Warm up

A courageous plan

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How can the general population be encouraged to exercise enough to improve overall health?

In the corridors of Whitehall and similar government institutions worldwide, new ideas are often viewed with suspicion. Consider this quote from the legendary TV series *Yes, Prime Minister* (Series 2, Episode 7: "The National Education Service", BBC1, 21 Jan 1988) when Sir Humphrey Applebee responds to an idea from his Minister by suggesting the formation of a committee to consider a proposal:

Sir Humphrey: "I mean they'll give it the most serious and earnest consideration and insist on a thorough and rigorous examination of all the proposals, allied with detailed feasibility study and budget analysis, before producing a consultative document for consideration by all interested bodies and seeking comments and recommendations to be included in a brief, for a series of working parties who will produce individual studies which will provide the background for a more wide ranging document, considering whether or not the proposal should be taken forward to the next stage." Jim Hacker: "You mean they'll block it?"

Sir Humphrey: "Yeah."

This sums up the feeling of many sports physicians who, armed with the knowledge that exercise is good for you, find the pathways to achieving government action blocked by interminable red tape. How then can we convince our political lords and masters to move forward on these ideas?

First, make it obvious.

The case for increasing exercise at a population level should be crystal clear even to a politician. Obesity has increased to the point where nearly two thirds of men and over half of women in the United Kingdom are classified as overweight or obese.¹ In 2001, the UK National Audit Office estimated that obesity accounted for 18 million days of sickness absence, 30 000 premature deaths, and annual health costs of over £2.5 billion.² In 2002, the UK General Household Survey revealed that only 15% of adults met the target of sports participation three times a week.

A staggering 66% managed sport only once a year. The trends from 1990 to 2002 also suggest that sports participation is falling rather than increasing.

The future is not so bright either. The year on year increase in childhood obesity and the fact that the United Kingdom ranks below the EU average in terms of meeting minimum physical activity targets of two hours a week in school has the potential to result in an epidemic of chronic disease.

The ever increasing budgetary costs of dealing with these problems make some sort of health intervention a mandatory part of health care rather than an option to be considered by a committee.

Second, the principle of "keep it simple".

How can we judge what exercise is best for all folks? The recent report by the UK *Independent sports review*¹ has provided a national framework by which exercise intervention strategies can be judged. However, some are critical of its focus on the need for physical "activity" rather than "sport" at a population level and perhaps feel threatened by the de-emphasis of the high performance sports institutes. In fact, this is not a report about how to win Olympic medals but rather how to prevent death and disease.

If we develop this concept further, any exercise can be judged by the "the perfect 8" criteria below:

- A skill for life—people must be able to participate at any age
- No sex bias—the exercise must be suitable for both sexes
- All round exercise—the exercise should involve as much of the body as possible
- Injury free—the exercise should have a low rate of injury
- Individual participation—it should be possible to undertake the exercise on your own
- Inexpensive—there should be minimal cost for the participant
- Venue flexibility—indoor or outdoor, so that it is independent of weather or season
- Mass participation—it must be possible for large numbers to participate simultaneously

Third, all sport involves exercise, but not all exercise involves sport.

This is a source of confusion for civil servants who only see the value of funding community sport programmes as the solution to the problem rather than encouraging physical activity. What is the difference between exercise and sport? Anything that involves movement and physical activity can be deemed to be exercise. Sport by definition must involve competition, structure (rules, judges, and umpires), physical activity (exercise), and skill. The exercise and skill must be integral to the sport; chess and card games can never be sports, but darts, shooting, and snooker can be sports, even though the amount of exercise required is minimal.

Fourth, what is the perfect sport or activity for schools?

The high profile team sports—soccer, rugby (league and union), Australian rules, and American football—all score poorly on "the perfect 8" because they involve large numbers of players, sex bias, and high injury rates, and none involve "cradle to the grave" participation. Similar criticisms can be made of the various team, combat, winter, water, racket, and Olympic sports, which do not match up well to "the perfect 8" list.

When we move on to other forms of exercise that can be undertaken in a non-competitive way, things start to improve. Swimming is near perfect (and non-weight bearing), but does require access to water (usually a pool). Cycling is excellent and can be done on a static bike. Cross country skiing may be fine in Scandinavia but is not an option in Australia. Tennis would rank a 4.5 out of 8, being principally limited by expense, facilities, and the requirement for multiple participants.

Innovation is the key; in Finland, the fastest growing activity is cheer leading, with thousands of children (boys and girls) practising complicated dance routines for hours at the weekend—surely a 7 out of 8! It is worth noting, however, that cheer leading as practised in the United States has virtually become an extreme sport with a number of catastrophic injuries each year.³

So what is the answer?

It would seem that the simplest and best approach is to start children off with exercise that involves lots of fun but no element of competition—for example, cycling, swimming, running, dance, gym exercises, aerobics, cheer leading. These activities would fulfil the goal of "the perfect 8" list. As children get older, the concept of competition (sport) can be introduced. Studies show that 50% of the physically active children will have no interest in this, but will still want to continue with exercise and hopefully

establish lifelong habits that will reduce obesity and the burden of resultant chronic illness. Contrary to popular mythology, not every runner, swimmer, or cyclist wants to go to the Olympics.

Let the sports clubs look after the children who want to compete. They have trained coaches, equipment, and facilities—why try to train teachers to duplicate these resources? It is critical, however, that, when children leave school, they have access to the same facilities as they had at school, without any additional cost (gym, pool). Such programmes have been shown to be effective in Scandinavia. The institutes of sport can then focus on their role of developing high performance athletes, free of any constraint to provide services to less elite athlete populations.

As people get older, they should be encouraged to continue taking exercise

by being deliberately included in physical activities—for example, volunteers should be encouraged or funded to collect retired pensioners from places with poor public transport.

We do not need to reinvent the wheel. The *Independent sports review* is a key document that provides the background to this overall approach and hopefully will provide a direction for the future.¹

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REFERENCES

- 1 **Raising the bar**. The final report (September 2005). *Independent sports review*. www.independentsportsreview.co.uk (accessed 20 Dec 2005).
- 2 **UK National Audit Office**. *Tackling obesity in England*. London: UK National Audit Office, February, 2001.
- 3 **Mueller FO**, Cantu RC, Van Camp SP. *Catastrophic injuries in high school and college sports*. Champaign, IL: Human Kinetics, 1996.