (Ipsos Reid, 2002), yet actual statistics show that rates of the most violent crimes have dropped in recent years (Statistics Canada, 2000). In trying to protect our children from the dangers of the world, we may be jeopardizing them in other ways.

**Organized Lives, Organized Sports**

Adults may also stifle play by overstructuring their children’s lives. Music, dancing, and singing lessons, extra educational classes, and organized sports can deprive a child of free time or activity and the freedom to play. Opportunities for exploration become minimal because children’s time is so programmed. According to Huizinga (1950), real play is based on freedom—supervised, organized play is not really play.

Sports like little league baseball and minor hockey are modelled on professional sports. Referees are needed, equipment is required, adults cheer and jeer from the sidelines. Children may also start to specialize in one sport or one position at an early age. Unorganized play involves (continued on page 8)
children negotiating their own rules. When children learn to take turns and create their own rules, they have asserted their independence, taken control over their lives in a small way, and promoted their own moral development by solving conflicts.

What can happen is that children get the idea that play is not important for its own sake, but for some external purpose, such as fame, money, physical conditioning, upward mobility, or national pride. In real play, according to Huizinga (1950), the focus is on process, not outcome. The true value of play is giving a child some control over his or her destiny.

**Summing Up**
Not all children are interested in playing in the WNBA or the NHL. To reach those who are intimidated by organized sport, the magical and mystical must take over from the practical and pragmatic. Promoting the values of play without killing the essence of play is what is important.

References available on request or from the Alberta Centre for Active Living (www.centreforactiveliving.ca).

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**News from the Alberta Centre for Active Living**

**Dr. Kerry McGannon**
The centre is very sorry to say farewell to Dr. Kerry McGannon, our Research Associate, who is leaving us to take up a position at the University of Iowa. Kerry has contributed many strong articles over the past year both to WellSpring and Research Update. She will continue to be associated with the centre as a research affiliate.

**Dr. Adrian Bauman at the University of Alberta**
The Alberta Centre for Active Living recently co-sponsored a presentation by Dr. Adrian Bauman. Dr. Bauman is Professor of Public Health and Epidemiology at the School of Community Medicine, University of South Wales, in Sydney, Australia. Dr. Bauman is a leading international authority on physical activity and public health. His presentation, “Physical Inactivity—The Neglected Risk Factor: What to Do about It,” focused on innovative strategies to promote active living. Dr. Bauman’s PowerPoint presentation is available on the centre’s web site at www.centreforactiveliving.ca/research/resources.html.

**Health in Action (HIA) Workshops**
The centre supports HIA, a web site that links health promotion and injury prevention practitioners to programs, research, and resources in Alberta. HIA is offering a free workshop for practitioners on how to use all aspects of the site. For more information, contact Dawn Vallet, HIA Project Manager, at 780-465-1248 or dawn.vallet@shaw.ca (or visit HIA’s site at www.health-in-action.org/HelpEnter.shtml).

**University of Alberta Focus on Research**
The centre is part of the Faculty of Physical Education and Recreation at the University of Alberta. The faculty has started a new Focus on Research web page, highlighting the work of a different researcher every month. To view this month’s article, visit the faculty’s web site at www.uofaweb.ualberta.ca/per/nav02.cfm?nav02=15059&nav01=132.