

WE WERE ATHLETES ONCE ★ ★ ★ AND YOUNG

Text by Prof Pierce Chow



I am often asked, perhaps because I am a clinician-scientist, if there is a scientific and foolproof way for a busy doctor to keep fit and trim. It is, in fact, not too difficult with modern science. It also helps that once upon a time, all doctors had taut bellies and could run very fast... and very far. Yes – every one of us. At least, that is how we remember our youth. Memories are notoriously ambiguous, but I digress.

We are, of course, older and more accomplished now and the athletes in us have somehow camouflaged themselves. We puff when we go up several flights of stairs, but we are convinced that our lithe bodies are still there, buried somewhere deep within our souls and guts. It's just that it's not easily discernible except through rose-tinted glasses.

We liberally dispense advice to patients, whether or not they come to us for such advice or conditions. Stop smoking, watch your weight, be careful of what you eat and do more exercises. Because if you don't follow these advice, dear patient, not only will you have higher chances of complications after surgery, but you will also be afflicted with a litany of unpleasant conditions, such as diabetes, fatty liver, high blood pressure, high cholesterol and even increase your chances of cancer. Yet increasingly, we ourselves are no longer the role models of that advice.

Epiphany

One sunny Monday morning more than half a decade ago, at the end of a pleasant clinic encounter, a matronly middle-aged patient congenially said as she departed, "Putting on a bit of weight eh, doc? Must be the Christmas goodies." And she winked. Ouch. Touché, auntie! A more sober assessment was conducted in front of the bathroom mirror later that day. Well, a little pudgy around the middle. Borderline high blood pressure. Cholesterol levels kept

in check by statins. Not the most convincing paragon of the virtues of healthy living.

In order to come across as a better example of healthy living, I needed to unleash some of that fitter body of my mythical youth. The challenge is that I have to fit that into a very tight schedule of surgery, teaching and research. I seldom reach home before 8 pm and often work into the night. Five hours of sleep is the norm. A pleasant hour-long jog along the beach or an hour in the gym thrice weekly is not practical. To become fit again given these constraints required thinking out of the box and a detailed review of the science behind the advice we give our patients. Doctors are luckier because we have the necessary training to interpret scientific biomedical data and also the means to access those data.

Personal experience of a time-efficient approach to fitness

A review of the literature was eye-opening. Lots of research have been done but much less have been filtered to the clinics. A dietary approach is the most efficient way to weight control and I adopted a low-carbohydrate (or ketogenic) diet which minimises insulin levels in the body. I never had a sweet tooth and it also helped that I love eggs, steaks and sashimi. Choosing a ketogenic diet comes naturally to me but I can understand that it's not for everybody. Many people get withdrawal symptoms after two days without *kway teow*.

Exercise is important, but not so much as to lose weight as to increase lean muscle mass and to increase metabolism. To depend on exercise alone to lose 10% of body weight (the ideal target) is a lot of exercise – close to jogging 40 km a week. That takes a lot of time and is probably bad for the knees in the long run (pardon the pun). Given my time constraints, any exercise I do needs to be highly time efficient. Fortunately, a lot of research has already been done on this.

Seminal research in the 1970s had demonstrated the efficacy of high-intensity short duration exercise and had led to the evolution of high-intensity interval training (HIIT) protocols. Research done by pioneer exercise physiology researcher Prof Izumi Tabata in 1996 showed that four minutes of HIIT (eight cycles of 20 seconds of intensive exercise followed by ten seconds of rest) provide similar fitness outcomes to 30 minutes of moderate intensity exercise done four times a week. I do this with kettlebell swings. Weight training is important to build lean muscle mass and maintain a high metabolic rate. Research has shown that exercising to fatigue within a single set is efficient.

I took steps to verify the above research findings using an N-of-1 design with myself as the test subject. For me, an exercise session is over in 15 minutes and done twice a week. With the above approach of diet and exercise, I dropped 10% of my body weight within four months. Moreover, I never felt hunger pangs. My blood pressure dropped by ten points, my triglyceride levels dropped and I maintained the same cholesterol levels without statins. My weight has only fluctuated within a two-kg range for the past five years.

I need to be clear that I adopted the above approach because of my peculiar circumstances that demanded for everything to be time efficient. It does not necessarily give you the best defined muscles or help you complete a marathon. If you have the time, an hour in the gym may also be a better way of getting you ripped (or is it “shredded”?).

Research-based practices

My experience also demonstrated the importance of research-based practices. Not many patients manage to become fitter after medical advice. Some are not motivated to do so. Many fail because of a misunderstanding of what needs to be done and others fail because of the absence of a detailed yet flexible plan of action. The conventional advice of 30 minutes of moderate

exercise five times a week, while safe even for the most unfit patient, is not really efficacious and most patients, like their doctors, simply do not have that kind of time. Unfortunately, many patients are also under the impression that dietary fat is the main culprit behind weight increase. In their efforts to avoid both dietary fat and salt (which they are informed increases blood pressure), they inadvertently increase their carbohydrate and sugar intake. While a lot of research has been done, lots more are still required so that patients from all walks can have diet and exercise plans that are individualised to their needs.

The first people who noticed were my patients. “Looking good doc, looks like you have lost weight,” they say as they nod approvingly. They take me seriously when I tell them to be careful of what they eat and to exercise regularly. They even nod when I tell them to stop smoking. But best of all are old schoolmates whom I have not seen since our teenage years. When we meet, they don't bat an eyelid. They don't say that I have lost weight. In their eyes, I am what I have always been. ♦

Legend

1. L to R: Former wrestler, former gymnast and former hockey player

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