

Exercise is Medicine

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I feel it's time to put the record straight about the importance of exercise and encourage our medical professionals to recommend or prescribe it, as a huge number of studies exist clearly demonstrating its effectiveness in preventing chronic diseases and disabilities.

We have to ask ourselves, if there was a single drug available that could offer all of the multiple benefits of exercise – big pharmaceutical companies would surely be cashing in on it wouldn't they?.....but there isn't!

The fact is that Exercise ***is*** Medicine and provides protection against numerous conditions including heart disease, hypertension, stroke, type 2 diabetes, obesity, osteoporosis, breast cancer, colon cancer, anxiety and depression, dementia and many other serious diseases – reducing the risk by at least 30 % in most cases. This is better than any drug available by far.

The four biggest causes of preventable ill – health are: Smoking, Poor Nutrition, Excess Alcohol and lack of Physical Activity. Of these, somewhat surprisingly - lack of physical activity is the most recently recognised modifiable risk factor of all the large contributors to ill health. The good news is that relatively small amounts of increased physical activity can make a huge difference to health.

The scientific evidence suggests that regular amounts of moderate exercise (i.e., 5 times a week for approximately 30 mins each time) (60 mins for children) bring dramatic health benefits. For most people this would equate to going for a brisk walk on most days of the week. Moderate exercise means it should get a person slightly out of breath along with an increased heart rate and/or feeling warm / sweaty.

Further health/fitness benefits can be achieved by performing higher intensity exercise (such as Phase IV Circuit Training) for 20 mins or more, 3 times per week.

Unfortunately at least half of the population do not even come close to reaching this level of activity. The costs of physical inactivity to the UK, the NHS and other public bodies are estimated to be in excess of £15 billion. Physical inactivity in the UK is acknowledged as a major cause of premature death and long term diseases. **In a 2015 report, the Academy of Medical Royal Colleges described Exercise as “A Miracle Cure too often overlooked by doctors and the patients they care for”.** The report set out to review the evidence for exercise and make recommendations to improve attitudes and health behaviours amongst doctors and other NHS staff in the hope that it may change society.

A huge meta-analysis (a review of many randomised controlled trials) examined the effect of exercise therapy on outcomes in people with chronic diseases.

So let's look at the evidence from the above report. **“Exercise: The miracle cure and the role of the doctor in promoting it”**.

Heart disease, Heart Failure & Angina

All studies show clear improvements in cardiovascular health with moderate exercise. These effects are similar for sufferers of angina. Overall exercise reduces cardiac mortality by 31%, in addition to reducing coronary artery disease risk factors including; reduced blood platelet adhesiveness (stickiness) and aggregation, reduced insulin needs, reduced body fat, reduced cholesterol and blood pressure.

High Blood Pressure (Hypertension)

Hypertension is very common and is responsible for 50% of strokes and 50% of ischaemic (Coronary) heart disease. Regular aerobic exercise has clearly been shown to reduce blood pressure by at least 10 mmHg – but is often more.

Cholesterol

Across several studies, exercise led to a reduction in “bad cholesterol” LDL by an average of 1 to 2mmol/l and increase in “good” HDL cholesterol. Serum Triglycerides also decrease with physical activity.

Diabetes

Exercise has been shown to significantly reduce blood glucose levels and improve the metabolic state. Exercise can reverse pre-diabetes and Type 2 diabetes as well as working as a treatment modality for Type 1 Diabetes. For people without a diagnosis of diabetes, exercise is proven to reduce the risk for developing type 2 diabetes by 50 – 80%.

Chronic Obstructive Pulmonary Disease (COPD)

Physical activity improves cardiorespiratory health, reduces dyspnoea symptoms (shortness of breath) and increases ability for exertion.

Obesity

Exercise has been shown to reduce visceral fat (abdominal fat) which carries the greatest risk. Body weight may stay the same however a shift in body composition towards more muscle mass and less body fat is highly beneficial for health.

Depression

Exercise is a natural anti-depressant and has been shown to be as effective as medication (without the side effects) in treatment of depression. (NICE) Guidance recommends the uptake of physical activity for the treatment of depression. “Eco therapy” (Physical activity outdoors) has shown to produce a huge 90% improvement in self-esteem and well-being.

Osteoarthritis

Osteoarthritis is often thought to be related to “wear and tear” yet physical activity improves symptoms of O/A by 22-88% and does not lead to worsening of this condition. It has benefits in reducing pain (by 25-52%), improving function, quality of life and mental health. Exercise has also been shown to give moderate improvement in low back pain. Of importance in joint stability – exercise increases muscle strength and coordination.

Osteoporosis

Weight bearing exercise leads to increased bone density- reducing the risks of osteopenia and osteoporosis.

Peripheral Vascular Disease (Claudication in Legs)

Exercise leads to a moderate improvement in PVD. Improvements are seen in both pain free walking time and distance.

Cancer

Exercise has been shown to reduce risk and help with recovery in certain cancers. In prostate cancer, a 57% lower rate of cancer progression was found with exercise. In breast and colon cancer exercise has been shown to reduce both morbidity and mortality. Exercise also helps with side-effects of treatment, improves mood, fatigue and stamina whilst prolonging life.

Dementia

Physical exercise improves cognitive function and consistently reverses brain atrophy. These improvements were noted in both normal adults and those with the early signs of Alzheimer’s disease. All studies show strong indications of benefits in well-being, quality of life, improved balance and strength with reduced falls and prolonged independence.

Fibromyalgia and fatigue

Aerobic exercise improves physical function and well-being in fibromyalgia as well as reducing fatigue in chronic fatigue syndrome.

In Summary

A large number of peer reviewed papers report global improvements in health across a range of at least 20 chronic conditions with regular physical activity.

So what are you waiting for??.....Let’s get moving!

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References available on request.