MOTIVATION AND PSYCHO-EDUCATIONAL PACKAGE FOR PEOPLE WITH EATING DISORDERS (MOPED)

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An abridged version of MOPED can also be accessed online at the following web address

http://mopedleicester.weebly.com/

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Content

Introduction

MOPED has been developed by clinicians at the Leicestershire Adult Eating Disorders Service in collaboration with Loughborough University Centre for Research into Eating Disorders (LUCRED). It is informed by our clinical and research experience and it incorporates some techniques from interventions proved to help people with disordered eating, such as Cognitive Behavioural and Motivational Enhancement Therapy. (Fairburn, 2008, Treasure & Schmidt, 2008).

We presume that if you are reading this booklet your eating is problematic. Hopefully you will find the information here useful to make the decision as to whether you would like to keep your eating disorder or not. If you decide to get rid of 'it' you can start making some changes.

MOPED will take you through the difficult journey of change. Firstly, by fully informing you about eating disorders and secondly, if you decide to initiate change, by suggesting a series of exercises to help you break the complex vicious cycle between eating and other issues.

Change is not always easy. We hope that MOPED will provide the information you need to decide whether you want to change or not. The decision is always yours.

We really hope you find MOPED useful.
Please do give us feedback about it either through the short questionnaire that you will find at the end of this booklet or you can complete the survey online by visiting www.surveymonkey.com/r/MOPED-NHS
This is the only way we can improve MOPED for other people.

HOW TO USE MOPED

We suggest that you use MOPED in the following way
- Set aside one to one and a half hours for each chapter. - Read and complete the activities in Chapters 1-4 every 2 to 3 days. - Read and go through the activities in Chapters 5-8 once every week, but read each chapter twice a week to make sure you are putting it into practice. - Find a quiet place, where nobody is going to disturb you. - Don't ignore any chapters even if you feel they are not relevant to you. - Make a summary of each chapter in the space provided in this booklet. Write down your understanding and what you have learned from it. - Before you start with a new chapter go through the summary you wrote of the previous chapter. - The activities are the most important part of MOPED. Allow yourself to spend as much time as necessary on them. - Take the summary of what you have learned from each chapter and the completed activities to your clinician. - It should take you a minimum of 6 weeks to complete MOPED.

Eating disorders and their symptoms

-1-

Activity 0

Before reading MOPED you need to ask yourself whether you have a problem with eating. Take a piece of paper and make a list of the reasons why you think your eating is problematic. If you think you have a problem (or if you are not certain as to whether your eating is a problem or not) continue reading…

1.1. What do we mean by eating disorders?

Before you can begin to challenge your problems with eating it's important to understand what the problem is and how it has developed. Eating disorders come with a range of symptoms and a spectrum of severity from mild disordered eating to severe eating disorders. Let's take a look at the different symptoms and features.

Types of eating disorders

Eating disorders fall into two main broad groups: those relating to restriction (people who do not feed themselves sufficiently) and those relating to binges (people who overeat in an uncontrolled way and may purge afterwards, although not everyone purges). There is a third group which is a "mixed bag" of eating disorders which do not fall into the two main groups and many people fall into this category. Such people may worry excessively about their weight and become very inflexible and anxious about eating even if they remain a normal weight. Some people might use unhealthy ways to control their weight, such as vomiting after meals or compulsively exercising, but do not binge.

Let's look at what is generally meant by an eating disorder and the common features which they share.

The main features of an eating disorder

Some of the difficulties that people with eating disorders present with are:

- Extreme concerns about controlling shape, weight and eating.
- Control of weight and eating strongly related to a sense of self-worth.
- An exaggerated fear of weight gain.
- Driven behaviour designed to compensate for over-eating or used as a method of weight control:
    - Extreme dieting or extreme food restriction / fasting
    - Self-induced vomiting
    - Misuse of laxatives, diuretics and other tablets aimed at losing weight
    - Compulsive exercise
- Episodes of bingeing or losing control of their eating.
- Eating / restricting / purging (self-induced vomiting or laxative use) to manage emotional states / traumatic memories.

You may have some of the above problems and there may also be difficulties, which you recognise as related to your eating disorder, which are not listed here. Because all people with eating disorders share some similarities, which are key to their difficulty, it is helpful to take an approach which deals with the whole spectrum of eating disorders. For example, we know that 80% of people who are low weight and restrict their eating will at some time lose control of their eating and binge. At the same time, people who binge maintain their tendency to binge by frequently trying to limit or restrict their eating and by using compensatory behaviours, such as vomiting or using laxatives.

How many of the symptoms present in people with eating disorders are under their control?

Many features of eating disorders are biologically driven, caused by the effects of trying to restrict food intake. These effects were illustrated in the "Minnesota Study" which highlighted the psychological changes that take place during starvation.

The Minnesota Study

A group of conscientious objectors in World War 2 took part in a research trial to see the effects of starvation. These previously healthy men were put on a very low energy diet for many weeks and their physical and psychological health was monitored. The men were noted to become increasingly preoccupied with food, often discussing food, looking at recipes and seeking out magazine articles related to food. Initially they became agitated and found it difficult to rest, though as their weight dropped they became tired, distressed and lacking in motivation. They reported feeling low in mood and irritable. They withdrew from social situations. They became very focussed on their bodies and some became worried about weight gain. Many of them experienced what we now call binges - when they had the opportunity to eat, they lost control and could not stop eating (Keys, 1950). (YouTube link about study www.youtube.com/watch?v=AbnbzsWY2Jc)

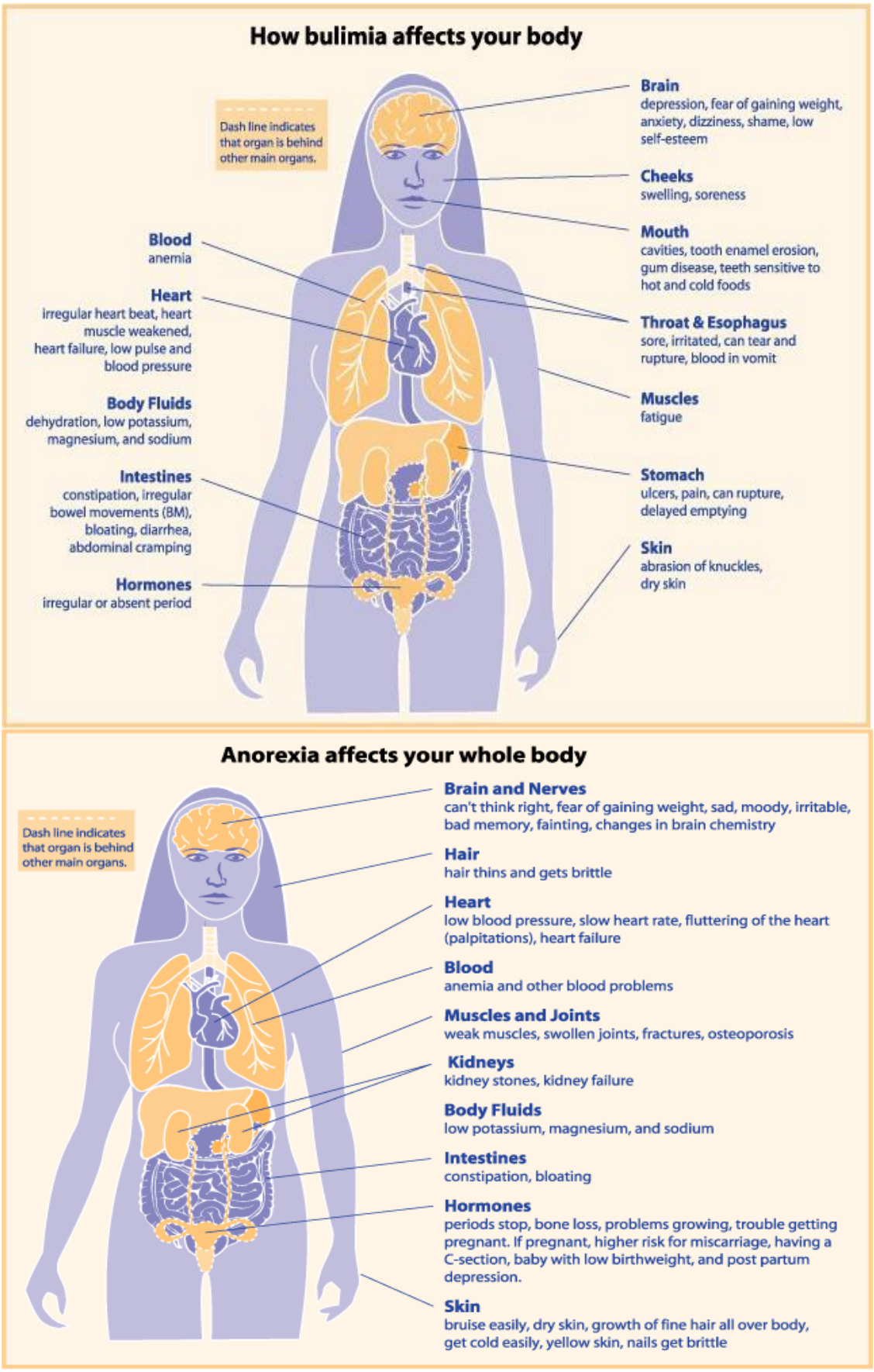
Many of the behaviours that individuals in this study developed are those recognised among people with eating disorders. This suggests that many features of eating disorders are directly related to the physiological or biological effects of starvation and hunger. For this reason, it is worth learning about the physical and psychological effects of food deprivation in order to understand which aspects of your eating may be directly due to food starvation.

Please note that even if you are not underweight the effects of food deprivation are relevant as you may have periods of time when you deprive yourself of certain types of food and the consequences of this can be a major factor in maintaining your eating disorder.

Symptoms of starvation or food deprivation	
Physical	**Psychological**
• Food remaining for longer in your stomach after eating which produces bloating and constipation • Feeling full easily • Tiredness / loss of energy • Sleeping problems • Feeling cold • Feeling dizzy / faint • Irregular periods or no periods • Hair loss and skin problems, e.g., dryness • Headaches and other aches and pains • Swelling of feet, hands or face	• Thinking about food all the time (pre-occupation may include enjoying cooking for others / hoarding food) • Overeating at times / loss of control with eating • Eating slowly / unusual ways of eating • Mood changes: depressed mood, anxiety and irritability • Poor concentration • Restlessness / inability to sit and do nothing • Social withdrawal • Apathy / hard to feel bothered • Loss of humour • Loss in previous interests, including sex

The following two pictures show how restricting food (anorexia-like behaviour) or binging (bulimia-like behaviour) can affect your body:

Figure 1



Source: www.womenshealth.gov

Activity 1

It may be helpful to take a moment and highlight, by ticking, which of the symptoms you currently have or have had in the past and to write down any others that you think are relevant that are not on the list.

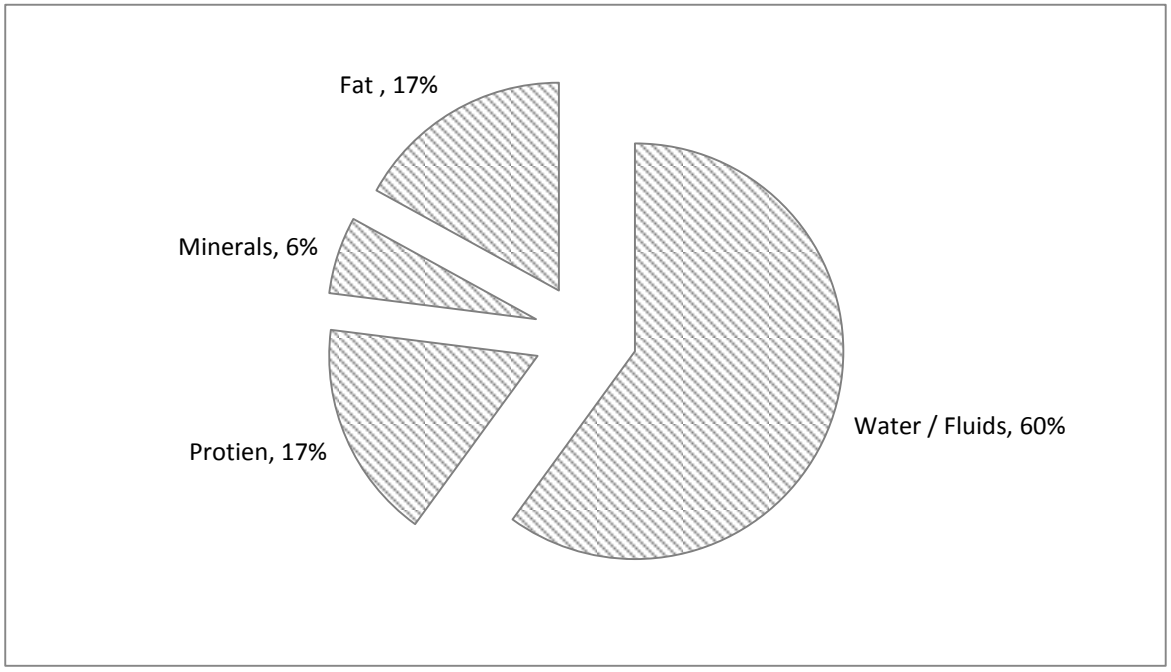
Symptoms of starvation or food deprivation	
Physical	**Psychological**
( ) Food remaining for longer in your stomach after eating which produces bloating and constipation ( ) Feeling full easily ( ) Tiredness / loss of energy ( ) Sleeping problems ( ) Feeling cold ( ) Feeling dizzy / faint ( ) Irregular periods or no periods ( ) Hair loss and skin problems, e.g., dryness ( ) Headaches and other aches and pains ( ) Swelling of feet, hands or face ( ) OTHER: …… …… ……	( ) Thinking about food all the time (pre-occupation may include enjoying cooking for others / hoarding food) ( ) Overeating at times / loss of control with eating ( ) Eating slowly / unusual ways of eating ( ) Mood changes: depressed mood, anxiety and irritability ( ) Poor concentration ( ) Restlessness / inability to sit and do nothing ( ) Social withdrawal ( ) Apathy / hard to feel bothered ( ) Loss of humour ( ) Loss in previous interests, including sex ( ) OTHER: …… ……

1.2. Weight and weight regulation

Weight

Many people have a distorted view about what weight actually means. For some people weight equals fat. For example, an increase in the number shown on the weighing scales is usually interpreted as an increase in fat. However, weight is not just fat. It is made up mostly of protein, minerals, fluid/ glycogen / water, and fat.

Body composition of an average person



The total amount of water contained in an average adult (man or woman) is between 60 and 70 percent. Water content differs throughout the body. Blood is made up of 83 percent water, bones are 22 percent water, and muscle is 75 percent water.

Many factors can affect exactly how much water your body is holding – how full your bladder or bowels are, the time of day, the humidity, the outside temperature, if you have been exercising, where you are in your menstrual cycle, etc, etc.

It is thought that the water content of your body is changing as often as your pulse rate is – but we are less likely to notice it. Sometimes there are clues about changes in water composition, such as shoes or rings feeling tight, clothes feeling a bit tight, etc.

The energy we use

Everybody gets their energy from food. The energy that can be developed from food is measured in calories. If a person eats the amount of food that they need, they are in 'energy balance'. If they distribute their energy intake over the course of their waking hours, by eating regular meals and snacks, they are more likely to maintain stable blood sugar levels and facilitate optimum physical and psychological health.

The energy we use each day is broken down into 3 parts:

I. Energy needed to keep our body ticking over (Resting Metabolic Rate – RMR; usually 1500 calories).
II. Energy we use in activity (variable according to activity levels).
III. Energy we use in digesting our food (usually 100-200 calories).

Usually the Resting Metabolic Rate (RMR) represents the largest proportion of daily energy expenditure (60-75%), unless you are an athlete. As a rule of thumb, most adults need about 1500 calories per day just to 'tick over'. To identify our total need for energy or calories we have to add the calories we require for RMR to the amount of calories used due to physical activity.

Total amount of energy we need = RMR(1500) + Energy for food digestion (100-200) + Activity energy

For most people, daily energy needs are between 1,800 – 2,500 calories per day. Athletes or people who exercise have greater energy / calorie requirements. This extra calorie requirement depends on the intensity of exercise. So, basically, the greater our activity levels, the greater our energy intake requirements. If a person falls short of their energy intake too often, the chances of losing control of eating or starting to binge-eat increases.

Monitoring of weight

Because of constant fluctuating water levels in our bodies, weight can fluctuate markedly over the course of the day so it is important not to rely on single readings. If you have lost weight and need to keep track of your progress in gaining some weight then weighing yourself weekly is sufficient. If you are trying to have a less chaotic eating style, or you want to give up binges or yo–yo dieting, then you might choose to weigh yourself less frequently (such as every two to three weeks).

If you tend to excessively weigh yourself, having scales at home can be problematic so consider getting rid of them and weigh yourself in a shop, fitness centre, or at a friend's house instead. Keep track of your weight and look for trends rather than focussing on specific readings. If you are trying to restore some weight in order to move yourself towards the healthy range, you would hope to see a gradual upward trend (aim towards increasing your weight by 500 grams a week). For those who do not require weight restoration, over time the trend would be at plateauing or stabilising their weight.

Normalising weight towards a healthy weight

If you decide to recover from your eating disorder, you need to normalise your eating. If your weight is *below* the healthy weight range then recovery from your eating disorder will require you to restore your weight to the healthy range, this is because:

- Trying to keep your weight below this range will keep your eating disorder active and it won't be possible to recover from it whilst you are trying to keep your weight below what is healthy.
- Keeping your weight below this range puts you at risk of some long-term health issues.

Remember that the weight at which your body stabilises may not be what you consider your "ideal" or desired weight. Your healthy weight is usually in the range of 18.5-25 BMI.

BMI

Body Mass Index (BMI) is defined as the individual's weight (in kilos) divided by the square of his or her height (in meters). BMI does not actually measure the percentage of body fat. The World Health Organisation (WHO) classifies a person below a BMI of 18.5 as underweight and a person above a BMI of 25 as overweight. BMI is particularly inaccurate for people who are fit or athletic as the higher muscle mass tends to put them in the overweight category by BMI. It is also not accurate for very tall or small people and it should not be used for children.

For women it is easy to know what their healthy body weight is as it is linked to their periods. In women, periods stop if their weight goes below a healthy weight as the body is trying to say that this is not a safe weight to have children. For men and women, a healthy body weight is the body weight that is most likely to give them long-term good psychological and physical health. In short, it is the body weight that nature intended for them.

Body weight regulation and the set-point theory

Our bodies have evolved to maintain a stable weight, determined by factors such as genetics and the level of nutrition received in the womb or as a young child, etc. The set-point theory states that our bodies have an internal thermostat that controls how much fat we keep on our bodies. Some people have higher settings than others. This

internal thermostat likes to keep us where we should ideally be in terms of weight. So if we eat a bit too much or too little, it will adjust so that we stay where we are - around our set-point.

For most people, most of the time, there is a surprising stability in body weight over weeks, months and even years. When an attempt is made to change weight significantly (either by losing or gaining weight) the system will resist any change away from its set-point. This resistance takes the form of biological mechanisms (increases or decreases in appetite, changes in body metabolism) and cognitive (thought) mechanisms (preoccupation with food and eating), which aim to help the body to restore the weight to the set-point.

The '**set-point**' of animals and young children is relatively easily maintained by the hunger and satiety (feeling full) system. However, as we grow up, our relationship with food can become far more complex and we can chose to ignore when we feel hungry and when we feel full. If these signals are ignored regularly, they become "dysregulated" and our bodies can do odd things like forget to tell us we are hungry, tell us we are hungry when we have just eaten, and not tell us when we have eaten enough. There is not one single set-point through our life - as we age our set-point resets itself.

There is also evidence to suggest that large changes in weight can reset our bodies, for example:

- When people are overweight for a sustained period of time their body resets to a higher level. When overweight people try to lose weight their bodies become more efficient in an attempt to try and protect their higher weight - they become "hypometabolic". This means that they need less calories to maintain their weight. People who lose large amounts of weight and maintain a new lower weight may notice they need less calories to stay at a stable weight than someone who has always been at a normal, healthy weight.
- Likewise when people who have been underweight for a significant period of time try to restore their weight, they can become "hypermetabolic" (they need more

calories than expected to restore and maintain a normal weight) as their body tries to protect their lower weight. This may explain why it is surprisingly difficult for underweight individuals to restore their weight.

This set-point system is able to cope with day-to-day fluctuations in our energy intake (e.g., over-eating at Christmas, significant increases in physical activity) and will normally restore our body weight by short-term changes in our appetite and metabolic rate. However, our body is not designed to cope with prolonged periods of starvation, over-eating, or irregular eating patterns.

Most people who have an eating disorder will have attempted to defy this built in set-point mechanism at some stage by either accidentally or deliberately changing the amount they eat or increasing their exercise or both of these things.

Activity 2

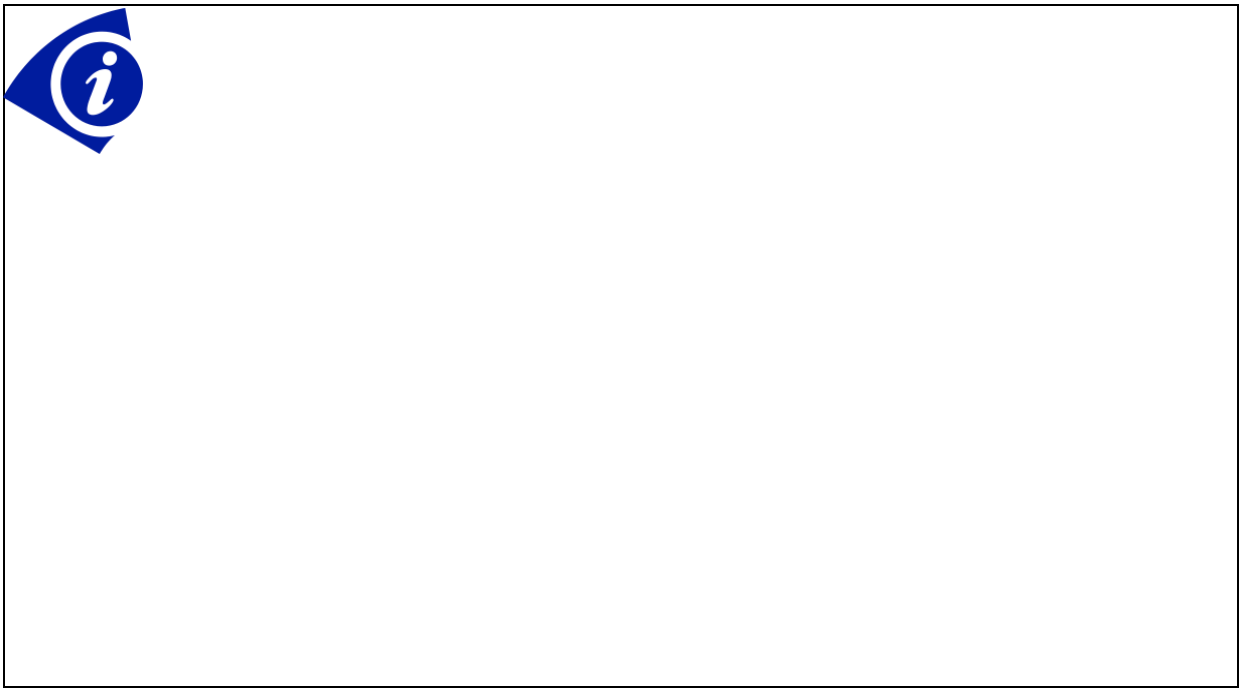
Examples of behaviours which may have interfered with your set-point.

Do you recognise any? (tick)

- Extreme diets (periods of very low calorie diets).
- Taking dietary stimulants (natural or artificial e.g. amphetamine based).
- Taking steroids to bulk up muscle.
- Excessive exercise.
- Comfort eating (regularly over-eating in response to stress or sadness).
- Binge eating (losing control of food and eating large amounts quickly).
- Yo-Yo dieting.
- Chronic / long term under-eating (maybe due to physical illness, anxiety or depression).
- .....

Summary Chapter 1

Now summarise this chapter. Ask yourself: what have I learned?



Do you think you have a problem with your eating?

Discuss your answers with your therapist/clinician.

The development of eating disorders

-2-

Read the summary you wrote from Chapter 1 first and then continue reading.

2.1. How do problems with eating develop?

You might already have some ideas or you might be curious as to why your problems with eating started. Although there are many theories and ideas regarding the development of eating disorders what is clear is that there is no one set route. Everyone who has an eating disorder is likely to give a different answer to the question: "How did the problems with my eating develop?"

For some people, there may be many reasons why, for others just a few, and some people may be genuinely unclear as to why they developed a problem with their eating.

The best way to try to understand why a person has developed an eating disorder is to divide the risk factors into three categories. Firstly, factors that make the person more vulnerable to develop an eating disorder; secondly, factors that trigger the development of an eating disorder; and finally, factors that maintain the problem. Sometimes the maintaining factors are the most important ones, as these are the ones that you can change and that you need to tackle if you want to get rid of the problem.

You can compare this to shooting a gun: the vulnerable factors load the gun and the trigger factors pull the trigger of the gun. But only if someone is shooting back will you continue to shoot the gun.

I - Vulnerability factors

The **risk factors** which make people more vulnerable to developing an eating disorder can be combined into two groups; individual factors (unique to the individual) and environmental factors.

i) Individual factors

Genetics: We know that people from families in which there is someone else with an eating disorder (or with depression) are more at risk of developing an eating disorder themselves. This is not because eating disorders are genetically inherited but because some of the personality risk factors (obessionality, perfectionism) can be passed from parents to children. Genetics also influence our physical height, frame and build which may affect our self-image and concerns about weight and shape and make us more susceptible to eating disorders.

Personality: Our temperament and "thinking styles" affect how we cope with stress. Whether a person is a perfectionist, pessimistic and self-blaming rather than laid back, optimistic and positive, may influence how likely they are to become unwell. Unfortunately, weight loss and starvation alters thinking styles and underweight people become more obsessional and rigid in their thinking. People can find themselves trapped within increasingly strict regimes about food and exercise which worsen their situation.

ii) Environmental factors

General socio-cultural factors: These factors may span across our close social circle (e.g., family and friends) to the wider socio-cultural attitudes and influences within our society (e.g., media, literature). The media perpetuates the idea that to be slim equals being successful and that our body shape and size is *completely* within our control.

Family factors: Our attitudes to food, dieting and weight are also influenced by parental attitudes and family "culture". Families may also promote unduly high expectations or competitiveness, leaving people at risk of feeling "failures".

Individual environmental factors: The environment where we spend most of our time could also be a risk factor for the development of eating disorders. For example we know that athletes and dancers (male and female) have a higher chance of developing an eating disorder than non-athletes and non-dancers. People who have careers that place an emphasis on appearance (e.g., modelling or the media) may also be more at risk. This does not mean that certain careers cause eating disorders but that those people attracted to certain professions or sports can have the personality factors described above which can put them at greater risk. For these people, spending most of their time in an environment where weight and body shape are important can maintain the relationship between self-worth and body image.

II - Trigger factors

Psychological stressors: In most people's lives, relationships are both a source of comfort and of stress. For example, when students move to a new place, they need to develop new relationships. This can be exciting but also stressful. On top of this, academic pressure can act as trigger factor to develop any mental health problem (including anxiety, depression, and eating disorders). It is not unusual to see young people developing eating disorders around exam times. For those students who participate in sport or exercise, there may be added pressures from performance around the time of selection or competition. All of the above factors (and more that may not be listed here) can act as psychological triggers to developing eating disorders.

Specific events: Any event that can cause a sense of loss of control, or negatively affect the mood, can trigger the development of an eating disorder. For example, if

parents suddenly get divorced, a best friend moves away, a relationship breaks up, someone moves to a university and doesn't know anyone, or someone is bullied, etc.

III - Maintaining factors

Effects of starvation and dieting: The Minnesota study (described in Chapter 1) highlights how restricting food can cause some of the symptoms that people with eating disorders have. Even less severe diets can increase risk, and for many of those who do develop a severe eating disorder, their problem began by dieting. Controlling eating can give a person a false sense of being in control. We say "false" as we don't believe that anyone would chose to have an eating disorder and the associated impact that it has on their life. This shows that the eating disorder is really in control of the person's life.

The leptin effect: Being underweight can also result in increased activity through the impact of a hormone called "leptin". Leptin has an important role in modulating weight by its impact on our hunger and activity levels. In starvation, this system falters. As people lose weight they report feeling increasingly restless and feel the urge to be more active. The resulting exercise further promotes more weight loss. In rat experiments, starved rats with low leptin levels continue to run even though they are dangerously thin and continue to exercise until death!

Compulsive exercise: Exercise can be a highly effective stress buster but it can also become a problem in itself, or an exacerbating factor, in someone with disordered eating. For people who have enjoyed high levels of exercise before the development of their eating disorder, or for those whose exercise has developed because of their eating disorder, it is important to disentangle exercise from disordered eating so that they can return to a healthy relationship with exercise. MOPED is not anti-exercise. In fact exercise can be really beneficial, so long as the person is in control of it.

Mood problems: It is not unusual for people with eating disorders to also present with low mood. Sometimes this has developed because of the lack of nutrients provided to the brain. At other times the low mood was there before and people use food or exercise to regulate their low mood. For example, they might think "If I think about food all the time, I don't have to think about more painful emotions…".

Now let's think about your story…

<u>The development of your eating disorder</u>

The person who knows most about how your eating disorder developed is you!

To increase your understanding of the development of your eating disorder, it might be helpful to look at the historical origins of your difficulties. Although sometimes it can be difficult, completing a **timeline** of relevant events, relationships and experiences is a useful way of doing this.

Activity 3 (a)

As a practice, read through Emma's story below and think about what might have made her vulnerable to her eating disorder, the triggers and what factors have kept it going. Then look at the timeline. The vulnerability, triggering and maintaining factors have been put in as an example.

Case example: Emma, aged 21, student

Emma's mum was quite plump and enjoyed cooking. She was always on a diet and called herself fat. Emma tended to compare herself with her older brother who was

very academic. Emma was bright but she was always quite shy and lacking in confidence. She was bullied at school for being quiet and a bit geeky.

At 15 years old Emma started to miss school meals to avoid sitting on her own at lunchtime. Instead she would go and sit in the library or go for a walk until the next lesson. Emma started going running after school, which she enjoyed and it helped her to feel better about herself. She started to lose weight which she liked as it gave her a sense of achievement. She got compliments from people. She continued to reduce her eating further and increase her running further. Her mum was initially pleased but then became worried and started nagging Emma to eat more and go running less. Emma stuck to her guns and the weight loss continued.

When Emma went to University at age 19 she joined a running club. She went out drinking a few times, but she had problems making friends. She continued to restrict her eating to make herself feel in control. This usually ended up with her binge-eating. Emma would increase her running whenever she felt her weight had gone up or to make herself feel better. Over time it became difficult not to go running. She would run even when she did not feel well, the weather was bad, and she would miss social stuff because she couldn't miss a run.

As she had cut down her food, she often felt tired and she started to binge-eat more often. Usually the amounts she ate were not very large, but it was still frightening for her to lose control so she stopped buying any food apart from Weight Watchers meals, low calorie foods, and fruit. She still binge-ate frequently, stealing other students' food as they tended to have the foods she deprived herself of. If she binged on chocolate or biscuits she felt she had to vomit. Eventually, Emma realised that she was really struggling to keep up with her course and she was getting more and more lonely and depressed. She dropped out at the beginning of the second year and went back home to Mum.

Timeline: Historical review of the development of Emma's eating disorder

AGE	EVENT/RELATIONSHIP/EXPERIENCE
Early school years Later school years /starting University.	**Vulnerability factors** • Mum was plump and overly concerned by weight and dieting, she was critical of her own size and regularly dieted. • Emma felt inferior compared to her brother. • Shy by nature and lacking in confidence. • Bullied at school. **Trigger** • Started missing meals. • Started university. • Lack of friends. **Maintaining factors** • Positive comments from Mum. • Restriction leads to preoccupation with food and feeling at risk of losing control. • Restriction and hunger lead to binges. • Vomiting exacerbates binge-eating and restriction. • Feeling low: running to feel better. • Lack of socialising.

Activity 3 (b)

Try and develop a timeline for yourself. It may be helpful to write a short case history about yourself and then think about what might have made you vulnerable to your eating disorder, your triggers and the maintaining factors which have kept it going. Take this exercise to your therapist / clinician.

Age	Event/Relationship/Experience

Summary Chapter 2

Write down the main points that you have learned from this chapter that have helped you to understand your eating disorder.

Patterns of eating

-3-

Read the summary you wrote for Chapter 2 (what I have learned) before reading this chapter.

3.1. Understanding your current style of eating

Eating patterns

There are three major eating patterns associated with people with eating disorders:

i. The starvation-eat cycle.
ii. The restrict-binge-purge cycle.
iii. Chaotic eating patterns.

The starvation-eat cycle

Most people who present with an eating disorder will at some time have deliberately attempted to lose weight. Dieting (i.e., restrictive eating and/or excessive exercise) can trigger a 'starvation' response. This is thought to be based on evolutionary development and is designed to help people survive (conserve energy whilst finding food) in periods of famine. During these periods, people will initially become energised to look for food and become preoccupied with thoughts of food and eating.

They can:

- Become more sensitised to food smells or tastes.
- Have more problems with sleep (as we can become more alert to find food).

Their bodies attempt to preserve energy by:

- Reducing blood to fingers and toes to save heat loss.

- Slowing down the rate at which the stomach is emptied (increasing the sense of fullness, developing constipation and bloating).
- Slowing down the overall system, lowering blood pressure, slowing the pulse, slowing the heart, etc.

This will also affect the amount of blood and nutrients that go into the brain.

Because of this they experience:

- Mood swings
- Feeling low
- Obsessional thoughts about food or not eating it
- Detachment from everyday living
- Isolation from others

Once food is available again, they usually eat more and faster than they would normally eat. Their weight will also increase slightly above their pre-starvation weight so that they have extra energy stored in case famine returns. If the food supply continues to be adequate and their activity levels don't exceed their need for food, their eating and weight will gradually return to normal.

The restrict-binge-purge cycle

When people go without food for more than 4 or 5 hours it becomes increasingly difficult to ignore the body's drive to find and eat food in order to survive. As already noted, if people go without eating for a significant period of time, food begins to taste and smell better, they become more preoccupied about food and eating, and their sleep can be disturbed.

If we were in a genuine famine, our body's drive to find food means that when we come across food, we would eat as much as possible in order to replenish our energy supplies (and because of uncertainties about when we may next be able to eat).

In our society, however, food is readily available – but those on rigid diets are choosing not to eat (or restrain) the available food. When the drive for food becomes too difficult to ignore, control over our food intake weakens considerably, resulting in an intake of food that is larger and less controlled than it would have been if the body had not been starved.

Physiologically and psychologically their bodies are pushing them back to a healthy weight and an adequate intake of food. They tend to experience fear of weight gain, loss of control, feelings of guilt, shame, and panic about wanting/needing to eat. These feelings can then lead them to the 'purge' stage in order to get rid of the food they have eaten.

Purging includes any method of getting rid of food (vomiting, laxatives etc). As well as having dangerous physiological effects for the body, these behaviours also make the body feel starved and so help set-up the next binge. It may also lead to increased attempts to restrict eating (re-start the diet).

This pattern can then become a vicious circle of restricting-bingeing-purging, which is emotionally very difficult to manage and can have extremely serious health consequences.

Chaotic eating

Many people do not fall neatly into either of the above cycles. Some may fluctuate between the two during the course of their lives.

Some people find that even thinking about starting a diet can trigger an eating response. This may be particularly true for 'serial dieters'.

The important thing for people who regularly attempt to diet is that their body tends to be on higher alert for signs of famine and is likely to trigger the hunger response

more readily. Also, as we have seen, the body can respond to a person's need to eat even if they try to stop eating.

Some people may binge-eat but cannot, or do not, attempt to compensate for their binges by purging or restricting their food intake. This increased calorific intake may lead to weight gain, which can lead to an increase in their Resting Metabolic Rate. This may lead to an initial increase in feelings of hunger. If this hunger is responded to by a prolonged and consistent increase in energy intake, any excess energy consumed will be stored as fat to be used at a later date.

The only way to bring this chaotic eating back to normal is by regular eating. There is not another way around it. The choice you have is:

1. **Regular eating.**
2. **Eating chaotically or having a vicious cycle of restrict-binge for life.**

Activity 4
Which style of eating do you recognise?

Style of eating	What is the worst part of this style of eating?

Summary Chapter 3

What have you learned in this chapter?

To change or not to change

-4-

Read your summary of Chapter 3 before reading this chapter.

4.1. The vicious cycle of eating

The timeline you have developed will have helped you see how events and experiences in your life may have been the backdrop and triggers to you developing your eating disorder. Now that you understand why your eating disorder may have developed, shouldn't it be easy to change? Unfortunately, eating disorders usually develop a life and momentum of their own so even when we understand them it can still be difficult to break free from them.

What traps a person in their eating disorder?

If you look at your timeline you may begin to see the context and triggers for your eating disorder but have you considered what is keeping you stuck with it? What is the purpose or the function of the eating disorder in your life?

This may sound strange, but for many people eating disorders are useful in some way. They may help them to cope with difficult situations, but as time goes on the problems with their eating create more problems than they solve. Indeed, what started out as a solution to a problem might actually maintain it and even create a more serious one.

Activity 5
Recognising your traps

Read and respond to the questions below to recognise what might trap you in your eating disorder. Discuss it with your therapist / clinician.

What would you miss if you gave up your eating disorder? E.g., episodes of overeating / comfort eating, feeling empty, feeling the light-headedness of hunger.

What type of feelings would you need to face if your eating normalised and you no longer used food to help? Perhaps your eating disorder would not be there to help you to manage difficult feelings, such as loneliness, upset, or anger?

How would others treat you if you gave up your eating disorder? Perhaps your eating disorder would be angry that it would not be treated as "special", would others demand or expect more from you?

How would you feel about yourself if you started eating normally? Perhaps your eating disorder would make you feel like a failure if you gave up strict dieting or didn't stick to your exercise regime.

4.2. How eating disorders capture us

The diagram below (figure 2) begins to explore how sometimes the way a person feels about themselves starts to be managed unhelpfully by the control of their weight. A person's relationship with food, their control of eating, their size, and exercise becomes their main focus to bolster their self-esteem.

Although this seems helpful to begin with (most people will initially say they feel better and more in control when they are controlling their food and weight tightly), before long the over-concern about food and weight causes more problems and can make matters worse.

Some of the eating-related behaviours make it difficult to break out of the cycle and some create direct physical or psychological problems which are unpleasant, e.g., dental erosion, hair loss, infertility, osteoporosis, injuries, mood swings, depression, insomnia etc.

Work with your therapist/clinician on the next diagram (Figure 2) describing the maintaining cycle and find out if this makes sense to you.

The maintaining cycle

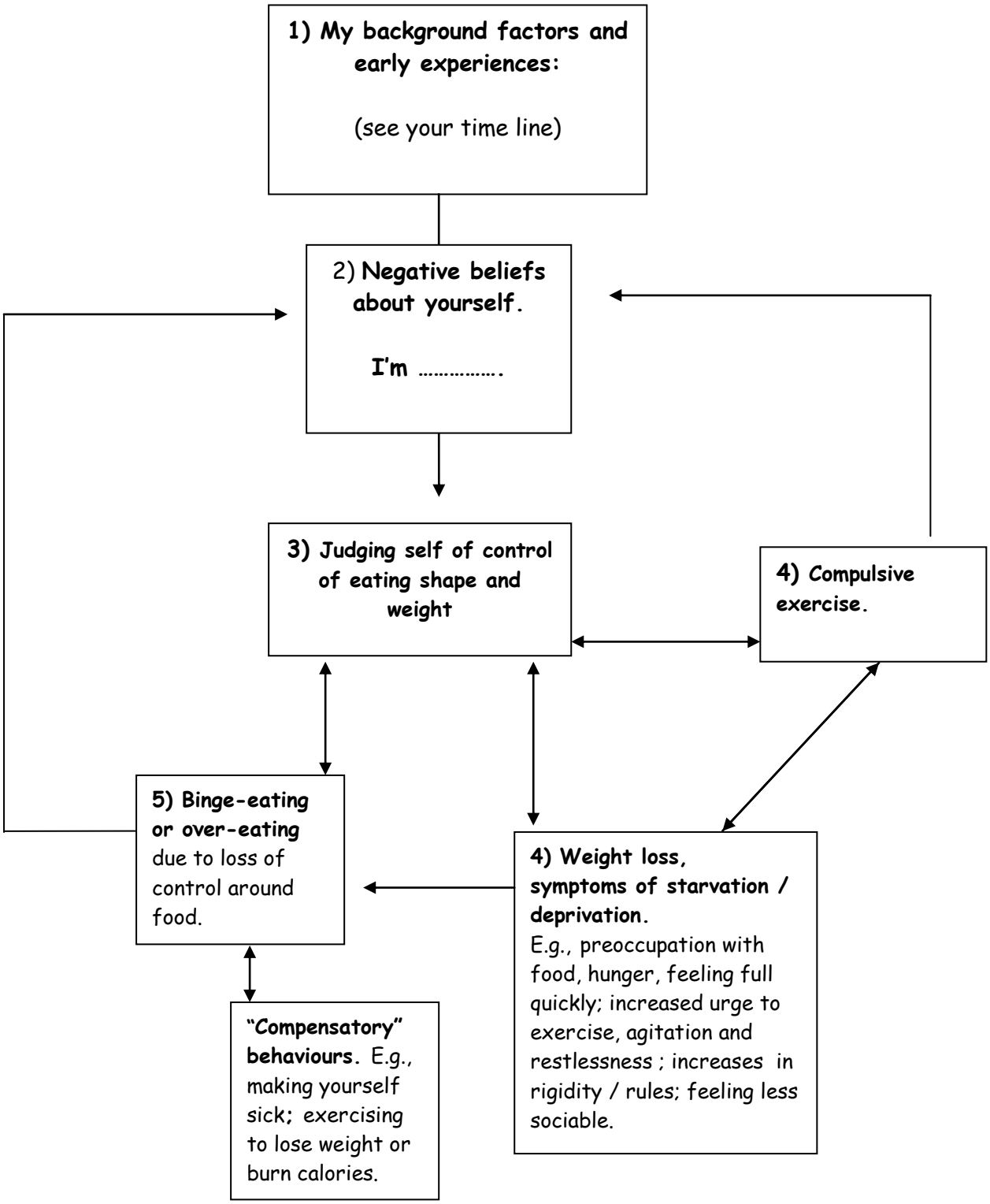


Figure 2 The Maintaining Cycle. Adapted from Fairburn (2008)

Sometimes when life is very difficult and everything seems to be out of our control it can be comforting to have one area of life which you feel in total and sole control. Manipulating our food and weight can be a way of communicating to others what may be too difficult to say in words. Being "ill" through not eating and losing weight can be a way of avoiding conflict (e.g., with family members or at university). For others, eating and food can be ways of regulating difficult feelings, such as eating more when we are angry or sad or binge-eating as a way of feeling better, in the short term at least. Maybe as you read this, bells are starting to ring? It can be unsettling to think how our eating disorder can be of use to us. However uncomfortable this may make a person feel by recognising it they can explore other ways of dealing with things and allow their eating to return to normal.

In the next chapter you will be thinking about how you use food to manage problems. To give up a behaviour you need to understand how it works for you and then you can begin to decide whether you want to continue to use food or weight control or try another way. The decision is in your hands.

Activity 6

Before moving on to the next chapter, spend time completing the questions below on the advantages of change.

Overcoming an eating disorder takes commitment and effort and this can be helped by being as clear as you can be about why you are doing it.

Write down the reasons to change that are really important to you in your life right now and keep this handy so that you can look at it at times when tackling your eating disorder seem particularly difficult.

My reasons to give up the eating disorder -
What I may gain from giving up the eating disorder -
What has the eating disorder has given me, that I need to find other ways to achieve -
What other ways are there to have what the eating disorder gives me -

Try to really think about what you would like your life to look like, in terms of social life, activities, occupation, family relationships, etc.

Are these things really going to be possible for you to achieve with your eating disorder?

If your answer is no, then it is important to start making positive changes so that your eating disorder does not continue to take away opportunities and choices.

Before you get started on making positive steps to overcome your eating disorder there are a few things that can help you to set the scene. You need to start prioritising yourself and your recovery. It will take time and energy, and putting other's needs and their expectations of you first can really hamper your efforts. You will also need to start monitoring your dietary intake (see Activity 7).

Prioritise your health. Your eating disorder may be putting your physical health at risk, particularly if you are underweight and / or making yourself vomit (see Chapter 1). Talk to your therapist/clinician so that your physical health can be assessed and monitored.

Access support. You may have become more socially withdrawn as your eating disorder has worsened. However, it is important that you have as much support as possible. Discuss with close family and friends as much as you can what you are going through and what you attempting to do. If there aren't people who can support you close by, consider accessing support from national and local organisations such as -

BEAT http://www.beateatingdisorders.org.uk

First Steps http://firststepsderbyshire.co.uk/

Student Minds http://www.studentminds.org.uk/

Activity 7
Starting to monitor

If you now feel ready to start making changes the first step is to practice monitoring your dietary intake. You can use the template food diary provided in appendix 1 (at the back of this pack), print off copies of the template from the resources on our website (www.leicestereatingdisorders.co.uk/about-us/resources in the MOPED section) or make your own monitoring sheets which need to capture where, when, and what you eat and drink and the thoughts you have about this. You do not need to make changes to your eating, simply practice writing it all down for the next three days and then review before you start the next chapter on regular eating. Work with your therapist/clinician to try to understand what triggers you to restrict, binge, or purge.

Monitoring is a vital tool in getting better. Monitoring your food intake is not a stage which can be skipped so it is important to practice and get this right. Do not write what you have eaten at the end of the day, but as soon as you have eaten it. This is called monitoring in "real time" which is much more effective and will help you keep to regular, planned, and controlled eating as discussed in the next chapter.

Some people find it easier to take a piece of paper (in their pocket) with them so they can write down as soon as they eat something, or they record it in the notes sections of their smartphone. There are even free to download apps that can help you to do this, such as Recovery Record (do not use Apps targeted at weight loss or calorie counting such as MyFitnessPal as these will exacerbate problems).

Warning! Monitoring in real time is not easy, feels annoying and is often intrusive, so if this is how it feels congratulate yourself on doing it well!

Summary Chapter 4

Now summarise this chapter. Ask yourself: what have I learned?

Making changes

-5-

This is the time when you read all the summaries you made from Chapters 1 to 4 before moving on. Then you need to look at your food diary before continuing.

5.1. Regulating your eating

We have explored the issues of weight and the ways in which your eating patterns may be an attempt to override your set-point system. It is often a painful realisation that our bodies may have a set-point which is different from our dream weight and it is fighting our attempts to change it! Hopefully you will have also thought how your current eating difficulties are creating problems and trapping you within your eating disorder.

Regular eating is the most powerful tool you can develop to reduce your disordered eating and regain control of your eating and your weight.

5.2. The fear of gaining weight

A common fear is that once you start to normalise your eating pattern by eating regularly throughout the day your overall intake will be increased and you will gain weight. In practice this does not happen.

<u>You are at a greater risk of losing control and binge-eating (and gaining weight) when eating a highly restricted diet (because of physiological pressures).</u>

Often hunger triggers binges and the food eaten in binges is typically the high energy foods forbidden at other times. By ensuring you are never over-hungry, you are reducing the physiological pressure to binge. By allowing yourself to eat your higher energy forbidden foods in a controlled manner, you reduce the psychological pressure to binge on these foods.

5.3. Eating mechanically

Mechanical eating means developing a regular eating pattern that will not leave you physiologically hungry. Distributing energy intake over the course of the day is the healthiest way to eat for all human beings, not just individuals recovering from an eating disorder.

It is essential to learn to "eat mechanically" rather than in response to hunger, as your hunger / fullness system will not start to become reliable and function normally again for several months. Only then is it possible to react to your body's signals about hunger, urges to eat certain foods, and when you feel you have had enough.
You can encourage the return of normal internal / fullness controls by following certain guidelines:

A pattern of regular eating:

- 3 meals and 2-3 snacks spread throughout the day.
- Not going over 4 hours without having something to eat.
- Eating a variety of foods, moving away from strict dietary rules about good and bad foods (see Figure 3).
- Eating enough to maintain a healthy weight or gain weight to achieve a healthy weight. See Chapter 1 for guidelines on calorie amounts.

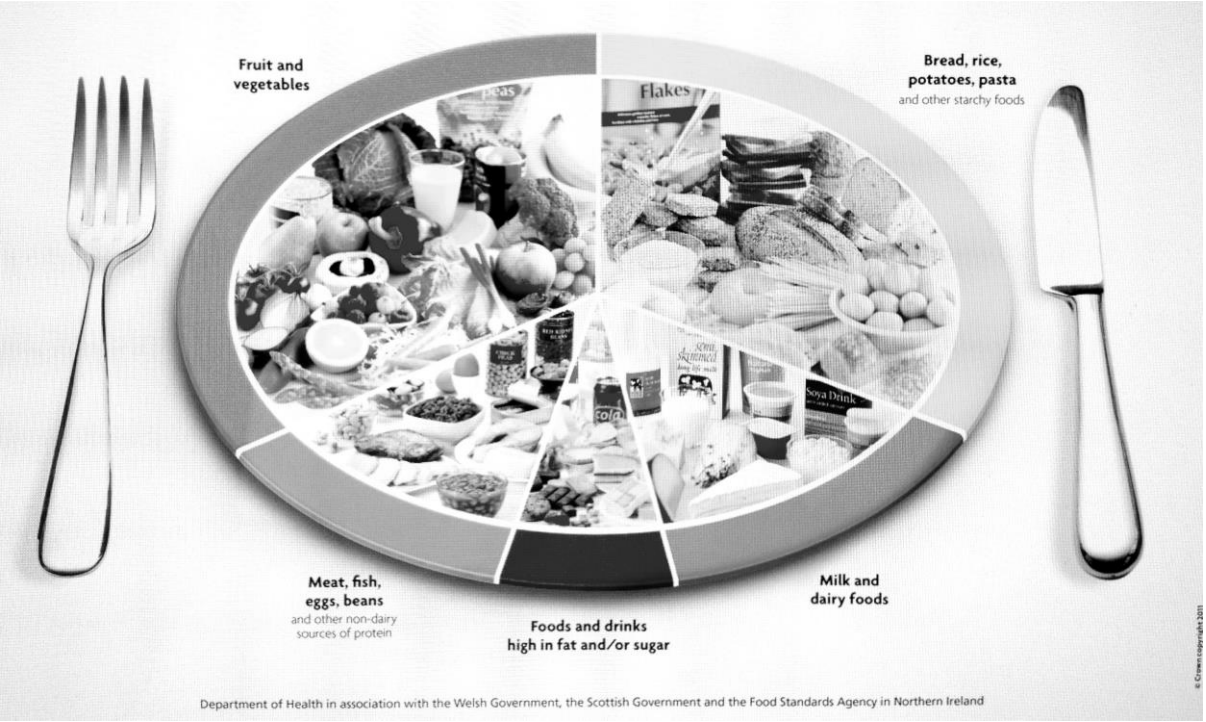


Figure 3. The eatwell plate from NHS Choices. More information can be found at http://www.nhs.uk/Livewell/Goodfood/Pages/eatwell-plate.aspx

Remember

1. Eat regular meals and snacks.
2. Aim for balanced meals and snacks.
3. Aim to follow your eating plan.

Some people are able to make fairly rapid adjustments to improve their eating, whilst others cope better with gradual changes. Remember, it is normal to have ups and downs when making changes (falling back and then starting again). If you keep going, you will get there!

5.4. Common misconceptions which can trip you up

- I could skip breakfast and save calories.
- I don't need to eat during the day.
- I shouldn't eat if I don't feel hungry.
- If I do eat during the day, then it just makes me hungry and I can't stop eating.
- If you eat food later in the day it is more likely to lead to weight gain.
- Carbohydrates make you put on weight (carbohydrates are required for energy, though wholegrain and vegetable-based carbohydrates have less impact on blood sugar so will not result in the highs and lows which are unhelpful).
- Low fat foods are always healthier (these often contain more chemicals, can be just as calorific, and may tempt us to eat more than we would otherwise).

Missing meals and snacks in the day often triggers loss of control of eating in the evenings. After 4 hours, the blood sugars in your body will fall too low and when you start to eat you are far more likely to eat faster, eat more, and possibly even lose control.

Hence restricting eating has a direct link to the risk of binge-eating and for some this can mean uncontrolled weight gain.

Willpower is not elastic. It will eventually snap and this is most likely when people are tired, alone, bored, stressed, or angry. It is thought that 80% of people who are underweight will eventually start binge-eating.

Breaking the cycle of restriction and binge-eating can feel very scary but it is worth it to truly be in control of your eating and your weight. A good-sized breakfast and lunch with snacks in between (if the gaps between these meals are longer than **4 hours**) will reduce the risk of binge-eating later and improve overall metabolic functioning.

There has also been research that shows an afternoon snack to be particularly important in protecting against overeating in evenings.

5.5. Spacing meals and feeling full

You should aim to have:

- **Breakfast** e.g., wholegrain cereal with semi-skimed milk or 2 slices of toast, and a portion of fruit.
- **Snack**
- **Lunch** e.g., sandwich with 2 slices of wholemeal bread, butter or margarine, with ham/cheese or tuna and salad, and a yoghurt, cake or biscuits.
- **Snack**
- **Evening Meal** e.g., portion of fish or meat with pasta/rice or potatoes, with 2 portions of vegetables or salad, and a pudding.
- **Snack**

Snacks may be fresh fruit, dried fruit, nuts, a slice of cake, cereal bar or couple of biscuits, or small (30-40g) bar of chocolate. It is recommended that all children and adults eat a minimum of five portions of fruit and vegetables a day. ***See Appendix 2 at the back of the booklet for more examples.***

Try not to go more than 4 hours without eating something.

You may find that the feeling of fullness / bloatedness is a problem. You are very likely to feel full easily if you are underweight due to delayed gastric (stomach) emptying. Some people find feeling full triggers feeling "fat" as they interpret feeling full as having eaten the wrong thing, or eaten too much.

It is important to remember that feeling full is normal, it is temporary and it is not noticeable to other people. If you focus on it, scrutinise your stomach and generally spend time worrying about it, it is likely to feel worse. If you are able to do activities

that distract you whilst you feel full, it is likely to pass much easier (look at Activity 9 for some ideas or to create your own).

5.6. When not eating enough is an issue

Many people with disordered eating eat too few calories when trying to normalise their eating. This simply perpetuates the eating disorder as the body will see this as starvation and increases the risk of binge-eating.

The combination of regular eating and eating enough is a powerful remover of the risk of binge-eating.

Point to remember:

The initial discomfort and hard work associated with normalising your eating is a small price to pay compared to a lifetime with an eating disorder.

Regular eating guidelines

When you are used to eating in a disordered way, it can be difficult to know what normal eating is, so we have prepared some guidelines for your information.

- **Think about what you eat and how you eat currently** and build from there.

- **Try to make changes in small and manageable steps** but be sure to be on the path to making changes rather than accepting life with an eating disorder.

- **Aim to eat regularly throughout the day**; 3 meals and 2-3 snacks so that you never go more than 4 hours without eating.

- **Know what you are going to eat before you get to a meal** and snack. Planning is good for checking you are eating enough, eating a balanced diet, and protecting you against binge-eating.

- **Aim to include at least small amounts of most foods** that you know you like. Strict rules about good and bad foods will perpetuate an eating disorder and this is not a healthy way to think about eating. E.g., fruit and vegetables are obviously healthy but a diet solely of fruit and vegetables is dangerously lacking in many vital components. Chocolate is not a healthy food to have as a main component, but allowing yourself to have things you enjoy will reduce the chances of being preoccupied with them and the risk of binge-eating on them.

- **Aim to not eat in between meals and snacks (i.e., in the gaps).** It is good to have time when you are not eating in between meals and snacks, keep busy and away from food if you start to struggle with urges to eat in between meals and snacks.

- **Always write down the planned meals and snacks in advance** as not sticking to the planned meals and snacks is risky.

- **Stick to what you have planned whether or not you feel hungry**. It is likely that due to experiencing periods of restriction and / or loss of control of eating, that your physical sensations of hunger are dysregulated and unreliable.

- **Plan safe foods that you are less likely to lose control around.**

- **If the plan has to be changed due to unforeseen circumstances don't panic - rather take time to consider what is available.** Consider what the safest and most appropriate choice is. Then go back and carefully select and eat what you have planned.

- **Buffet meals, barbecues and parties are difficult**. Take time to see what is available, consider carefully what you would feel okay to eat and keep down (not vomit) then plate up only what you have planned to eat. Once you have eaten stay away from the food table and manage any urges to keep eating.

- **Don't eat directly from packets, boxes, tubs** etc. Always use a plate or bowl, even for something like biscuits or crisps. This will assist you in being specific about how much / what size portion is acceptable to you and sticking to that.

- **Focus when you are eating**; don't eat and watch TV at the same time, don't eat and drive, eat and read etc. Focus on eating, slow it down, practice putting your cutlery down at intervals to slow yourself down and really focus on what you are doing.

Activity 8

Have a look at the food diary you have been completing and compare it with the advice in this booklet.

1- What are the differences?

2- What do you need to change?

3- What is the plan to move from your current eating to healthy, regular eating?

Discuss this exercise with your therapist/clinician.

Getting rid of binges

-6-

Before commencing this chapter, have a look at your food diary and whether you have managed to think about / make some changes. Discuss this with your therapist/clinician. What is keeping you stuck with your eating disorder? What is your plan?

6.1. Keeping on track: Avoiding bingeing and vomiting

We have explored how important it is to establish a pattern of regular eating in order to start recovery. This method of distributing our energy intake throughout the day in a planned and structured way is a simple yet very potent method of preventing binge-eating. This is still relevant if you do not currently experience binge-eating as you may fear losing control with your eating, or be underweight and therefore be at great risk of binge-eating.

By now you will have started to monitor your eating with daily food diaries and over the last four days you may have been trying to normalise your eating by the technique of "mechanical eating". It might be quite a struggle to keep to your plan because of urges to miss meals or to over-eat. At this stage you might feel determined to persevere or maybe you feel like giving up.

It's never easy to make such changes so it's helpful to think about how to keep things on track. Take time to look at your food diaries and see what has happened and what you can learn about your eating disorder. You can then go on to learn about techniques to manage when things go wrong.

We are aware that completing diaries and introducing mechanical eating is not always easy. However, this is essential to make changes. Some of the reasons why people experience difficulties with this are below. Which one(s) is yours?

1- **Taking time to think and record is not easy. Planning feels so boring. There is no spontaneity and no fun if everything needs to be planned:** *Remind yourself why you are doing this! Remember this is not forever but planning is vital in the early stages. Once regular eating is second nature this level of planning will not be necessary.*

2- **I feel embarrassed bringing out my monitoring sheets and having to write down what I've eaten:** *Just keep one sheet folded up in a pocket. Or use your phone. Perhaps excuse yourself and go to make a call outside and jot down your intake. You can monitor privately.*

3- **I feel annoyed with myself for having to do this, it feels so abnormal:** *Again remind yourself why you are doing this and what you will gain long term from not having an eating disorder. You are striving for normal eating.*

4- **Once I've had a drink any thoughts of regular eating gets forgotten:** *It may be worth thinking about limiting or not drinking alcohol for the first couple of weeks just to get going and to keep up your commitment.*

If you feel confident about planning and monitoring then it's time to move on to the techniques which can help you keep on track. Resisting the urge to eat between planned times and managing times when you lose control or slip back into behaviours such as vomiting need focussed attention.

6.2. Managing the gaps

When you are eating regularly with three substantial meals and snacks you may feel as if you are always eating! But there are times between these planned meals/snacks when it is important to resist the urge to eat or "graze". You may experience an urge to eat after you have eaten your planned meal or snack, or before your next episode of eating is due, but it is important to manage this urge.

The two most effective ways of managing this are **urge surfing** and **distractions**.

Urge surfing

Urge surfing is the process that allows you to "ride out" the urge to eat inappropriately, binge, or to vomit. People worry that as their feelings / urges become more powerful, they will continue to rise until they are completely overwhelmed. However, we know that those urges or feelings always reach a peak and then they start to fade away. Try to tackle the urge at the beginning. Become alert to when an urge to binge commences. Try to find out what are the first signs of your urges to binge, so that you can act swiftly to protect yourself.

This technique is not unique for binges or eating disorders. For example, we know that people who suffer from migraines are expert in knowing when they are going to have a migraine even hours before it starts. They can then do something to prevent it from happening.

Managing the urges at the beginning is so much easier.

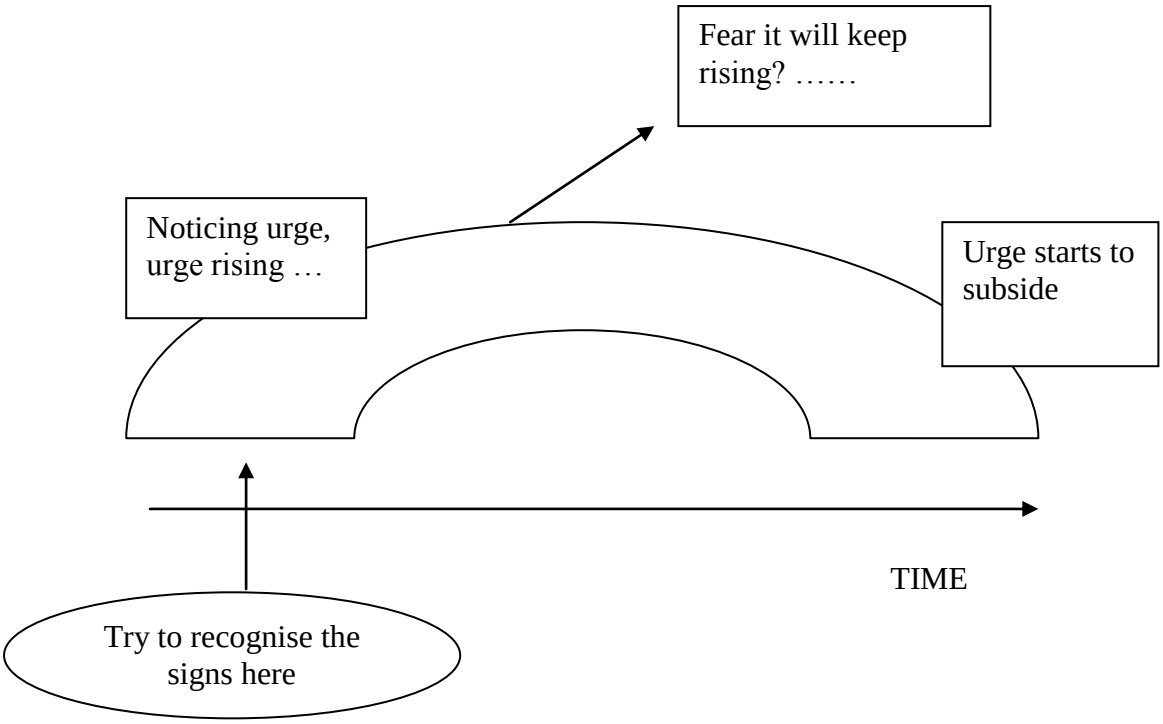


Figure 4. Diagram of urge surfing. Adapted from Marlett & Kristeller, 1999 & Fairburn 2008).

Urges are thought to generally take about 30 minutes to pass after hitting a peak. It is better to try to keep busy and distract yourself whilst experiencing these feelings. Concentrating directly on the urge whilst trying to resist it is very difficult, especially at first.

Letting the urge pass, or "urge surfing", will allow the feelings to naturally end. The more you can use urge surfing the better, as the more the urges are ignored and not responded to the less frequent and less troublesome they become.

Distractions

Distractions are activities that you use to stop yourself from eating. Sometime we eat because we are bored. Be aware of boredom and plan your day! Activities should be as enjoyable as possible and help to make the environment wrong for eating. They could be going for a walk without money, listening to music, having a bath or shower, phoning someone, social contact, crafts etc.

Activity 9

Make a list a list of things you can do to distract yourself. If you want some ideas look at the examples below.

Having a cool invigorating shower, having a relaxing bath with nice toiletries, phoning a friend for a chat, going out into the garden, going for a walk (without money to avoid buying food!), going for a drive, doing a crossword, meeting up with friends, window shopping, looking at Facebook, checking emails, giving yourself a manicure, organising a trip out, cleaning the house, sorting out drawers, doing a puzzle, watching a movie…

My list:

6.3. Learning from your binges

Maybe you have experienced a binge in the last few days. This is not unexpected as it is very early days and each binge is a great opportunity to develop a greater understanding of your eating disorder and learn new skills.

Binges can usually be prevented once you understand what your triggers are and you can learn this by analysing each binge after it has happened.

Binge Analysis

A good way to prevent binge-eating is by analysing your binges and learning from them.

For example:

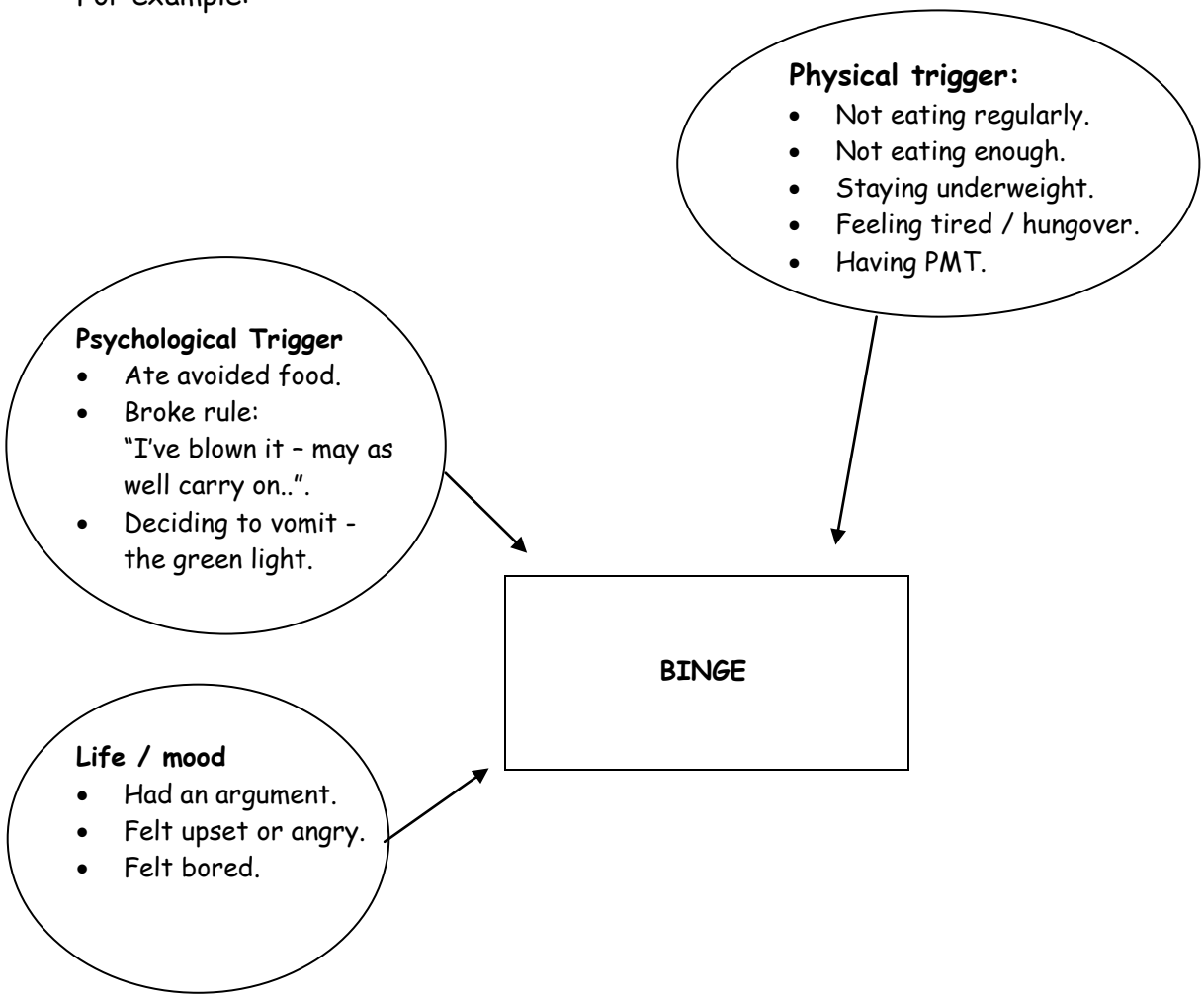


Figure 5. Binge Analysis. Adpated from Fairburn (2008).

Questions to ask yourself for every binge

1. **What was the trigger?** Was it biological (I did not eat enough) or psychological (I was upset, my mood was low, I was angry) or was it related to something else that happened?

2. **What action do I need to take next time?**

E.g.,

- Ensuring I don't miss meals.
- Carrying my snack with me so I don't miss it.
- Catching tricky thoughts like "I've blown it" and challenging them.
- Planning ahead for times I will be alone or feeling low.

It is advisable to do this after every binge when you feel you have calmed down and you are able to think back over the situation.

Activity 10

After one week of recording this information on binges, work with your therapist/clinician or alone and ask yourself the following questions:

---

1. What are the main triggers of my binges?

Biological:

Psychological:

2. Do I have different triggers and different type of binges?

3. What can I learn from this?

4. What can I do differently? (go back to previous chapters and make a list of things that you have learned that can help you reduce the binges. Put it into practice and look at it next week).

Be aware that sometimes you may allow yourself to binge because you can purge. Some examples that may be useful to manage your binges…

Trigger	Action
Being underweight.	Work on regaining a healthy weight and maintaining it.
Not eating for long periods of time (over 4 hours).	Make sure you eat and keep something down at least every 4 hours.
Breaking dietary rules.	Work on giving up rules, have flexible guidelines for eating, but stick to your eating plan.
Mood (e.g. feeling low, lonely etc).	Problem-solve and tackle the trigger. Think about other ways to help lift your mood. Remember eating doesn't solve the problem.
Other –	

Managing purging

-7-

Continue to use your food diary to learn about purging and how to get rid of it.

7.1. What do we mean by purging?

By purging we mean self-induced vomiting, taking laxatives, taking any other medication or tablets with the aim to get rid of what we have eaten. Purging can be a dangerous game. Many people explained to us that they discovered purging by chance.

"One day I felt very full, I went to the toilet and I made myself sick. I thought this is great, I can eat whatever I want and get rid of it".

Activity 11

How did your purging start?

In order to be able to make the decision of whether you would like to stop purging or not, you need to understand the consequences of this behaviour. Only then you can choose. If you look at the picture in chapter 1 (Figure 1, consequences of bulimia nervosa) you can see that bulimia can have an effect on our body. This is more due to the purging behaviour than the bingeing. Interestingly, many people want to stop primarily the bingeing behaviour but not the purging one.

7.2. Health consequences of purging behaviours

Repeated vomiting

Potassium

Frequent vomiting reduces the levels of potassium in our body and this is dangerous.

Potassium is vital to life because of its role in nerve conduction, particularly the nerves and muscles of the heart. So when potassium levels in the body fall, the heart may lose its regular beating rhythm. This may cause faintness or even loss of consciousness. Occasionally the heart may stop beating altogether.

Effect on the teeth

Acidic stomach fluid in the mouth erodes dental enamel. Sometimes it is the dentist who first notices and asks about the problem of frequent habitual vomiting, which has been kept secret from others. Dentists advise against brushing teeth straight after vomiting, as this worsens the acid damage. Instead you should rinse with water and then rinse with a fluoride mouth wash or even with a small amount of high fluoride toothpaste. The only way to protect your teeth properly is to stop vomiting.

Swollen face

In reaction to frequent vomiting, the saliva glands in the cheeks may enlarge, giving the face a swollen appearance. This swelling may be misinterpreted as weight gain and cause further distress and vomiting.

Bleeding

Frequent vomiting also results in damage and bleeding of the oesophagus which may cause pain, blood loss, and anaemia.

Other

Frequent vomiting is likely to cause dehydration, bringing faintness, tiredness, and headache.

Excessive laxative use

Laxative misuse causes dehydration, bringing faintness, tiredness, and headache.
The most important mineral to be depleted by laxative misuse is potassium (see previous page). There are others too, such as phosphate, calcium, zinc and magnesium.

Many laxatives work by stimulating the muscle wall of the bowels, which contract and push the contents through quicker. This artificial stimulation eventually leads to loss of bowel tone, the muscle wall becoming thinned and flaccid. At this stage bowel function may be permanently weakened and slow, and even the presence of adequate food and fluid cannot restore it to normal. Many people end up suffering severe and long term constipation, which will not respond to more laxative medication.

It is not advisable to abruptly stop laxatives without medical supervision.

7.3. How to reduce purging

Urge surfing, distractions, and analysis (discussed in Chapter 6) are all helpful techniques for managing urges to purge, particularly to vomit.

Also remember:

- **Vomiting never brings all the food consumed back and it gives you permission to binge.** It is important to remember that allowing yourself to vomit after eating makes it far more likely that you will experience binge-eating. At the same time, vomiting can have a detrimental effect on your health, since vomiting gets rid of potassium which you need to make sure your heart works properly. Low potassium means that you have a higher chance of having heart problems. Makes sure you ask your doctor to check your potassium if you vomit.

- **Laxatives and diuretics only get rid of water and their use can also have a worrying effect on our kidneys.**

Having purging as an option gives the go ahead to eat more than you would otherwise. Often people recognise that as they start to overeat, if they think they can vomit, they go for a full binge. Vomiting gives them the green light! That is one reason why purging causes binge-eating.

When purging is not an option, people appear far more able to "apply the brakes" and stay in control of what they are eating.

If you experience difficulties with purging, use your monitoring sheets to identify when you get the urge to do it and what is going on for you. When you have been able to work out what the triggers are, identify alternative ways of managing those triggers.

7.4. Remember

Trigger	Action
To manage feeling full	• Remember it is normal to feel full after eating. This is especially the case when you are underweight due to delayed gastric emptying. • Don't wear tight clothes. • Don't "fill up" on fluids. • Don't scrutinise your tummy, or focus on fullness after eating. • Remember fullness is temporary and does pass.
To empty stomach or flatten abdomen	• Vomiting does not empty the stomach. It is not that effective. • It doesn't have a true effect on body shape.
To manage mood	• Vomiting can give temporary tension relieving effect but it is better to problem solve what is causing the negative mood and manage the mood by a functional coping method. E.g., tackle anxiety by relaxation techniques.
To self-punish	• With support, tackle depression or low self-esteem issues if either of these are driving the need to punish yourself.
To get rid of what has been eaten	• Vomiting is ineffective in this regard. You can't get rid of everything you have eaten. Remember that you need to eat enough to maintain or achieve a healthy weight / BMI to recover from an eating disorder. • **It is not possible to recover and be underweight.**

Activity 12

Continue to plan and monitor your food

If you are struggling to plan and monitor, be honest with yourself. Why is this? Revisit earlier activities to help you to remember the benefits of change.

1- Pay attention to the binges and learn from them.

2- Pay attention to any episodes of vomiting or purging and learn from them.

3- Re-read Activity 6 on the reasons why you want to give up your eating disorder.

4- Plan your food and introduce mechanical eating.

5- Review your diary every 3 days and write down what you can learn from it. Discuss with your therapist/clinician what you have learned and your on-going plan.

6- Try to elicit support from a friend or family member.

Summary

What have your learned so far about your eating?

Compulsive Exercise

-8-

Continue to work using your food diary, regulating your eating, and learning from your binges and purging behaviour.

8.1. What do we mean by compulsive exercise?

Regular enjoyable exercise and increased activity can be beneficial for physical and mental health. However, some people, as part of their eating disorder, may begin to use exercise in a more compulsive way to lose weight and/or manage thoughts and feelings. This can be problematic for several reasons:

- As exercise becomes compulsive, your fitness and ability to exercise over time will be reduced due to weight loss, muscle loss, injuries, and excessive training which is driven increasingly by your eating disorder.
- If no additional calories are taken in to compensate for those used in excessive exercise, your body will understand this as 'famine' and trigger the starvation or binge-purge cycle.
- If exercise becomes an obsession, this can also be damaging to your psychological wellbeing. Specifically, if you feel guilty when you can't exercise or if you use exercise to make you feel happy. If this happens then you will no longer enjoy exercising and it will become a chore.
- Your reasons for exercising are key. The reasons you began exercising might be healthy ones (such as engaging in sport at school or to enhance your fitness). However, eating-related problems can "overtake" the exercise, such that it becomes rigid, out of control and no longer enjoyable.
- Compulsive exercising can have a negative effect on social and occupational relationships, if prioritised above other areas of life.

A person suffers from **compulsive exercise** if they are; unable to cut down or stop exercising even though it is detrimental to their health; if they feel very guilty if they don't exercise; if they exercise even when they are injured or when it has been recommended that they do not exercise; and when the main reason for exercise is to manage their weight or mood.

It is not the aim of MOPED to reduce your compulsive exercise, but to make you aware that it may take the role of the purging behaviour, and may be maintaining your eating disorder. If this is a problem, discuss it with your therapist/clinician.

Maintaining progress

-9-

9.1. The importance of reviewing your eating and learning

Once you have gone through this booklet, each week at a regular time meet with your therapist or set time aside for yourself to review how things are going and what progress you are making.

1. Review your monitoring. Are you managing to monitor most of the time ?

If not, what is getting in the way? Prioritise getting into the routine of monitoring your eating on monitoring sheets, your phone or an app. It is worth getting this stage right before moving on to the other strategies.

2. Review your planned regular eating. Are you:

- Planning what you eat before you get to that time?
- Making sure you don't go longer than 4 hours without having something to eat?
- Working on not eating during the gaps?

If there is room for improvement here, review all the relevant information in this booklet and keep trying. It gets easier as it feels more familiar. Ultimately this is the template for all of us to eat in an optimally healthy manner.

3. Binge-eating. Are you finding that your frequency of binge-eating is reducing?

If not, review previous chapters. Make sure that there is planned regular eating. When binge-eating occurs, are you looking back and working out the triggers and thinking ahead about how to prevent this pattern continuing? Work out where you need to focus your efforts and prioritise doing so.

4. Purging. Is the frequency of purging decreasing?

If not, go back to the material on binge- eating and ensure you are working to reduce the frequency of binges. Less binge-eating should result in less purging. Then review the material specifically on purging. Identify the strategies relevant for you at this time. Remind yourself of the serious health consequences that purging brings. It is a good idea to set yourself a zero tolerance of purging.

5. Exercise. Is your exercise becoming compulsive?

Try to break the patterns. Try to exercise with others, never alone. Enjoy the exercise. If you are putting on hold your life because of your exercise, this is a problem. Are you using exercise to manage or to avoid difficult feelings? Can you find alternative ways to manage them healthy ones, such as yoga, pilates, speaking to a friend, etc?

The regular review of your progress is to give you a chance to identify your successes and those opportunities to improve your focus and efforts. It will not be helpful if you come away from these reviews telling yourself that you are not good enough, not trying hard enough, not worth trying.

Overcoming an eating disorder is acheivable, but it is hard work and you need to give yourself encouragement and praise for your positive steps, however small. Nobody responds well to critisism and put downs, so don't expect to be able to motivate yourself that way! Take time to identify the barriers to making changes, look for the answers to those barriers within the material in this booklet. If you cannot find the solutions or you know you are trying to make changes but not getting anywhere, then it is important that you take this to your therapist so that you can be provided with more support with overcoming your eating disorder. Maybe there is a need for a specialist opinion?

9.2. Planning for the future

We have identified that the process of recovering from an eating disorder involves working on the maintaining mechanisms; tackling the expressions of the eating disorder that keep it all going.

This requires motivation to make changes and actually doing things to make changes. We have also shown that once you have started to make changes and work on a particular part of the problem, you need to keep going with it rather than revert back to what you were doing before. So, even as you introduce new techniques, you need to keep the previously introduced ones going (for example, sticking with monitoring and regular eating).

Remember

Getting better may not mean feeling better straight away although it's more than likely to in the long run.

People often find that the process of recovery is a difficult, distressing and demanding task and it is important to identify clearly and then hold on firmly to the reasons why you want to change. Also, look carefully at the reasons you have for not changing. Consider if they are reason enough to hold you back.

Overcoming your concerns about your weight and learning to eat in a more flexible and healthier way, resisting the urge to binge or purge, and changing your relationship with exercise may leave you feeling more emotionally stirred-up. However, facing the eating disorder and making changes to overcome the eating disorder will pay off in time.

Activity 13

Looking at changes

What changes have you made so far?

What have you struggled with?

Are there still changes you need or want to make but haven't got around to yet? What is getting in the way? How might that be resolved?

It is perfectly reasonable to access support in your endeavours. It is important not to get despondent if it feels difficult. Keep doing the right thing and you will get there.

Activity 14

Personal plan

What I need to be working on:

(be really specific)

Problems and answers
-10-

Problems to focus on	How to address
Disordered eating pattern	- Try to eat a flexible and varied diet. - Practice eating socially (i.e., with others, in restaurants, etc). - Take care not to avoid certain foods. - Try and eat 'enough' and avoid under-eating. - Eat regularly (meals and snacks at least every four hours).
Binge-eating	- Reduce likelihood of binge-eating by eating regular meals and snacks throughout the day. - Don't go longer than 4 hours without eating and plan ahead to help keep you on course. - If binges do occur use binge analysis to identify triggers. - Use urge surfing and distractions to manage the urge to binge.
Exercise	- Exercise should be social, enjoyable and not at the expense of other pleasurable life activities. - Exercise mainly with others and avoid having rigid regimes. Vary your exercise and be flexible to avoid becoming too obsessive about it. - Don't exercise when unwell, injured, or when you are too tired. - It is not appropriate to use exercise as a means of weight loss if you are already underweight. - Compulsively exercising will maintain your eating disorder.

Purging behaviours	- Avoid vomiting and taking laxatives as they keep the eating disorder going, can cause significant health risks, and are relatively ineffective as methods of weight control. - Remember urge surfing and using distractions and the importance of planning meals and snacks that you can actually manage to keep down without vomiting or using laxatives. - Analyse the triggers for purging as you would analyse binges.
Weight	- Know your Body Mass Index. - Don't weigh yourself more than once a week. - If you are underweight, the first priority is to gain weight. It is impossible to overcome an eating disorder and remain underweight, or try to diet at the same time, it will never work!
Mood	- Work on developing your skills at managing difficult moods using activities that do not involve food and compulsive exercise.
Slip-ups and lapses	- During recovery, minor slip-ups are to be expected. - Spot slip-ups early and react positively by i) trying to understand the trigger, and ii) trying to get back on track with planning and regular eating as soon as possible.

10.1. How my progress is going

MOPED elements	Not Going well	Going Reasonably well	Going Well
Taking time to review progress			
Monitoring			
Regular planned weighing only			
Planning regular eating			
Not eating in between			
Giving treatment priority			
Compensating for eating : Purging e.g., vomiting			
Exercise			

Appendix 1: Food diary

This is only an example, either photocopy this page, print off the version on our website (www.leicestereatingdisorders.co.uk/about-us/resources) or make up your own version.

Date	Time	Where / With Who	Food and Drink Consumed	B / P	If B or P why? What have I learned?

B: Binge, P: purge (explain what kind)

Adapted from Fairburn, 2008

Appendix 2: Examples of meals and snacks

Breakfast

- Two weetabix with semi-skimmed milk and a portion of fruit.
- 2 slices of toast with butter/margarine and jam, and a portion of fruit.
- Bowl of porridge with jam/honey, glass of juice.
- Slice of wholemeal bread with butter/margarine and cheese, and a yoghurt.

Snack

- 1-2 portions of fruit.
- Two crackers with cheese.
- Two biscuits.
- Yogurt and fruit.
- Slice of wholemeal toast with jam/peanut butter.
- Small (30-40g) bar of chocolate.
- Handful of nuts.
- Fruit scone.
- Cereal bar.
- Packet of crisps.
- Breadsticks and dip.
- Rice pudding pot.

Lunch

- Sandwich with 2 slices of wholemeal bread, butter/margarine, with ham and/or cheese, salad, and a yoghurt.
- Omelette with cheese and ham, salad, and a slice of cake.
- Beans, two slices of wholemeal toast, butter/margarine, and a portion of fruit.
- Pizza bread with salad, and a rice pudding pot.

Evening Meal

- Portion of fish, rice, two portions of vegetables/salad, and a piece of cake.
- Portion of chicken with sauce, potatoes, two portions of vegetables/salad, and a flapjack.
- Spaghetti bolognaise, salad, slice of garlic bread, and ice-cream.
- Veggie burger, salad, potato skins, and tinned fruit and biscuit.

Evaluation of the MOPED package

Whether you used some of it, all of it or only flicked through MOPED we would really appreciate your feedback. This enables us to evaluate the effectiveness of the MOPED package and help us make any necessary improvements.

We would be grateful if you could complete the following questionnaire by placing a circle round the number of the answer which most closely reflects your views. If you would prefer to give feedback anonymously an online version of the feedback form is available at **www.surveymonkey.com/r/MOPED-NHS**

Please indicate which version of MOPED you used **paper copy ☐** **online ☐**

How *helpful* was the MOPED package with increasing your understanding in these areas…	Very unhelpful	Unhelpful	Neutral	Helpful	Very helpful	Section not read	
1. The symptoms of eating disorders	1	2	3	4	5	Not relevant to me	Other*
2. How weight is regulated	1	2	3	4	5	Not relevant to me	Other*
3. How eating disorders develop	1	2	3	4	5	Not relevant to me	Other*
4. The maintaining factors or "vicious cycle" of eating disorders	1	2	3	4	5	Not relevant to me	Other*
5. How to manage regular eating	1	2	3	4	5	Not relevant to me	Other*
6. The importance of planning your eating	1	2	3	4	5	Not relevant to me	Other*
7. The triggers for binge eating	1	2	3	4	5	Not relevant to me	Other*
8. The triggers for vomiting	1	2	3	4	5	Not relevant to me	Other*
9. The role of compulsive exercise	1	2	3	4	5	Not relevant to me	Other*
10. How to start recovery (the summary)	1	2	3	4	5	Not relevant to me	Other*

* If you circled **other** for any of the sections please indicated below why you did not read this section

How helpful were the MOPED activities	Very unhelpful	Unhelpful	Neutral	Helpful	Very helpful	Activity not completed	
11. Developing your own timeline	1	2	3	4	5	Not relevant to me	Other*
12. Identifying your style of eating	1	2	3	4	5	Not relevant to me	Other*
13. Recognising your "traps"	1	2	3	4	5	Not relevant to me	Other*
14. The advantages of making change	1	2	3	4	5	Not relevant to me	Other*
15. Monitoring your eating	1	2	3	4	5	Not relevant to me	Other*
16. Binge analysis	1	2	3	4	5	Not relevant to me	Other*
17. Looking at changes	1	2	3	4	5	Not relevant to me	Other*
18. Developing a Personal Plan	1	2	3	4	5	Not relevant to me	Other*

* If you circled **other** for any of the sections please indicated below why you did not read this section

Please rate your level of agreement with the following statements …	Strongly disagree	Disagree	Neutral/ No change	Agree	Strongly Agree
19. MOPED has helped me understand my eating disorder	1	2	3	4	5
20. MOPED supported me in changing my eating	1	2	3	4	5
21. MOPED has motivated me to continue with my recovery	1	2	3	4	5
22. MOPED was a useful activity to do whilst waiting for therapy to start	1	2	3	4	5
23. MOPED can be used on its own without additional support	1	2	3	4	5
24. MOPED needs to be supported by further contact with the Eating Disorders Service whilst completing the booklet	1	2	3	4	5

25. Since completing the MOPED booklet how has your eating disorder changed, if at all?	Much worse	Worse	No change	Improved	Much improved

26. How much has completing the MOPED booklet contributed to this change?	Not at all	A little	Mostly	Completely

27. Approximately how long did it take you to complete the booklet? ☐ Days/Weeks

28. Did you re-read the summaries from Chapters 1-5 before moving on? YES/NO

29. Did you re-visit Chapters 5, 6 & 7 to re-read and monitor progress? YES/NO

30. The length of the MOPED booklet was … ☐ too short ☐ about right ☐ too long

31. The number of activities were … ☐ too few ☐ about right ☐ too many

32. What, if anything, did you find the most useful about the MOPED package?

33. What, if anything, have you found difficult about using the MOPED package?

34. We would welcome any feedback or comments on the MOPED package and any suggestions of ways that it could be improved

Thank you for your feedback

References

Fairburn, C.G. (2008). *Cognitive Behaviour Therapy & Eating Disorders*. New York, Guildford Press.

Keys, A., Brožek, J., Henschel, A. & Mickelsen, O. (1950). *The Biology of Human Starvation (2 Volumes).* University of Minnesota Press.

Marlett, G.A. & Kristeller, J.L. (1999). Mindfulness and Medication. In Miller, W.R. (ed). *Intergrating spirituality in treatmen*t (p67-84). Washington DC, American Psychological Association.

Treasure, J. & Schmidt, U. (2008). Motivational interviewing in eating disorders. In H. Arkowitz, H. Westra, W.R. Miller & S. Rollnick (Eds.), *Motivational interviewing and the promotion of mental health (pp. 194-224). New York: Guildford Press.*