Sports medicine, on the forefront of spreading a little love in this world

Steven Stovitz

What pill can lower LDL cholesterol, raise HDL cholesterol, improve insulin sensitivity, delay the transition from glucose intolerance to type 2 diabetes mellitus, lower percentage body fat, improve mood and sleep, decrease stress, and improve mental capacity, all with generally no side effects? *None.* So, you can give someone a lipid-lowering medication and then treat their muscle soreness. Add an oral hypoglycaemic and monitor their liver function tests. Then add an anti-depressant, but follow their weight closely. And don't forget their sleeping pill. Alternatively, you might encourage a physically active lifestyle. Naysayers will claim that few sedentary individuals will start to exercise. However, new evidence is showing that we do not need to focus solely on "exercise." Simple, everyday activities such as walking can often do the trick.

Sports medicine providers are in an optimum position to be champions for physical activity. We can encourage our patients to become more physically active, and treat those who have injuries that limit physical activity. There is a strong association between obesity and musculoskeletal impairment.[1] Thus, increasing energy expenditure can be viewed not only for its ability to prevent cardiovascular disease, but also as a means of preventing musculoskeletal disease. We at the *BJSM* believe strongly that the field of sports medicine is positioned to be at the forefront of the medical field's transition from "sick care" to "well care."

When it comes to physical activity, especially as a means of decreasing obesity, research is mounting that we should stop focusing only on exercise. Rather, we should put our energy toward the everyday lifestyle forms of activity that may not be considered exercise, but add to overall energy expenditure, such as walking.[2] Last month's issue of *BJSM* featured a wonderful systematic review of MEDLINE, Cochrane Database of Systematic Review and Web of Science articles investigating walking as a means of primary prevention of cardiovascular disease (CVD) and all-cause mortality.[3] In their meta-analysis of prospective cohort studies, English researchers Hamer and Chida found an inverse relationship between walking and both CVD and mortality. Although they found a dose–response relationship of stronger prevention with higher amounts of walking, there were significant associations observed at lower levels of walking that matched the recommendation for moderate intensity physical activity (2.5 hours/week).

This issue of the *BJSM* includes further evidence from various parts of the world. Williams' cross-sectional analysis of >7000 men in the United States' National Walkers' Health Study (***see page 352***) found that in those aged >35 years, walking distance was inversely related with both body mass index (BMI) and waist circumference. Importantly, the greatest declines in BMI and waist circumference per km/week walked occurred in those with the highest BMI. These are the individuals who need weight loss the most and, being >35 years old and overweight, may have the most trouble engaging in more vigorous forms of exercise.

From The Netherlands, van Uffelen *et al* (***see page 344***) conducted an RCT examining the effects of walking or vitamin B12 on cognitive function in older adults with mild cognitive impairment. Among participants adherent to a 1-hour, twice-weekly, moderate walking programme, men had improvement in memory and women had improvement in attention. Although an intent-to-treat analysis did not show a main effect of walking on cognitive function, this should not cause us to discard the potential benefit. Absence of proof is not proof of absence of effect. We need to encourage rather than discourage community-based studies in the "real world". The world's population is ageing, especially in countries where modernisation is leading to less daily energy expenditure.[4] We must be creative in encouraging individuals to remain physically active during their later years.

When addressing the problem of obesity in our adult population, primary prevention must begin in our paediatric population. Childhood overweight and obesity are strong risk factors for adult obesity.[5] Children spend the majority of their waking hours at school and, depending on their home environments, may have more options for physical activity at school than at home.[6] "Action Schools! BC" (British Columbia, Canada) is a practical intervention aimed at incorporating 150 minutes of weekly physical activity while in school (***see page 338***). Boys in intervention schools took approximately 1000 extra steps per day compared with boys in control schools. From the UK, Thomas *et al* (***see page 357***) add to the body of evidence that C-reactive protein, an inflammatory mediator associated with cardiovascular disease in adults, is positively associated with adiposity in children.

Like the wonderful singer-songwriter from Iowa in the heartland of the USA, Greg Brown, wrote, "love ain't a hug, love ain't a kiss, love is everyday doing this, that and this." So it goes with physical activity. One need not be a tri-athlete to enjoy some of the health benefits of physical activity. Simple daily walking and physical activity during school can often do the trick. We at the *BJSM* encourage those in the field of sports and exercise medicine to do what they can to help their less active patients engage in everyday lifestyle activities, such as walking, and spread a little love in this world.

Correspondence to: Steven Stovitz, 717 Delaware St, SE, Room 420, Minneapolis, MN 55414, USA; sstovitz@umphysicians.umn.edu

REFERENCES

1. **Alley DE,** Chang VW. The changing relationship of obesity and disability, 1988–2004. *JAMA* 20077;**298**:2020–7.
2. **Levine JA,** Miller JM. The energy expenditure of using a "walk-and-work" desk for office workers with obesity. *Br J Sports Med* 2007;**41**:558–61.
3. **Hamer M,** Chida Y. Walking and primary prevention: a meta-analysis of prospective cohort studies. *Br J Sports Med* 2008;**42**:238–43.
4. **Lunenfeld B.** An aging world – demographics and challenges. *Gynecol Endocrinol* 2008;**24**:1–3.
5. **Whitlock EP,** Williams SB, Gold R, Smith PR, Shipman SA. Screening and interventions for childhood overweight: a summary of evidence for the US Preventive Services Task Force. *Pediatrics* 2005;**116**:e125–e144.
6. **Floriani V,** Kennedy C. Promotion of physical activity in children. *Curr Opin Pediatr* 2008;**20**:90–5.