

Physical Health

At ABC we are aiming to present information that will enable an understanding of the impact that eating disorders can have on physical wellbeing. We always advise seeking help and support as soon as possible to help prevent longer term damage to the body.

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Bone health

Studies suggest that low bone mass (osteopenia) is common in people with anorexia and that it occurs early in the course of the disease. Girls with anorexia are less likely to reach their peak bone density and therefore may be at increased risk for osteoporosis. This is a condition where the bones are very fragile and far more susceptible to fracturing.

Nutritional and hormonal imbalances can negatively impact bone density. Low body weight in females causes the body to stop producing oestrogen, resulting in a condition known as amenorrhea, or absent menstrual periods. Low oestrogen levels can also contribute to significant losses in bone density.

In addition, people with anorexia often produce excessive amounts of the adrenal hormone cortisol, which is known to trigger bone loss.

Other problems that contribute to bone loss in girls and women with anorexia include a decrease in the production of growth hormone and other growth factors, low body weight, calcium deficiency, and malnutrition.

Weight loss, restricted dietary intake, and testosterone deficiency may be responsible for the low bone density found in males with the disorder.

Excessive exercise particularly if body weight falls and loss of normal periods occurs, will affect bone health in a similar way to the effect of anorexia nervosa. The intensity of exercise should be reduced and, if possible, calorie intake increased until body weight improves.



Size zero/bone health

New research from the Children of the 90s project (ALSPAC), suggests that teenage girls who are too thin may be putting their bones at risk. It has long been known that the amount of muscle in the body is related to bone growth, but this new study shows that fat mass is also important in building bone, particularly in girls.

The researchers examined 4,000 young people aged 15. Using sophisticated scanning techniques that calculated the shape and density of their bones, as well as how much body fat they had. Those with higher levels of fat tended to have larger and thicker bones. This connection was particularly marked in the girls. For example, one key measure showed that in girls, a 5kg increase in fat mass was associated with an 8% increase in the circumference of the tibia (lower leg bone).

As girls tend to have higher levels of fat than boys, even when they are normal weight, these findings suggest that fat plays an important role in female bone development.

Building strong bones in youth is particularly important for women, as they are 3 times more likely to develop osteoporosis, and they suffer 2 to 3 times more hip fractures than men.

Professor Jon Tobias, leader of the research, says:

"There is a good deal of pressure on teenage girls to be thin, but they need to be aware that this could endanger their developing skeleton and put them at increased risk of osteoporosis"

Many people think that exercise is the key to losing weight and building strong bones at the same time – but this may only be true up to a point. If you do a good deal of low impact exercise, such as walking, you will certainly lose fat but you may not be able to put enough stress on the bones to build them significantly. To offset the detrimental effect of fat loss on your bones, it may be important to include high impact exercise as well, such as running or jumping."

ALSPAC The Avon Longitudinal Study of Parents and Children (also known as Children of the 90s) is a unique ongoing research project based in the University of Bristol. It enrolled 14,000 mothers during pregnancy in 1991-2 and has followed the children and parents in minute detail ever since.



Heart health

At ABC, we always advise our callers who are suffering with eating disorders to have regular medical monitoring. This is so important for many reasons but this information focuses on the heart and highlights why early recognition and treatment of an eating disorder is essential to prevent and minimize health risks.

In people with both short term and longstanding exposure to anorexia, the heart walls can thin and weaken because the heart muscle loses mass (this is just like the muscles that you can see in your arms and legs). This then can cause the heart chambers to enlarge and alter the pumping mechanism of the heart. Fortunately, with weight restoration and replenishment of essential vitamins and minerals the heart muscle often recovers.

A number of abnormal heart rhythms can occur with anorexia. One is that the heart beats slowly, a pattern called bradycardia. This is a particular problem in people who have weak heart muscles. Another concern is fast abnormal heart rhythms. People tend to be most sensitive to these types of rhythms if they follow a pattern of binge eating and purging. This can result in dangerous shifts and loss of body electrolytes such as sodium, potassium, and magnesium. The electrical aspects of the heart that create heartbeats are critically dependent on these electrolytes. When they are unbalanced, unstable electrical patterns can develop in the lower heart chambers that can result in cardiac arrest.

People with anorexia can experience severe lightheadedness and fainting spells. This can sometimes be due to the loss of the autonomic regulation of the heart and blood vessels which can cause huge drops in blood pressure when doing normal things like standing or walking. (It is also important to rule out anaemia and hypoglycemia if experiencing these symptoms.)

Blood pressure and heart rate should be checked and a blood sample can be taken at a GP assessment. If appropriate the GP will also organise an ECG to monitor any abnormal heart rhythms. These checks can help ensure that the heart is kept healthy as it is one of the organs that is most vulnerable to anorexia.

Oesophagal bleeding

Self-induced vomiting is the most frequently used purging method which anyone with an eating disorder can revert to. One of the medical complications of self-induced vomiting can include acid reflux and bleeding and damage to the pharynx and larnyx.

Acid reflux can come about as a result of frequent self-induced vomiting that damages the oesophagal sphincters that are in charge of holding food down. When a person uses self-induced vomiting, the body forces the food up through the oesophagus and through the sphincter the controls the entrance of food into the stomach. The intended job of the sphincter is to prevent acid from backing up into the oesophagus which has no intrinsic protection from the acid. The more that the sphincter is abused in this way, then the less likely it is able to remain closed as intended.



Regurgitated acidic stomach contents may also come into contact with the vocal chords and surrounding areas. This can sometimes result in hoarseness, difficulty swallowing, chronic cough, a burning sensation in the throat or repeated sore throats.

With repetitive vomiting, the lining of the throat suffers repeated abnormal exposure to acidic gastric (stomach) contents. The unfortunate potential consequences of this can include inflammation, oesophageal erosions and ulcers,

Barrett's oesophagus refers to a condition in which there is a change in the mucosal lining type due to chronic and repetitive abnormal acid exposure to the esophagus. Very occasionally, oesophageal cancer can develop from these cells, so you may need to be closely monitored. The most severe, albeit very rare, acute consequence of self-induced vomiting, is oesophageal rupture. This causes bleeding which doesn't stop and is a medical and surgical emergency.

The most common cause of blood in vomit in bulimia sufferers is from **Mallory Weiss tears**. These are tears in the lining of the oesophagus caused by forced retching and vomiting. There may be streaks of bright red blood or if the bleeding is from lower down in the digestive system the blood can appear dark, almost brown in colour. It is important not to ignore these symptoms to describe what you see to a health professional.

Mallory Weiss tears usually heal in a couple of days without treatment. During those days, the body needs to be treated gently so purging must be avoided or reduced as much as possible. In more severe cases, Mallory Weiss tears are serious as they can lead to full thickness tears which can be life threatening. Sometimes there are no other obvious signs that you have a Mallory Weiss tear or how bad it is. Because of this, any bleeding following self-induced vomiting should be taken seriously and medical advice should be sought

Fainting

Fainting (syncope) is caused by a temporary reduction in blood flow to the brain. This can happen for many reasons. If anyone suffering with an eating disorder gets dehydrated and or is deficient in iron (anaemic), and has low blood sugar due to food restriction or purging, the possibility of fainting is raised.

If a person who is battling an eating disorder starts to feel faint and or dizzy:

- •Ask them to lie down, preferably in a position where the head is low and the legs are raised. This will encourage blood flow to the brain.
- •If it isn't possible to lie down, ask them to sit down with their head between their knees.
- •Once recovered ask them to rest and drink some fluids. Ask them to eat something to restore blood glucose and blood pressure. Ensure that they avoid driving or operating machinery if the feeling of faintness or dizziness continues.
- •Keep a record of when this happens and for how long.



- •Encourage the person to seek medical advice and assessment to establish whether they are anaemic and to get a medical assessment in relation to the eating disorder.
- •If a person does faint and doesn't regain consciousness within two minutes, (this is very rare) put them into the recovery position.

To do this:

- 1. Kneel beside them and put their hand that is nearest to you up at a right angle
- 2.Bring their other arm across their chest towards you and place their palm by their cheek
- 3.Lift their far leg and then bring this leg right across their body towards you
- 4. Open their airway by tilting their head back and lifting their chin checking for any obstruction and removing it if it is easy to do so
- 5. Monitor their breathing and pulse continuously
- 6. Take a note of the time of the faint if possible and how long they are not responsive.

After putting the person in the recovery position, dial 999, ask for an ambulance and stay with them until medical help arrives. If you know further details about their eating disorder let the medical professionals know.

Laxatives

ABC often receives calls and emails from people who use laxatives to excess. Some people with eating disorders abuse laxatives because they believe they can remove food from their bodies before the calories are absorbed. Laxatives remove lots of water from the colon or large intestine as well as food residue. Laxatives and enemas cannot stimulate the small intestine, the upper part of the digestive tract where food is digested and where nutrients and calories are absorbed. The small intestine does not even have the kinds of nerves that occur in the colon and respond to artificial stimulation.

The scales may indicate "weight loss" after a laxative-induced bowel movement, but it is false weight loss. The ounces or pounds return as the body rehydrates. (It is very important to rehydrate otherwise you risk dehydration which can lead to fainting spells and imbalances in the electrolytes. Electrolytes are minerals like sodium and potassium that are dissolved in the blood and other body fluids. They must be present in very specific amounts for proper functioning of nerves and muscles, including the heart muscle.

In order to avoid becoming dependent on laxatives and to have any kind of bowel movement at all it is very important to eat enough food. Foods such as fruit and vegetables, pulses and wholegrains are recommended.

It is possible to recover from laxative misuse; however, it is always advisable to seek support from your GP in order that your physical health can be monitored and an assessment of your emotional health needs can be made.



Pregnancy

Many people with an eating disorder will find the prospect of pregnancy and all the associated changes in their body difficult to contemplate.

It is important that the healthcare provider is informed about any struggles that may exist regarding eating. This will ensure the correct support is available to safeguard the physical and emotional health of both mother and baby during pregnancy and postnatally.

If stores of carbohydrates, proteins, fats, vitamins, minerals and other essential nutrients are depleted, a woman's body will drain them to support the growth and development of the baby. If reserves are not sufficiently restored through healthy eating, there is the potential for the mother to become severely malnourished, and this in turn can lead to other complication such as depression, exhaustion and many other serious health complications.

Women with very low BMI or very high BMI are sadly at a higher risk of miscarriage. People suffering bulimia nervosa who continue to purge during pregnancy may suffer dehydration and electrolyte or cardiac irregularities which can cause health complications for mum and baby.

It is advisable to seek the support from a qualified dietitian for anyone who is planning a pregnancy who is currently suffering with or has recovered from an eating disorder. It is important that the dietician has a specialist knowledge of eating disorders. The dietitian should guide the person through the pre-conception period, during pregnancy and post-natally, to maximize the health outcomes for mother and baby.

Individual counseling during and after pregnancy can be valuable in coping with concerns and fears regarding food, weight gain, body image and being a new mum. The GP and midwife should also be able to provide support. It is important that good care of mother and baby is dependent on honesty. At ABC, we know this is often really difficult but it can really help and enable you to safeguard mother and baby's health in the long run.