



Intentional movement

Firstly, you might have noticed that I have reframed the word exercise to 'intentional movement'. I believe that this is important as regular short periods of movement can have a profound effect on our health, fitness and happiness.

For many of us and particularly those in the western hemisphere, our environment presents many challenges. Our bodies are more sedentary than ever and they try to compensate by doing everything they can. They adapt brilliantly to keep us functioning and yes, with medicine, we are able to increase the quantity of time on this planet, but not necessarily the quality. We are sitting for hours in front of screens, be that laptop, phone or television.

Being sedentary is literally killing us

Recent statistics show that half of us are either pre-diabetic or diabetic, one in three will develop heart disease or cancer, one in four of us have some kind of mental disorder and one in 14 will develop Alzheimers, a number that is doubling every five years.

Regular movement plays a key role in avoiding the above, with studies suggesting that regular movement can not only help reduce the chance of serious illness but also boosts our immune function, reducing the risk of falling ill or dying from infectious diseases by 37%.

Incorporate regular movement

I think that there are more exercise acronyms than there are exercises – HIIT (high intensity interval training), REHIT (reduced intensity high interval training), EMEM (energetic movement each minute) to name a few. The truth is that the most influential thing we can do is just move regularly. That doesn't necessarily mean getting your kit out of the wardrobe, dusting off your trainers and attempting to beat yourself up in the gym. On the contrary, the average gym membership lasts for around just three months – for some, it's great but for many it is neither fun or practical.

It's more about balance and consistency than it is intensity. Being a weekend warrior and pounding the pavements is not beneficial either – that can lead to injuries – it's similar to taking a high performance car out of the garage occasionally and hitting the gas as hard as you can. We just wouldn't do it.

The current NHS recommendation is 30 minutes of moderate exercise each day and 75 minutes a week of high intensity. This has been shown

to reduce the odds of serious illness by 80%. However, a recent study has shown that all the good work could be thrown away if we spend the rest of the day sitting. Let's be honest, 30 minutes represents 2% of the day, so it stands to reason. One study I read suggested that just three minutes of exercise every hour of sitting could extend our lives by 30%.

Let's talk a little about the physiology of the body

We have three main energy systems: aerobic, anaerobic lactic and anaerobic alactic.

- **Aerobic energy system** – low intensity – long duration – endurance, e.g. a good walk
- **Anaerobic lactic (glycolytic) energy system** – high to medium intensity – uptempo, e.g. a jog or cycle
- **Anaerobic alactic (ATP-CP) energy system** – high intensity – short duration/bursts, e.g. a sprint

Consider different gears in a car. When you get to high revs as we do with various intensities of exercise, we adjust through the various gears. With our body, these gears use various fuels. It is important for us to engage all the gears at various times, but I would like to concentrate on aerobic.

Let me describe activities that are aerobic. This is where you are in a very comfortable gear, at a rate where you are still able to have a conversation. During these activities our bodies are using its primary and very efficient source of fuel – fat (lipids). Think walking, shopping, hoovering, washing the car, gardening, putting the washing out, etc.

Fat is oxidised (burned with oxygen) in the mitochondria which are the powerhouse of our cells. The more you push this gear – doing the kind of movements described above – the more these power houses flourish and grow strong. Conversely, the less we do, the more they wither and become dysfunctional and that is when illness can set in.

This is what our bodies were designed to do. In prehistoric times, we weren't able to chase after

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our dinner, we were designed to be able to fast walk until what we were chasing gave up. We are primarily built for endurance and are able to cover far more distance than you might imagine.

Occasionally, switching gear or extending the revs, holding in that gear a little longer, is important, e.g. MAT (maximum aerobic threshold) but still using fat as the primary fuel. This is where the mitochondria is being pushed – the greater the push, the more you will create and the better their function.

Using our car analogy, move into another gear and you change to anaerobic. This is where HIIT (high intensity training) is useful as the heart and lungs are getting a good workout and the body transfers to a different fuel, glucose, created by converting carbohydrates to energy. Once again, getting into this gear doesn't necessarily require changing into your gym kit. Movement that gets the heart pumping to where you wouldn't be able to carry on a conversation so easily, like taking the stairs or including hills into your walk, is a great way of moving into this zone.

Strength training

Resistance training, up until recently, has been very underrated but is being increasingly recognised as an important addition to our exercise routine.

The phrase "you lose it if you don't use it" is very relevant. After 30 years old, we will lose up to 5% of muscle a year for every decade – this is known as sarcopenia. It is crucial to retain muscle mass as falls are a prominent cause of death in those aged over 65. That's because we stop using our type 2 fast twitch muscle fibres, those that react quickly and powerfully in our muscle. It takes an incredible amount of strength and balance to keep us upright, which we take for granted. Keeping our muscles, particularly legs, glutes (muscles in our bottom) and core strength is essential, particularly in old age.

Our glutes are a keystone muscle, not only keeping us upright but also helping our biomechanics as they are linked to a whole chain of muscles from our shoulders to our feet. If they are not firing, it puts a great deal of stress on other areas. Back pain can often be linked to sleepy glutes.

Once again, you can keep your gym kit in the cupboard. To work all the major muscles in the body, you just need yourself. We weigh enough to be able to make an impact without having to pick up any weights. Freestanding squats or lunges, press ups and engaging your core, will all keep these muscles active. If you want a little resistance, invest in a kettle bell. I have one beside me and often do a few exercises while on the phone. My aim is not to look like Arnold Schwarzenegger – those days have long gone but I am keen not to lose that 5% I mentioned earlier. There are plenty of simple exercises to follow on YouTube.

Strength training has also been shown to increase the quick firing neurons in our brains, forming new neural pathways and increasing our brain's white matter.



Consistency is key

To keep exercise in your lifestyle, make it fun and inspiring. Going for a walk outside with a friend is a treble whammy as movement, being social and being around nature are three of the areas that have been shown to increase longevity.

Joining a walking group can be a great way to be inspired and, if you can afford to, buying a fitness device is a great way of seeing your own improvements and tracking your daily steps.

Input and stimulus is an excellent way of improving our cognitive function so why not learn a new language while going on a walk.

Key take homes:

- Incorporating IM, intentional movement, as much as you can throughout the day is a great way to keep fit and healthy.
- If you are working from home upstairs, use the loo downstairs, perhaps go up and down then up again. When visiting the kitchen, do some lunges on the way. While waiting for the kettle to boil or the coffee machine, do a few press-ups – start with doing them with your hands on the edge of the kitchen worktop to make them easier. Use a bottle of water for doing a few bicep curls.
- Rather than doing strength training in one go, stretch it over the day, giving yourself a target of say 50 press up and 50 squats; five of each 10 times a day. Make a note in your diary or journal of what you do each day, you will be amazed at the results of “just doing little and often”.

Important notice: All content is based on my own personal research and my own lifestyle choices that have positively supported my own health and wellbeing. We are however all unique and before making any changes to diet or lifestyle, it is my strong advice to seek professional advice or to speak to your doctor before doing so and to start slowly and gently to find out what suits you.