

Exercise and exercise equipment

"Those who think they have not time for exercise will sooner or later have to find time for illness". Edward Stanley, 15th Earl of Derby

Exercise: One of the NHS top tips for pain management is exercise. "Simple, everyday activity like walking, swimming, gardening and dancing can ease some of the pain directly by blocking pain signals to the brain. Activity also helps to stretch stiff and tense muscles, ligaments and joints, which can lessen pain".

"It's natural to be hesitant if exercise is painful and you're worried about doing more damage. But if you become more active gradually, it's unlikely you will cause any damage or harm. The pain you feel when you start gentle exercise is because the muscles and joints are getting fitter".

Avoiding exercise completely could lead to other problems like stiff joints, weight gain, heart disease, osteoporosis, poor balance and falls.

In recent years, studies have shown that regular physical activity also has benefits for mental health. Exercise can help people recover from depression and prevent them from becoming depressed in the first place. Please see the section on Emotional Wellbeing for further details.

How much physical activity do adults aged 19-64 years old need to do to stay healthy?

To stay healthy or to improve health, adults need to do two types of physical activity each week: aerobic and strength exercises.

Guidelines for adults aged 19-64

To stay healthy, adults aged 19-64 should try to be active daily and should do:

at least 150 minutes of moderate aerobic activity such as cycling or fast walking every week, **and**

strength exercises on two or more days a week that work all the major muscles (legs, hips, back, abdomen, chest, shoulders and arms).

OR

75 minutes of vigorous aerobic activity, such as running or a game of singles tennis every week, **and**

strength exercises on two or more days a week that work all the major muscles (legs, hips, back, abdomen, chest, shoulders and arms).

- A mix of moderate and vigorous aerobic activity every week. For example, two 30-minute runs plus 30 minutes of fast walking equates to 150 minutes of moderate aerobic activity, **and**
- strength exercises on two or more days a week that work all the major muscles (legs, hips, back, abdomen, chest, shoulders and arms).

A rule of thumb is that one minute of vigorous activity provides the same health benefits as two minutes of moderate activity.

One way to do your recommended 150 minutes of weekly physical activity is to do 30 minutes on 5 days a week.

All adults should also break up long periods of sitting with light activity. Find out [why sitting is bad for your health](#).

What counts as moderate aerobic activity?

Examples of activities that require moderate effort for most people include:

- [walking](#) fast
- water aerobics
- [riding a bike](#) on level ground or with few hills
- doubles tennis
- pushing a lawn mower
- hiking
- skateboarding
- rollerblading
- volleyball
- basketball

Moderate activity will raise your heart rate and make you breathe faster and feel warmer. One way to tell if you're working at a moderate level is if you can still talk, but you can't sing the words to a song.

What counts as vigorous activity?

There is good evidence that vigorous activity can bring health benefits over and above that of moderate activity.

Examples of activities that require vigorous effort for most people include:

- [jogging or running](#)
- [swimming fast](#)
- [riding a bike](#) fast or on hills
- singles tennis
- football

- rugby
- skipping rope
- hockey
- aerobics
- gymnastics
- martial arts

Vigorous activity makes you breathe hard and fast. If you're working at this level, you won't be able to say more than a few words without pausing for breath. In general, 75 minutes of vigorous activity can give similar health benefits to 150 minutes of moderate activity.

For a moderate to vigorous workout, try Couch to 5K, a nine-week running plan for beginners.

What activities strengthen muscles?

Muscle strength is necessary for:

- all daily movement
- to build and maintain strong bones
- to regulate blood sugar and blood pressure
- to help maintain a healthy weight

Muscle-strengthening exercises are counted in repetitions and sets. A repetition is one complete movement of an activity, like a bicep curl or a sit-up. A set is a group of repetitions.

For each strength exercise, try to do:

- at least one set
- eight to 12 repetitions in each set

To get health benefits from strength exercises, you should do them to the point where you struggle to complete another repetition.

There are many ways you can strengthen your muscles, whether it's at home or in the gym. Examples of muscle-strengthening activities for most people include:

- lifting weights
- working with resistance bands
- doing exercises that use your own body weight, such as push-ups and sit-ups
- heavy gardening, such as digging and shovelling
- yoga

Try [Strength and Flex](#), a 5-week exercise plan for beginners to improve your strength and flexibility.

You can do activities that strengthen your muscles on the same day or on different days as your aerobic activity - whatever's best for you.

Muscle-strengthening exercises are not an aerobic activity, so you'll need to do them in addition to your 150 minutes of aerobic activity.

Some vigorous activities count as both an aerobic activity and a muscle-strengthening activity.

Examples include:

- circuit training, aerobics, running, football, rugby, netball, hockey

Equipment to help with exercising:

Resistance Bands

Bodylastics 12 piece resistance bands with handles and door anchor
£19.95



Bodylastics Premium Flat resistance bands without handles

£13.87



Suspension training straps

Protone professional suspension trainer - bodyweight strength training

£29.99

[All available from Amazon.co.uk](https://www.amazon.co.uk)

Alter G treadmill:

0800 368 8700

www.alterg.com

The Mill, Horton Road,
Stanwell Moor
Staines, Middlesex TW19 6BJ

The treadmill is ideal for physiotherapy clinics, rehabilitation facilities, gyms and wellness centres and is the perfect solution for patients looking to regain mobility, develop strength and fitness, and increase range of motion and natural movement – all while minimising stress on injuries.

AlterG's unique and patented unweighted rehabilitation treadmill technology:

- Allows patients to move with less pain during physiotherapy sessions whilst reducing the risk of further injury
- Provides Physiotherapists with an accurate tool to track patient progress, keeping them engaged during rehabilitation
- Helps clinics and therapists to set themselves apart by offering the most advanced physiotherapy technology available
- Allows Physiotherapists to easily observe and analyse their patients range of movement
- Acts as both a rehab device and wellness tool that gets patients excited and motivated to continue using it for regular training

Find the location of your nearest treadmill:

<http://www.alterg.com/en-gb/product/find-an-alterg/locations/?address=Northcourt+Ave%2c+Reading%2c+Reading+RG2+7HE%2c+UK>



Power Plates:

How does vibration training work?

By exercising on a vibrating, and therefore, unstable surface your muscles are forced to respond in order to regain stability. Your body does this by performing reflexive muscle contractions many times per second.



These contractions must work in multiple directions, because the platform not only moves up and down, but also vibrates from side to side. As you increase the vibration frequency (Hz) or the intensity from high to low your muscles will always be facing a renewed challenge.



Also note, there are two methods currently available to deliver vibration - oscillation and vertical vibration. Research has yet to conclude which is best, so the argument rages on.

A significant amount of research is stacking up in favour of vibration training, and as more is known about how the body responds to the stimulus of standing on of these platforms, we're sure more benefits will be identified.

It is claimed that instability training or vibration training can achieve in 10 minutes what would usually take one hour.

Hypervibe G-10 Whole Body Vibration Machine

£200-£1,000

(This isn't a recommendation, but has been purchased by one beneficiary who is happy with its performance. You should ensure you research to find a plate that is most suited to your personal needs/disability. Some have handles.)

If you have any of the following, you should seek advice before using a Power Plate:

Absolute Contra-indications: NO NO!

- Acute diseases/inflammation processes
- Wearing a pacemaker
- Acute thrombosis conditions
- Fresh wounds resulting from operation or surgical intervention
- Pregnancy
- Osteoporosis in an advanced stage

Non-absolute Contra-indications

- Migraine
- Acute hernia, discopathy
- Cardiovascular disease
- Wearing recently fitted IUDs, coils, metal pins, bolts or plates
- Gall and kidney stones
- Synthetic joints

The Genny Segway Mobility Device

This modern two wheeled personal mobility device uses a self levelling system derived from the Segway, meaning it can go forwards or backwards, accelerate and brake just by using intuitive upper body leaning movements. Using the Genny works on upper body movement, working your core muscles. Steering is simple too, with just a light push left or right on the handlebar and Genny can turn on a sixpence.



Genny uses no hand controls at all allowing almost hands-free operation. This enables the rider to hold a dog lead, an umbrella or even a partners hand on the move. Genny is equally at home indoors or outdoors and uses no less than 5 gyroscopes and many motion sensors to safely take you almost anywhere. The really great things about the Genny is that it can travel over fairly rough terrain - snow, sand, gravel and mud. If the optional XR kit is fitted, Genny quickly becomes a formidable off-roader too.

<https://www.youtube.com/watch?v=7DfcjRcoef0>

Genny
Regus House
Victory Way
Admirals Park
Dartford
DA2 6QD

Tel: 01322 303473 Craig Tibbles
craig@genny.co
www.genny.co

Demonstrations available.

Help with exercise:

English Federation of Disability Sport

National charity, dedicated to disabled people sport and physical activity. They support a wide range of organisations to include disabled people more effectively. Their vision that disabled people are active for life.



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www.Efds.co.uk

English Federation Of Disability Sport, SportPark- Loughborough University, 3 Oakwood Drive, Loughborough, Leicestershire LE11 3QF

- Tel 01509 227750
- Fax 01509 227777



Wheelpower

WheelPower are dedicated to providing opportunities for disabled people to find a sport they enjoy and provide opportunities throughout the year to introduce people to wheelchair sport.

<http://www.wheelpower.org.uk/>

WheelPower
Stoke Mandeville Stadium
Guttmann Road
Stoke Mandeville
Buckinghamshire HP21 9PP

Telephone: 01296 395995
Fax: 01296 424171

email (general enquiries): info@wheelpower.org.uk

Finding a suitable personal trainer (PT):

Google “Personal + Trainer + [your location] + disability

A good personal trainer delivers safe, effective, fun and interesting workouts (in that order) to all fitness-training clients. The training programs you develop should be varied and progressive, and geared toward improving your clients' health and wellness.



Fees vary depending on location. Most PT's offer a first session for free so that you can assess how well you may be able to work together. It's essential to find a PT who works well for you.

Many personal trainers are happy to travel to where you want to train (your home, a local gym, local park, etc). They will usually supply any equipment.

If you experience pain, you may want to try and find a PT through your local physio clinic, or try and find a PT with knowledge and experience of bio mechanics and/or sporting injuries.

Personal Training for a person who is disabled may be more challenging for both the client and the trainer, however most personal trainers should be able to adapt their training techniques to individual needs and abilities.

The most important thing is to find someone who you feel comfortable working with to help you to achieve the results you would like!



National Register of Personal Trainers

<http://www.nrpt.co.uk/>

The Inclusive Fitness Initiative (IFI)

Mark: this is a model that supports the fitness industry to become more inclusive to both disabled and non-disabled people.

Working within the English Federation of Disability Sport (EFDS) nearly 400 IFI Mark accredited facilities, accreditation consists of three levels; Provisional, Registered and Excellent. These venues support and lead the way in providing accessible physical activity and in increasing participation amongst disabled people.



The IFI model addresses inclusion holistically through the following areas:-

- Accessible facilities in terms of physical access and accessible service provision
- Inclusive fitness equipment
- Staff training; customer service and adaptive exercise programming
- Marketing and local partnership development within the local community
- Wider accessible sport and social activities

When visiting an IFI Mark facility you should find accessible facilities, equipment that is appropriate for the vast majority of disabled people, a positive culture and staff attitude and a facility that understands the value of a diverse and inclusive customer base.

To find your nearest IFI Mark facility ring **01509 227750** or email ifi@efds.co.uk

or visit http://www.efds.co.uk/inclusive_fitness

The information and advice presented in these pages was developed by beneficiaries and advisers as a result of their participation in the Fit for the Future event held in April 2016. It is based on the advice and experience of those living with Thalidomide damage and those who work alongside them.

It is always advisable to talk to your own GP before embarking on an exercise or diet regime. The Health & Wellbeing team at the Trust are also available to support you with all aspects of living well and can provide further information and advice based on your specific needs. Please don't hesitate to contact them on 01480 474074.

Physical activity benefits for adults and older adults



BENEFITS HEALTH



IMPROVES SLEEP



MAINTAINS HEALTHY WEIGHT



MANAGES STRESS



IMPROVES QUALITY OF LIFE

REDUCES YOUR CHANCE OF

Type II Diabetes **-40%**

Cardiovascular Disease **-35%**

Falls, Depression and Dementia **-30%**

Joint and Back Pain **-25%**

Cancers (Colon and Breast) **-20%**

What should you do?

For a healthy heart and mind

To keep your muscles, bones and joints strong

To reduce your chance of falls

Be Active

Sit Less

Build Strength

Improve Balance

VIGOROUS

MODERATE



RUN



WALK



SPORT



CYCLE



STAIRS



SWIM



TV



SOFA



COMPUTER



GYM



YOGA



DANCE



TAI CHI



CARRY BAGS



BOWLS

MINUTES PER WEEK

75 OR 150

VIGOROUS INTENSITY

(BREATHING FAST
DIFFICULTY TALKING)

MODERATE INTENSITY

(INCREASED BREATHING
ABLE TO TALK)

OR A COMBINATION OF BOTH

BREAK UP SITTING TIME



2 DAYS PER WEEK

Something is better than nothing.

Start small and build up gradually:
just 10 minutes at a time provides benefit.

MAKE A START TODAY: it's never too late!