

## Exercise and fitness

One aspect of modern living is that we tend to be less physically active than previous generations. Many aspects of modern living contribute to this. The use of cars, labour saving devices, more sedentary type jobs etc, has reduced the amount of daily physical activity we undertake. Technology means that we are more likely to spend hours sitting in front of a TV or computer, rather than getting outdoors to burn those calories. In addition, modern living has increased the amount of activities we try to juggle on a daily basis. Hectic family, working and social lives mean that many people perceive that they do not have enough time to exercise and maintain fitness.

Food has become more plentiful, varied, quick and easy to prepare in recent years, making it more difficult to keep the required energy balance. The explosion of convenient food and take away restaurants means that cheap (and often tasty) high calorie and high fat food has never been so accessible. When we eat more than we need or use, energy input (food intake) becomes greater than energy output (activity). That excess of energy soon leads to weight gain and the potential to develop chronic, obesity-related diseases later in life.

### How Ireland ranks?

Many of us perceive Ireland to be a very sporting nation with a thriving GAA and the popularity of team sports like rugby and soccer. Since the slowdown in the economy, we have seen more interest in sports like running, triathlons and cycling as people have more time on their hands and turn to sport to escape the doom and gloom of the recession. However the facts don't stand up to this perception; we do not rank high when it comes to exercise and obesity. According to a 2012 study in the *The Lancet*, a leading medical journal, Ireland is the seventh worst country in the world for exercise. Perhaps even more worrying, the study showed that Irish people exercise less than Americans, dispelling the myth that Americans have a bigger obesity problem than us. The study found that 53.2 per cent of Irish people fail to do sufficient exercise, compared to 40.5 per cent in America. It found that among Europeans, Greeks, Estonians and the Dutch are the most active. Malta (71.9 per cent) and Serbia (68.3 per cent) had the highest levels of inactivity amongst adults in Europe. The study concluded that lack of exercise is killing as many Irish people as smoking.

### The role of exercise

To correct this energy imbalance and ensure we stay fit and healthy, it is important to maintain an effective level of activity. Exercise increases the rate at which the body uses energy and burns up stored energy (fat), preventing weight gain and promoting weight loss. In addition to increasing our body fat, exercise has many other advantages. It will also improve overall fitness which simply means how efficiently our heart and lungs perform.

### Types of exercise

When we exercise, our effort exceeds that of our normal daily activities. As the exercise becomes easier, the intensity needs to gradually be increased so that a level of effort is maintained during the session. There are two important types of exercise. This is resistance training and aerobic exercise.

### **Resistance training**

Resistance training helps to maintain and increase muscle mass and can be performed with weights, resistance bands or by simply by using your own body weight. It will improve muscle strength and flexibility. With time, movement becomes easier and muscles become firmer as they shorten and strengthen.

### **Aerobic exercise**

This type of exercise allows the heart and lungs work harder and increase the body's metabolic rate. Examples of aerobic exercises include walking, running, cycling, swimming and dancing. Aerobic exercise promotes weight (fat) loss, improves muscle tone, works the large muscle groups in the arms/legs/trunk, increases your level of fitness and improves the functioning of the cardiovascular system (i.e.) heart and lungs.

## **The benefits of exercise**

Exercise helps prevent high cholesterol, heart disease and other obesity-related diseases such as diabetes and certain types of cancer and arthritis. Studies show that regular aerobic exercise has the ability to lower LDL levels (bad cholesterol) by 5 to 10 percent and raise HDL cholesterol (good cholesterol) 3 to 6 percent.

Obesity is associated with increased risks of cancers of the oesophagus, breast (postmenopausal), endometrium (the lining of the uterus), colon and rectum, kidney, pancreas, thyroid, gallbladder, and possibly other cancer types. Exercise reduces the risk of these cancers.

Exercise will help shake off any cobwebs and make you feel more energised. Physical activity delivers oxygen and nutrients to tissues and helps the cardiovascular system work more efficiently; this means you will have more energy.

Exercise has been proven to improve mood by stimulating "good mood" hormones in the brain such as serotonin. Many of you know the feeling of satisfaction or even elation after completing a good exercise regime. Exercise is a great way to relax, it can give relief from the normal stresses and worries of daily life and can help "clear your head" if you have a lot going on. Regular exercise can have a positive effect on a person's sex life, it can help enhance libido in women and reduces the risk of erectile dysfunction in men. Exercise has been proven to help us fall asleep quicker and give a deeper and more satisfying sleep. However, it is important not to exercise within three to four hours of going to bed as this can have an alerting effect and may affect sleep.

## **How to improve stamina?**

Exercise improves stamina by training the body to become more efficient and use less energy for the same amount of work. As a person's conditioning level improves, heart rate and breathing rate return to resting levels much sooner from strenuous activity. An explanation of stamina is the ability to withstand fatigue or resist disease. In relation to exercise and fitness, stamina is the ability to sustain physical activity or sport for a prolonged period of time. Stamina involves both aerobic endurance, which is low to moderate intensity prolonged exercise (needed for sport like a marathon), and anaerobic endurance which is short and very high intense exercise (needed for sprints). The best way to increase stamina is with exercises that challenge both types of endurance and muscles.

For those interested in improving stamina, there are a few types of exercise which improve stamina. These include interval training, weight training, circuits and cardiovascular exercise.

### **Intervals**

Interval training is short bouts of high intensity work followed by a longer bout of lower intensity work. In a study published in the journal *Medicine and Science in Sports and Exercise* in October 1996 found that people who performed moderate cycling exercises for 60 minutes a day over six weeks improved their aerobic endurance but did not increase their anaerobic endurance. Another group of cyclists who performed eight sets of high intensity 20-second intervals with 10 seconds of rest in between for six weeks not only improved their aerobic endurance more than the moderate intensity group but also improved their anaerobic capacity by 28 percent.

### **Weight training**

Lifting weights is mostly anaerobic and not only improves strength but also improves muscular stamina and the ability to perform repetitive activities for extended periods of time. To ensure strength and endurance gains in weightlifting, it is important to lift a weight heavy enough to experience muscular fatigue within eight to 15 repetitions. For those wanting to increase stamina, weight training should be done at least two days per week, working every major muscle group, about eight exercises per session.

### **Circuits**

Circuits involve up to 12 different “stations” that incorporate strength training, cardiovascular exercise or both. Circuits challenge strength and both anaerobic and aerobic endurance, making it a great way to improve stamina. To do a circuit, combine basic strength training exercises and do each one for 30 seconds before moving on to the next. It is important to get a 30 second break between each exercise. As stamina improves, a person can reduce rest time to 15 seconds and increase work time to 45 seconds.

### **Cardiovascular Exercise**

An effective method of improving aerobic endurance and hence the ability to withstand low to moderate intensity work for a long time is with prolonged cardiovascular training. When starting into an exercise regime, start with 30 minutes of low to moderate intensity cardiovascular exercise such as walking, jogging, hill walking, cycling or swimming. Depending on your ability and health, you can reduce this initially. Each week try to increase the amount of exercise time by five minutes or increase the distance a little. Add another quarter mile on the walk or jog, or another lap in the pool. Keeping a record of your times and distances will allow you to do this in a more disciplined manner.

## **Can omega 3's improve stamina and recovery?**

Omega 3s have an anti-inflammatory effect which reduce the pain and stiffness associated with inflamed joints that can sometimes result from intense physical activity or injury. Lyprinol<sup>®</sup> is a highly potent anti-arthritis omega 3 supplement available in Whelehans Pharmacy, Mullingar. Trials have shown that Lyprinol<sup>®</sup> has 200 to 300 times more anti-inflammatory potency than other omega 3 supplements and is as effective as prescription medicines for inflammatory joint pain. Lyprinol<sup>®</sup> can improve vital lung capacity, reduce inflammation, increase the speed of recovery, help blood circulation, reduce delayed onset muscle soreness and increase the body's oxygen intake. While more research is needed to clarify how effective omega 3's are at helping improve fitness, early indications of their benefits, especially the benefits of Lyprinol<sup>®</sup>, are very promising.

## How much exercise do I need?

To maintain or improve the level of fitness, a general guide is to exercise continuously at a steady pace for 20-30 minutes at least three times each week, but ideally about 5 times a week. To lose weight, however, you may need to exercise for up to 60 minutes four to five times per week. It may be more appropriate for some people to start with a shorter exercise period at more frequent intervals, depending on weight and fitness levels and build it up. You just need to start being more active than you are currently to start burning up existing fat while improving your fitness. Serious exercise and workouts is not always what is needed. Even small things, like walking to the local shop or mass instead of driving, walking up a stairs instead of taking the lift and so on can result in big benefits to our health. You need to tailor it to your physical ability and health. Conditions like arthritis and bronchitis is going to restrict the amount of exercise you can do, therefore find a level that suits you and do not be afraid to ask for advice from your doctor, physiotherapist or pharmacist on the level and types of exercise that you will be able for. If you are member of a gym, staff can give excellent advice on your exercise regime and techniques. Finally, exercise has a great social aspect, it is a great way to meet people and make new friends. Being part of a team or a sporting club can give a great sense of belonging, and while it is not all about winning, winning or doing well in a competition is a great feeling and can be a great boost for morale.

## Top 10 exercise mistakes

Many of us rush into exercise regimes, but unfortunately the initial motivation frequently wanes and the exercise regime fizzles out for various reasons. This can include injury, boredom, lack of time and unrealistic goals. Here are ten tips to help you maintain a good level of exercise, and more importantly, enjoy it.

### Mistake 1 - Unrealistic Goals

We tend to be very impatient when it comes to exercise and losing weight. Unless your goal is to lose only a pound or two, it may take you a while to achieve your ideal healthy weight and your goals should reflect this. Having a weekly target helps keep you focused.

### Mistake 2- Not doing something you enjoy

Do things you enjoy. Don't feel you need to do exercises that you don't enjoy. Pick something that you find fun e.g. swimming, rollerblading, skipping, cycling. Everyone is different so pick something that you enjoy. Many people find team sports or group activities such as spin classes, five-a-side soccer or tag rugby more enjoyable and a great way to meet new people. Try music, for example, a mini MP3 player to listen to while jogging. People who exercise to music report exercising longer and more vigorously than those who don't.

### Mistake 3 - Failing to plan

As Roy Keane famously said, "fail to prepare, prepare to fail". If you do not plan your exercise regime you are less likely to keep it up. You should plan set days of the week that you will exercise and try to stick with these (no matter how tired you feel after work!)

Your plan should take account of your current fitness and a fitness level you would like to achieve. It should take into account the amount of free time you have, and any injuries or ailments you need to work around. Even if you have very little time to exercise, even 10 minutes twice a day can make a difference.

#### **Mistake 4 - No Exercise Variety**

Varying your exercise will avoid boredom and will allow you to lose weight quicker and get fitter quicker. Varying your exercise allows more muscles are used and you will be stronger overall. For example, if you normally only run to exercise, why not break it up with a swim, a cycle or a pilates class

#### **Mistake 5 – Doing it all alone**

Find an exercise partner. People who exercise with a partner or group are more likely to stick with a regular routine. Involve family members and friends. You will be less likely to skip your workout if you know somebody else is counting on you.

#### **Mistake 6 - No warm-up and cool-down**

Warming up prepares your body for the activity and intensity of activity ahead and prevents injury. Cooling down help:

- Muscles get rid of waste (such as lactic acid).
- Decrease the heart rate slowly.
- Prevent blood pressure drops which cause dizziness or fainting.
- Re-circulate blood from working muscles to the rest of the body.
- Prevent post-workout stiffness or soreness.

An example is walking for 5 minutes before jogging or lifting very light weights as a warm-up for more strenuous lifting.

#### **Mistake 7 - Training at the same intensity**

This mistake typically takes one of two forms; training with too low an intensity all the time, or training with too high an intensity all the time.

#### **Mistake 8 - Using improper technique**

- Do some homework - find out what the right technique is
- NHS website has good advice
- Get help from a professional (such as a trainer or coach)
- Check your technique periodically to make sure everything's as it should be

#### **Mistake 9 - Not rewarding yourself**

Set yourself weekly exercise goals and reward yourself at the end of the week if you have achieved these. Rewards could include a new book or magazine, a cinema trip, new clothes, new makeup or a massage.

#### **Mistake 10 - Not resting enough**

Rest has a vital role to play in life and in exercise, and getting the mix of activity and rest right is vital in both.

Common signs of over-training include:

- Injury.
- Irritation.
- Insomnia.
- Fatigue.
- Disinterest in exercise

## It's not just about the exercise!

To maintain vitality and prevent weight gain, an exercise regime should always go hand-in-hand with a sensible, balanced diet. Evidence shows that eating a healthy diet can reduce your risk of illnesses such as diabetes, obesity, heart disease, stroke, osteoporosis and cancer (particularly bowel cancer).

No single kind of food contains all the nutrients and fibre you need, so it's important to eat a range of foods. Eating the right balance from the main food groups will ensure that your body gets all it needs to stay healthy. There are five main food groups:

- starchy foods
- fruit and vegetables
- dairy foods
- meat, fish and other non-dairy sources of protein (such as beans)
- fats and sugar

There is more information on healthy eating on our website, [www.whelehans.ie](http://www.whelehans.ie) (ailment section) or ask our staff in store for details.

**Disclaimer: Information given is general; please ensure you consult with your healthcare professional before making any changes recommended**

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