Physiotherapy Eating Disorder Professional Network

Managing activity and exercise with an eating disorder



It is widely known that there are many positive physical and psychological health benefits of exercise, including improved heart and lung function, improved muscular and skeletal strength and improvements in self esteem and mood. As a result exercise plays an important part in what is considered to be a healthy lifestyle.

Currently the Department of Health (2012) recommends 150 minutes of physical activity per week, which includes activities such as walking, jogging, swimming, gardening and housework. However, it is important to acknowledge that this recommendation is based on a BMI level of 18.5 above, and whilst it is directed at the majority of the population, this amount of activity can be detrimental to someone with an eating disorder.

When exercise becomes associated with an eating disorder it can often become compulsive and when exercise levels can increase beyond that of nutritional intake. When this happens the health benefits of exercise are lost and exercise becomes more harmful to the body than helpful.

The aim of this booklet is therefore to provide you with an insight into the relationship between exercise and eating disorders, what you might experience if your exercise and activity increase to unhealthy levels and ways in which you can be supported to try and make changes to your exercising behaviour.

Exercise and eating disorders

The relationship between an eating disorder and exercise levels can vary between individuals, and can depend on the reasons for first starting exercise, whether it be to control weight and shape or whether it started out healthily prior to the eating disorder taking over, but what ever the reason, exercise can become a very powerful tool in maintaining an eating disorder because of the strong influence that it can have on weight control.

Compulsive exercise refers to any form of physical activity that is associated with disordered eating attitudes, beliefs and behaviours, and an inability or unwillingness to cut down or stop exercising even though it is detrimental to health.

In addition, as part of the eating disorder, the individual may have developed a psychological dependence on exercise through the influence of perfectionistic tendencies and behavioural rigidity, a dependence on exercise for mood regulation, or due to the beliefs about the negative consequences that may result from alterations in exercise behaviour.

Activity urges are controlled by the brain chemical Leptin. In the majority of individuals with a restricted diet, the levels of Leptin significantly reduce, resulting in an increased urge to be active. As weight returns to within normal ranges, the amount of Leptin produced then increases and the urge to be active reduces. In addition, it is also believed that the urge to be active is an evolutionary survival mechanism to support foraging for food in times of famine. It is therefore important to acknowledge that the powerful drive to exercise and be active becomes less intense as weight is restored to healthier levels.

How do you know if your exercise is becoming compulsive?

Are any of these points familiar to the feelings you have around exercise?

- I make myself exercise even when I am injured or tired
- I exercise every day, and feel guilty if I miss a day
- I must always do more than I did the last time
- I make excuses to miss social events or study in order to exercise

- I cut back on food if I have not exercised enough
- I need to exercise in order to cope with the way that I feel
- I make up for any exercise I have missed by doing more the next time
- I do not enjoy exercise the way that I used to

If they are then it may be time to talk about your exercising behaviour and how if is affecting you and your eating disorder.

Common altered beliefs around body composition and exercise include:

"If muscle is not used, it turns to fat" – this is a myth Muscle that is not used will lose tone and therefore will look less defined than more toned muscle, but it will not turn to fat.

"If I do not exercise then as I gain weight all the weight will be fat tissue" – this is a myth Until your body has returned to a healthy weight it will be using all nutrients to repair and rebuild your body to its genetically determined healthy composition, which includes rebuilding muscle tissue in order for the body to function for everyday tasks. This means that the body will regain muscle tissue even without the need for exercise.

"Walking to the shops or train station is not exercise" – this is a myth All physical activity that functions either directly or indirectly as a means to influence weight, shape, physical fitness and mood are forms of exercise

So what do we mean by exercise?

Physical activity relates to any movements that exert the muscles of the body, and therefore can encompass a vast range of activities such as running, dancing, gardening or walking to the shops. This range can be broken down further into activities which are classed as planned and structured exercise, such as playing a sport or going to the gym, and incidental exercise which is neither planned nor structured but involves physical activity, such as hoovering, washing the car, walking to and from the shops. Both exercise and incidental exercise influence components of physical fitness, including muscular, heart and lung function, and must therefore both be taken into account when identifying activity levels of compulsive or over-exercising behaviours.

When exercise has become excessive and/or compulsive in someone with an eating disorder it can be carried out in different ways. It may be that someone is openly and deliberately engaging in exercise as a way to burn calories or lose weight, which can often be undertaken in a rigid way, such as running, swimming and cycling. It may be that someone is carry out high levels of exercise but in secret, such as sit ups in their room, by making excuses to 'fetch something' from another room, or by standing for long periods of time or pacing.

Therefore all types of physical activity and exercise, when compulsive in nature or carried out at an unhealthy BMI level, have a negative impact on health and it is therefore important to address exercising behaviours in order to minimise the risk of harm to the body.

What are the consequences of over exercising?

At a lower BMI the body does not have the ability to withstand high levels of activity. At a BMI level below 18.5 there are significant changes in the body, including the muscle and skeletal systems, to the heart, to the circulatory system.

At a low weight there is significant reduction in muscle mass and muscle strength, which reduces the support around the joints of the body. Exercising on top of these already weakened and therefore vulnerable joints can lead to joint damage, and if continued, degenerative changes such as arthritis. In addition reduced muscle mass means that these weakened muscles are unable to withstand the repetitive nature of exercise movements and therefore are extremely vulnerable to repetitive strain injuries. Some of the signs and symptoms you may experience include:

- Joint pain
- Neck or back pain
- Muscular and ligament injuries
- Stress fractures
- Friction burns and bruising
- Increased callous formation on the feet

Osteoporosis is a common complication of an eating disorder, particularly anorexia nervosa. Reduction in bone mineral density and therefore development of osteopenia and subsequently osteoporosis increases the risk of fractures, and even low impact activities such as walking can result in stress fractures. If exercise contributes to a further reduction in weight then the overall result will be counter-productive to bone mineral density. As a result it is vital to address any compulsive or over exercising behaviours if you have a diagnosis of osteopenia or osteoporosis, and you should avoid high impact activities such as running, jumping or contact sports, and activities that are a high risk for falls such as skiing and horse riding. It is also advised that you avoid exercises which involve forward flexion (curving the spine forwards) such as touching the toes in standing and sit-ups, as these movements put pressure on the bones in your spine increasing the risk of compression or wedge fractures especially in your upper back.

In addition to the risk to the muscular and skeletal system, exercising at a low BMI can place extreme stress on both the cardiovascular and circulatory systems. At a low weight the body may have experienced some muscle shrinkage of the heart muscle, and this in addition to altered blood chemicals that can result from dieting, vomiting, laxative abuse or dehydration, can lead to lowered blood pressure (hypotension), altered heart rhythms and dizziness or fainting and swelling of the body's soft tissue, usually in the lower legs, known as peripheral oedema.

The importance of rest and recovery

During exercise, whether it be strengthening exercises, such as sit ups or press ups, or aerobic in nature, such as walking, jogging, cycling, increased stress is placed on muscles, joints, tendons and ligaments. This results in microscopic damage to tissues and the success of repair is dependent on both time and nutrition. It takes approximately 48 hours for muscle to recover, repair and replenish and this requires the correct amount of protein, vitamins and minerals. If you are over-exercising, and your nutritional intake is low, then you are not allowing your body the chance to repair properly. This will result in your muscles and joints becoming more vulnerable to injury and, without that time to recover, you will soon start to feel weak and become tired and fatigued. Therefore it is important to allow your body to not only carry out a level of activity appropriate to your BMI, but also allow your body adequate time to rest between activities.

It is often believed that *"If I do more exercise, then I will be fitter"* but not allowing your body to rest and recover can have negative consequences. There is only so much the body can take before the positive benefits of exercise become outweighed by the negatives. Therefore more is not always better.

The consequences of compulsive exercising behaviour not only have a significant impact physically, but socially and psychologically as well. These may include:

- A deterioration in relationships
- Withdrawal and isolation
- Depression
- Anxiety and guilt
- Unbalanced occupation and poor performance with study
- Negative self-image

What can be done to challenge your exercising behaviour?

If you feel that you are experiencing compulsive exercising tendencies or are concerned about your exercising behaviour then it is important to discuss this with staff and ask for support in how to best manage and challenge it. You will have your own individual reasons for your compulsive exercise behaviour and therefore it is important to identify these and develop ways of challenging them.

Within one-to-one sessions with your primary nurse we advise you to discuss any difficulties that you have been experiencing in relation to exercise and activity and then be referred on to other professionals to address this further:

The Physiotherapist can work with you to help you identify your current level of activity and the impact that this might be having on your body, and support you to develop a plan for appropriate levels of activity in relation to your BMI level. An Occupational Therapist can help you identify how your current exercise and activity impacts on your occupational routine and support in developing a healthier approach to this. A Cognitive Behavioural Therapy approach, supported by a Psychologist, can help you to find new ways of thinking about exercise and activity and make changes to your behaviour.

You will be able to review your progress and motivation to change within your one-to-one sessions with your primary nurse.

Useful strategies that you might find helpful to get you started in challenging your activity levels and exercising behaviour:

- Complete an activity diary include in this the amount of activity that you carry out and the function of it and how you felt afterwards.
- If you are over-exercising, try to cut down the amount that you do, whether this be by 10 repetitions or by 5 minutes, it will be a positive step in the right direction
- Write a pros and cons list for changing your exercising behaviour. What are you concerned might happen if you stop?
- Use alternative activities these can be helpful at the time of the urge to exercise. Talk about your thoughts and feelings with others, or participate in enjoyable activities, for example, with reading a book or listening to music.
- Use anxiety management techniques and remember urges and anxiety passes.
- Understand the consequences of over-exercising and the benefits of changing your behaviour on overall wellbeing.

• Acknowledge the need for your body to rest as part of it's recovery and that even trained athletes allow themselves rest days

It is important to remember that any exercise that you carry out that unsettles your exercise and nutritional balance will be counter-productive in returning to a healthier weight and minimising the risk of harm to your body.

Allow yourself to rest and to listen to your body – to give exercise a miss if you are feeling unwell, tired, are injured, or you just don't feel like it.

As your BMI increases the amount of exercise that you will safely be able to engage in will increase. It is important to work with the Physiotherapist to identify an appropriate type and amount of exercise for you, in order to reach a healthy balance between activity and nutritional intake and to maintain a healthy weight. At this stage your body will then be gaining the positive health benefits that can result from exercise.

When engaging in exercise is it important that it is fun, social and enjoyable. Try to avoid solitary, rigid or secretive exercise as this may lead you to over exercise. Engaging in exercise groups or exercising with others, i.e. time limited sessions and social sessions, will therefore be supportive in guiding you through to healthier exercising behaviours.

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