## CONTENTS

### ABOUT BUTTERFLY

### REPORTING ON EATING DISORDERS

### QUICK GUIDE FOR REPORTING MENTAL ILLNESS

### GENERAL INFORMATION ABOUT EATING DISORDERS

- **What is an eating disorder?**
- EDS are serious mental illnesses; they are not a lifestyle choice or a diet gone ‘too far.’
- **Anorexia Nervosa**
- **Bulimia Nervosa**
- **Binge Eating Disorder**
- **Other Specified Feeding and Eating Disorder**

### THE FACTS

- **Eating Disorders and Negative Body Image**
- **Men and Eating Disorders**
- **Symptoms of an Eating Disorder for Men**
- **The Differences between Men and Women with Eating Disorders**
- **Onset and Duration**
- **Treatment and Recovery**
- **Burden of Disease**
- **Mental Issues**
- **Physical Issues**
- **Anorexia Nervosa:**
- **Bulimia Nervosa:**
- **Binge Eating Disorder:**
- **EDNOS:**

### WARNING SIGNS OF AN EATING DISORDER

- **Physical signs:**
- **Psychological Signs:**
- **Behavioural Signs:**
POSSIBLE RISK FACTORS

WHAT CAUSES AN EATING DISORDER?  21
GENETIC VULNERABILITY  21
PSYCHOLOGICAL FACTORS  22
SOCIO-CULTURAL INFLUENCES  22
MODIFIABLE RISK FACTORS  23
SELF ESTEEM  23
BODY DISSATISFACTION OR NEGATIVE BODY IMAGE  23
INTERNALISATION OF THE THIN SOCIO-CULTURAL IDEAL  23
EXTREME WEIGHT LOSS BEHAVIOURS  24
DISORDERED EATING  24
DIETING  24
DIETING AND ADOLESCENTS AT RISK  24

PROTECTIVE FACTORS  25

INDIVIDUAL PROTECTIVE FACTORS  25
FAMILY PROTECTIVE FACTORS  25
SOCIO-CULTURAL PROTECTIVE FACTORS  26

CASE STUDY - SCOPE OF THE PROBLEM  27

THE CHILDREN’S HOSPITAL WESTMEAD (NSW)  27
INCREASED DEMAND FOR SERVICE  27
About The Butterfly Foundation

The Butterfly Foundation is the national peak organisation for eating disorders and negative body image.

Butterfly operates a national support service, ED HOPE, which is staffed by counselors experienced in assisting with eating disorders. This service is funded by the Federal Government and includes phone, email and online counselling support. Butterfly is committed to providing support and recovery based resources for those affected by eating disorders.

Butterfly also run support programs for those in recovery and their carers in Sydney and hope to expand these services to run online to meet the demand for these programs across Australia, particularly in regional areas.

- Emerging, Unfolding and Storywell are six week programs for those in recovery
- At Home With Carers is a six week course aimed primarily at parents helping their child recover from an eating disorder
- A support group for those in recovery once a month
- A support group for carers once a month

Butterfly recognises that eating disorders often arise from poor body image, and it delivers a range of Positive Body Image workshops to schools and workplaces through its education program. It has a strong media presence to raise awareness of Butterfly’s perspective in community debates about body image and eating disorders.

Throughout its work Butterfly emphasises the critical importance of prevention and early intervention strategies in limiting the development of, and experience of, negative body image and eating disorders. To expand knowledge in this field The Butterfly Research Institute commissions academic research projects and funds PhD research scholarships.

Butterfly is committed to collaboration across the sector and works with allied medical and mental health providers as well as with clinicians and academics. Butterfly has been appointed to administer the National Eating Disorder Collaboration (NEDC) for the Australian Department of Health since 2009. The NEDC brings research, expertise and evidence from leaders in the field together with lived experience to create an evidence-based, consistent approach to eating disorders prevention, early intervention and treatment. The National
MEDIA KIT

Eating Disorders Collaboration produces evidence-based resources and provides a knowledge hub for research and practical information through its website www.nedc.com.au. In recognition of the NEDC’s role in ensuring consistent, evidence-based approaches, Butterfly ensures that information available from the NEDC is integrated across all services and activities. Butterfly works to mitigate the harmful effects of eating disorders and represents all people affected by eating disorders, including those living with the illness, their families and their friends. Butterfly aims to raise awareness about the realities of seeking treatment, reduce the risk of relapse and advocates for improved services from both government and independent sources.

Butterfly is particularly conscious of the role that the media can play in influencing the way we think and act towards people who are affected by eating disorders. As such the Butterfly Foundation strongly advocates that media use the Mindframe Media Guidelines relating to mental illness when reporting on any eating disorder story.

The Mindframe Media Guidelines aim to ensure that all stories that report on eating disorders are accurate, balanced and provide all necessary support line contact information. They also provide contacts for organisations that can provide comment for stories, up-to-date facts and statistics about eating disorders.

This Media Kit was updated in October 2014, and information will be refreshed quarterly or as information is made available.

**Media contact:**

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www.thebutterflyfoundation.org.au
Reporting on eating disorders

Eating disorders are a serious mental illnesses and it is important that media reporting of these illnesses, contributing factors and the consequences of eating disorders are dealt with sensitively and with a ‘do no harm’ approach.

We encourage all media to refer to the new Mindframe Media Guidelines on reporting of eating disorders and visit the Butterfly Foundation website for more information.

Quick guide for reporting mental illness

Before running a story
Check for consistency with codes of practice that relate to discrimination, privacy, grief and trauma (see Industry Codes) and that you have access to the most reliable facts, statistics and other information.

Privacy
Media guidelines and codes of ethics emphasise the right to privacy. Is it relevant to the story that the featured person has an eating disorder? What are the consequences for their health, safety and livelihood if you disclose their mental illness?

Language and stereotypes
Most people working in the media are conscious about using appropriate language. While improvements have been made, some negative terms are still in use. This language can stigmatise people with eating disorders and perpetuates discrimination.

Have you provided balance to the story? Remember that people with an eating disorder are not inherently violent, unable to work, unpredictable, untrustworthy, weak or unable to get well. Mental illness is not a life sentence and most people are able to recover with treatment and support.

Interviewing a person with a past or current mental illness
Interviewing a person with a past or current mental illness requires particular sensitivity and discretion. While many people who have, or have had, a mental illness are happy to speak to the media, talking publicly about a deeply personal issue can be difficult and distressing.
Include helpline numbers

It is important to include appropriate help-seeking information and helpline numbers within stories that involve mental illness. Include phone numbers and contact details for support services. This provides immediate support for those who may have been distressed, or prompted to act, by your story. A list of appropriate helplines for inclusion in stories about mental illness is available here.

We recommend using the following wording to support media coverage of eating disorders and negative body image.

**For help and support call the national support line: 1800 33 4673 or email support@thebutterflyfoundation.org.au**

Seek expert advice

Media reports on eating disorders should be based on the most reliable information from recommended experts. A list of **Story sources and contacts** is available here.

Photo selection and placement

Ensure the person understands how a photo or footage will be used. Check they are prepared to be identified in the story this way. Use appropriate images that support healthy lifestyle, images that portray emaciated or malnourished individuals are not considered to be appropriate.
Social Media

While Butterfly recognise that social media is a potentially dangerous, illness triggering, communication channel for people with an eating disorder, it can also be a positive communication tool when used responsibly.

There are some key points to be aware of when using social media to comment on eating disorders that can support the safety of those hearing your messages.

Butterfly encourages the media to:

- Refrain from providing details of hashtags that have been found to be dangerous such as #proana. #thinspo and other links to harmful content.
- Exercise caution in the messages and images you retweet or support. Be aware of the message you are sending; when talking about living well, Butterfly encourage messaging that connects to a person’s worth rather than weight or diet.
- Do not use inappropriate images. Images are a potential trigger and so Butterfly encourage the media to use the Mindframe Media Guidelines and refrain from using images of the body.
- Provide support lines where possible. When discussing eating disorders or negative body image please use The Butterfly Foundation’s National ED HOPE Line contact details.
General information about Eating Disorders

Over the years the rate of people suffering from eating disorders has increased, with approximately 9 per cent (2 million) Australians experiencing an eating disorder requiring clinical intervention at some point in their life\(^1\). In 2012, approximately 4 per cent of the Australian population suffered from an eating disorder.\(^2\)

People of all demographics are affected including men and women of all ages,\(^3\) and children as young as five years of age.\(^4\)

The number of people seeking support for eating disorders is also on the rise; Butterfly experienced a 202 per cent increase in calls made to their support line in the past twelve months.\(^5\) (As at July 2013).

Eating disorders are a serious psychiatric disorder, responsible for an estimated 1,829 deaths using 2012 population figures\(^6\).

While present statistics paint a bleak future for sufferers, early intervention and treatment can decrease the severity and duration of the illness.\(^12\)

What is an eating disorder?

An eating disorder is a serious and potentially life threatening mental illness. For someone living with an eating disorder, it is not a case of it being a lifestyle choice or a diet gone ‘too far.’

Eating disorders are associated with significant physical complications and increased mortality.

There are four eating disorders that are recognised by the Diagnostic and Statistical Manual of Mental Disorders (DSM), which are Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder and Other Specified Feeding and Eating Disorder (OSFED).

**Anorexia Nervosa**

Anorexia Nervosa (AN) is a serious eating disorder characterised by restrictive diet and weight loss with approximately 10 per cent of sufferers dying within 10 years of onset of the illness.  

For someone with Anorexia Nervosa, maintaining a normal and healthy weight is impossible and the fear of gaining weight is overwhelming.

When someone has Anorexia Nervosa the amount of attention, they place on their body image can be enormous. The person’s self-worth can become entirely defined by the way they think they look.

People with Anorexia Nervosa can go to great lengths to keep their eating and exercise habits a secret. It can be very difficult for someone with Anorexia Nervosa to ask for help.

**Bulimia Nervosa**

Bulimia Nervosa (BN) is a serious eating disorder characterised by recurrent binge eating episodes followed by compensatory behaviour such as self-induced vomiting, misuse of laxatives, diuretics, fasting, over exercising, enemas or illicit or prescription drugs. These behaviours can become more compulsive and uncontrollable over time.

When someone has Bulimia Nervosa, they will likely experience an obsession with food, thoughts about eating (or not eating), weight loss, dieting and negative body image.

These behaviours are often concealed and people with Bulimia Nervosa can go to great lengths to keep their eating and exercise habits a secret. As a result, Bulimia Nervosa can go undetected for a long period.

**Binge Eating Disorder**

Binge Eating Disorder (BED) is the most common of all eating disorders. Binge Eating Disorder (BED) is characterised by binge eating episodes resulting in feelings of guilt,

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depression and shame. During these episodes, a person experiences a loss of control over their eating and may not be able to stop even if they want to.

Binge eating often occurs at times of stress, anger, boredom or distress. At such times, binge eating is used as a way to cope with challenging emotions.

**Other Specified Feeding and Eating Disorder (OSFED)**

OSFED applies to cases in which a person does not meet full criteria for an eating disorder but encounters significant distress as a result of the eating disorder symptoms they experience. OSFED is not a diagnosis in its own right; however, it acknowledges the symptoms of an eating disorder presented.

For a person affected by OSFED, they may have disturbed eating habits, and/or distorted body image, and/or over-evaluation of shape and weight, and/or an intense fear of gaining weight. Around 30% of people who seek treatment for an eating disorder have OSFED\(^\text{15}\).

**The Facts**

**Eating Disorders and Negative Body Image**

More than two million people in Australia will suffer from an eating disorder in their lifetime.\(^\text{16}\)

**In 2012 there were approximately 913,000 people suffering from an eating disorder in Australia.**\(^\text{17}\)

Alarmingly, trends suggest that unless our ability to recognise and treat eating disorders early on in the development of the illness figures will rise.\(^\text{18}\)

Negative body image is a precursor of serious social, medical and mental health issues including anxiety, depression, social withdrawal, stigmatisation and, of course, eating disorders. Research shows that people who diet to change their body shape are 18 times more likely to develop an eating disorder within six months,\(^\text{19}\) and one in five times more likely to develop and eating disorder if dieting in this way over 12 months.\(^\text{20}\)


\(\text{15}\) National Eating Disorders Collaboration 2014


\(\text{18}\) Hudson et al 2007, Wade et al 2006 and Madden et al 2009

**Men and Eating Disorders**

While eating disorders are often portrayed as illnesses that only affect females, Anorexia Nervosa and Bulimia Nervosa account for 10 per cent of people with this condition and for Binge Eating Disorder they account for as many as 25 per cent\(^21\). We also know that under-diagnosis and cultural stigma mean that the actual proportion of males with eating disorders could be much higher.

Recently more attention has been placed on what is being termed ‘Muscle Dysmorphia’. Muscle Dysmorphia has not been listed as an eating disorder, rather an obsessive and compulsive related disorder in the DSM 5. The hallmark symptom of Muscle Dysmorphia is a preoccupation with a perceived lack of muscularity, with reports of up-to five hours per day being consumed by these negative thoughts.\(^22\) More research is being done in this area by a team of researchers from the University of Sydney to develop understanding of the relationship between muscle dysmorphia, body image concerns in men and eating disorders in men.

Onset usually occurs in late pubescence, although the desire to be more muscular is evident in boys as young as six.\(^23\)

The disorder is characterised by excessive working-out, extreme anxiety in the event of a missed work-out, adherence to rigid diet plan, and anabolic steroid abuse.\(^24\)

Men affected by Muscle Dysmorphia are known to become so obsessed with working out and eating plans that they can disrupt occupation and social function. Their dissatisfaction with their bodies can result in social avoidance, body concealment and impaired interpersonal and sexual relationships.\(^25\)

The number of men afflicted by Muscle Dysmorphia is still largely unknown, as no formal epidemiological studies have been conducted and because many men try to hide their

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\(^{23}\) Ibid

\(^{24}\) Ibid

\(^{25}\) Ibid
unhealthy eating and working-out habits. However, trends indicate that potentially millions of men are suffering from the disorder.26

Symptoms of an Eating Disorder for Men

The symptoms of an eating disorder for men are very similar to those of women. They include:

- Low self esteem
- Depression
- Preoccupation with food, weight and shape
- Refusal to maintain body weight at or above minimally normal weight for age, height, body type or activity level
- Lying about eating and difficulty eating in front of others
- Low blood pressure or body temperature
- Low hormone levels
- Possible gender identity issues
- Thinning hair or hair loss
- Fatigue and muscle weakness
- Heart arrhythmia or electrolyte disturbance
- Perfectionist standards
- Binge eating and/or purging behaviours
- Compulsive exercise and/or preoccupation with muscles, body weight and shape

The Differences between Men and Women with Eating Disorders

- Men tend to develop eating disorders at an older age than women28
- Men are more likely to control their weight through exercise than restricting their intake of food30

26 Ibid


30 Ibid
Onset and Duration

The serious mental and physical consequences of eating disorders affect people of all ages. Generally adolescents between the ages of 13 and 18 are at the highest risk of developing an eating disorder; however, recent studies have shown children as young as five are now at risk.\(^{31}\)

The younger the age of onset the higher the risk of long term physical and mental problems,\(^{32}\) children with Anorexia Nervosa can experience arrested growth and development\(^{33}\) and early onset Bulimia Nervosa (age 15 or below) has been associated with higher rates of deliberate self-harm and familial depression.\(^{34}\)

For some, eating disorders can be a lifelong disease with research indicating that women as old as eighty are still seeking treatment.\(^{35}\)

Treatment and Recovery

Anorexia Nervosa and Bulimia Nervosa are the 8\(^{th}\) and 10\(^{th}\) leading causes of burden of disease and injury in females aged 15-24 in Australia as measured by disability adjusted life years.\(^{36}\) However, many sufferers are unable or unwilling to seek help due to lack of facilities and cost.

Anorexia Nervosa has been reported to come second only to the cost of cardiac artery bypass surgery in the private hospital sector in Australia,\(^{37}\) yet health insurance provides little or no assistance to people diagnosed with an eating disorder.


\(^{32}\) National Centre on Addiction and Substance Abuse [CASA] at Columbia University, 2003)


The complex treatment required for eating disorders are commonly not understood by those who develop and administer service models, making it crucial to re-evaluate our current methods.

The Maudsley Family Treatment Therapy, an outpatient treatment that involves the family working together over 1 year to treat Anorexia Nervosa in their child, have increased recovery rates in those diagnosed with Anorexia Nervosa by up to 70 per cent after 12 months and 90 per cent after five years in patients under the age of 18. 38

Skilled early intervention also had a profound beneficial effect on the course of eating disorders, particularly Anorexia Nervosa where 90 per cent of patients given an effective treatment 39 within three years of the illness onset had a good outcome (minimal weight loss (body mass index > 17 kg/m2), absence of medical complications, strong motivation to change behavior, and supportive family and friends who do not condone the abnormal behavior ) at five years. 40

These findings demonstrate the urgent need for efficient, effective, affordable, accessible treatment methods, which addresses both the mental and physical aspects of the illness and is provided early in illness and early in episode. 41

Burden of Disease

The Paying the Price – Eating Disorders in Australia report was commissioned by Butterfly and written by Deloitte Access Economics. The Paying the Price report advises that the AIHW reports health system expenditure for eating disorders of $80.4 million in 2008-09. Inflating this to allow for subsequent prevalence increase and health cost inflation suggest expenditure of $99.9 million by 2012. 42

40 Ibid
The productivity impacts of Eating Disorders were estimated as $15.1 billion in 2012\textsuperscript{43}, similar to the productivity impacts of anxiety and depression which were $17.9 billion in 2010\textsuperscript{44}. Of this cost, $2.0 billion is due to lost lifetime earnings for young people who die\textsuperscript{45}.

Eating disorders also have lengthy duration – an average of around 15 years in survey respondents\textsuperscript{46} – which can mean long lasting productivity impacts for those living with eating disorders, such as lower employment participation (costing $6.0 billion) and greater absenteeism ($1.8 billion) and presenteeism ($5.3 billion). Productivity costs are borne largely by individuals and their families, but also by Federal Government (in the form of less taxation revenue) and by employers (sick leave and lower productivity from presenteeism). Estimates of the cost of informal care for people with eating disorders, total $8.5 million, based on data from the Federal Department of Human Services, and other financial costs of $594 million, based on survey data for out-of-pocket expenses borne by people with eating disorders and their families and carers.\textsuperscript{47}

The “burden of disease" from eating disorders is estimated at $52.6 billion, calculated by multiplying the years of healthy life lost (measured in disability adjusted life years or DALYS), by the value of a statistical life year (VSLY) as recommended by the Department of Finance and Deregulation. The estimate is comparable, although slightly larger, than the estimated value of the burden of disease for anxiety and depression of $41.2 billion.\textsuperscript{48}

**Mental Issues**

Eating disorders are a mental illness which requires professional and long term psychiatric treatment.

Approximately 95 per cent of people with eating disorders have a comorbid condition.\textsuperscript{49} Mood and anxiety disorders occur common in people with all types of eating disorders and people with Anorexia Nervosa also experience higher rates of obsessive compulsive disorders.\textsuperscript{50}

\textsuperscript{43} Ibid
\textsuperscript{44} Access Economics 2010
\textsuperscript{46} Ibid
\textsuperscript{47} Ibid
\textsuperscript{48} Access Economics 2010
More than 14 per cent of patients with bipolar disorder also suffer from an eating disorder, and these individuals are likely to have more severe course of illness.\textsuperscript{51}

Studies have also revealed that people dealing with an eating disorder are more likely to abuse alcohol and/or illicit drugs,\textsuperscript{52} and people with comorbid Bulimia Nervosa and substance abuse are at increased risk of attempted suicide.\textsuperscript{53}

Anorexia Nervosa records the highest mortality rates out of any mental illness with one in five sufferers who die prematurely having had committed suicide.\textsuperscript{54}

Of those who survive, more than 50 per cent of people with Anorexia Nervosa and Bulimia Nervosa will relapse and those with BED report ‘very high rates of relapse’.\textsuperscript{55}

**Physical Issues**

**Anorexia Nervosa:**

- Anaemia (iron deficiency)
- Reduced/compromised immune system function
- Intestinal problems (e.g. abdominal pain, constipation, diarrhoea)
- Loss of or disturbance of menstrual periods in girls and women
- Increased risk of infertility in men and women
- Kidney failure
- Osteoporosis— a condition that can lead to human bones becoming fragile and easy to fracture
- Heart problems (e.g. cardiac abnormalities, sudden cardiac arrest)
- Death

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\textsuperscript{51} Ibid
\textsuperscript{52} National Centre on Addiction and Substance Abuse [CASA] at Columbia University, 2003
 MEDIA KIT

**Bulimia Nervosa:**
- Chronic sore throat, indigestion, heartburn and reflux
- Inflammation and rupture of the oesophagus and stomach from frequent vomiting
- Stomach and intestinal ulcers
- Chronic irregular bowel movements, constipation and/or diarrhoea due to deliberate misuse of laxatives
- Osteoporosis— a condition that can lead to human bones becoming fragile and easy to fracture
- Loss of or disturbance of menstrual periods in girls and women
- Increased risk of infertility in men and women
- Irregular or slow heart beat which can lead to an increased risk of heart failure

**Binge Eating Disorder:**
- Osteoarthritis - a painful form of degenerative arthritis in which a person’s joints degrade in quality and can lead to loss of cartilage
- Chronic kidney problems or kidney failure
- High blood pressure and/or high cholesterol leading to increased risk of stroke, diabetes and heart disease

**OSFED:**
- Weight loss, weight gain or weight fluctuations
- Loss of or disturbance of menstrual periods in girls and women and decreased libido in men
- Compromised immune system (e.g. getting sick more often)
- Signs of damage due to vomiting including swelling around the cheeks or jaw, callouses on knuckles, damage to teeth and bad breath
- Fainting and dizziness as a result of dehydration

**Warning signs of an Eating Disorder**

**Physical signs:**
- Rapid weight loss or frequent changes in weight
• Loss or disturbance of menstrual periods in girls and women and decreased libido in men
• Fainting or dizziness
• Feeling cold most of the time, even in warm weather (caused by poor circulation)
• Feeling bloated, constipated, or the development of intolerances to food
• Feeling tired and not sleeping well
• Lethargy and low energy
• Facial changes (e.g. looking pale, sunken eyes)
• Fine hair appearing on face and body

Psychological Signs:

• Preoccupation with eating, food, body shape and weight
• Feeling anxious and/or irritable around meal times
• An intense fear of gaining weight
• Refusal to maintain a normal body weight for the person’s age and height
• Depression and anxiety
• Slowing of thinking and increased difficulty concentrating
• ‘Black and white’ thinking - rigid thoughts about food being ‘good’ or ‘bad’
• Having a distorted body image (e.g. seeing themselves as fat when in reality they are underweight)
• Low self-esteem and perfectionism
• Increased sensitivity to comments relating to food, weight, body shape, exercise
• Extreme body image dissatisfaction

Behavioural Signs:

• Dieting behaviour (e.g. fasting, counting calories/kilojoules, avoiding food groups such as fats and carbohydrates)
• Deliberate misuse of laxatives, appetite suppressants, enemas and diuretics
• Repetitive or obsessive behaviours relating to body shape and weight (e.g. weighing themselves repeatedly, looking in the mirror obsessively and pinching waist or wrists)
• Evidence of binge eating (e.g. disappearance or hoarding of food)
• Eating in private and avoiding meals with other people
• Anti-social behaviour, spending more and more time alone
• Secrecy around eating (e.g. saying they have eaten when they haven’t, hiding uneaten food in their rooms)
• Compulsive or excessive exercising (e.g. exercising in bad weather, in spite of sickness, injury or social events and experiencing distress if exercise is not possible)
• Radical changes in food preferences (e.g. suddenly disliking food they have always enjoyed in the past, reporting of food allergies, food intolerances or becoming vegetarian)
• Obsessive rituals around food preparation and eating (e.g. eating very slowly, cutting food into very small pieces, insisting that meals are served at exactly the same time every day)
• Preoccupation with preparing food for others, recipes and nutrition
• Self-harm, substance abuse or suicide attempts
Possible risk factors

What causes an eating disorder?

The factors that contribute to the onset of an eating disorder are complex. No single cause of eating disorders has been identified; however, known contributing risk factors include:

- Genetic vulnerability
- Psychological factors
- Socio-cultural influences

Genetic vulnerability

There is some evidence that eating disorders have a genetic basis. The genes that are most implicated in passing on eating disorders are within biological systems that relate to food intake, appetite, metabolism, mood, and reward-pleasure responses. It has been shown that this genetic influence is not simply due to the inheritance of any one gene but results from a much more complicated interaction between many genes and quite possibly non inherited genetic factors as well.\(^{56}\)

Evidence suggests that chances of developing an eating disorder (and associated symptoms) are influenced by genetic factors, life stresses and psychological traits, and in the under taking any restriction of food and nutrition (dieting). The most recent admission statistics to the Eating Disorder Clinic at the Sydney Children’s Hospital Network campus at Westmead in Sydney confirm an increase in Eating Disorders in children. In the past 12 years admissions to the service have increased by 400%,\(^{57}\) with an average of 12 medically unstable patients admitted each month.

The genes that are most implicated in passing on eating disorders are within biological systems that relate to food intake, appetite, metabolism, mood, and reward-pleasure responses. It has been shown that this genetic influence is not simply due to the inheritance of any one gene but results from a much more complicated interaction between many genes and quite possibly non inherited genetic factors as well.

The biological causes of eating disorders are not well understood. This could be because the majority of studies are conducted during the acute or recovery phase of an eating disorder.


\(^{57}\) The Children’s Hospital Westmead – admission statistics to the Eating Disorders Clinic (as at July 2012)
At this time, there are physiological changes occurring in the person as a result of their eating disorder behaviours which can affect the findings of the studies. Studies conducted at the onset of an eating disorder could show different results.

**Psychological factors**

Research into Anorexia Nervosa and Bulimia Nervosa specifically, has identified a number of personality traits that may be present before, during, and after recovery from an eating disorder.

These include:
- perfectionism
- obsessive-compulsiveness
- neuroticism
- negative emotionality
- harm avoidance
- core low self-esteem
- traits associated with avoidant personality disorder

Specific additional personality traits may be associated with each type of eating disorder. It is also important to include that prolonged starvation induces change in cognition, behaviour, and interpersonal characteristics. It can therefore be difficult to discern the psychological causes from the psychological effects of eating disorders.

**Socio-cultural influences**

Evidence shows that socio-cultural influences play a role in the development of eating disorders, particularly among people who internalise the Western beauty ideal of thinness. Images communicated through mass media such as television, magazines and advertising are unrealistic, airbrushed and altered to achieve a culturally perceived image of ‘perfection’ that does not actually exist.

The most predominant images in our culture today suggest that beauty is equated with thinness for females and a lean, muscular body for males. People who internalise this ‘thin ideal’ have a greater risk of developing body dissatisfaction which can lead to eating disorder behaviours.
Like most other psychiatric illnesses and health conditions, a combination of several different factors may increase the likelihood that a person will experience an eating disorder at some point in their life.

**Modifiable risk factors**

It is possible to change some socio-cultural, psychological and environmental risk factors. The modifiable risk factors for eating disorders are identified as:

- Low self-esteem
- Body dissatisfaction
- Internalisation of the thin socio-cultural ideal
- Extreme weight loss behaviours

**Self esteem**

Low self-esteem has been identified by many research studies as a general risk factor for the development of eating disorders. Strong self-esteem has been identified as essential for psychological well-being and for strengthening the ability to resist cultural pressures.

**Body dissatisfaction or negative body image**

Poor body image can contribute to impaired mental and physical health, lower social functionality, and poor lifestyle choices. Body dissatisfaction, the experience of feelings of shame, sadness, or anger associated with the body, can lead to extreme weight control behaviours and is a leading risk factor for the development of eating disorders.

Body dissatisfaction is also linked to depression and low self-esteem and has been found to be widespread in adolescent girls in Australia.

**Internalisation of the thin socio-cultural ideal**

People who internalise and adopt the Western beauty ideal of thinness as a personal standard have a higher risk of developing an eating disorder.
Extreme weight loss behaviours

Disordered eating

Disordered eating is the single most important indicator of onset of an eating disorder. Disordered eating is a disturbed pattern of eating that can include fasting and skipping meals, eliminating food groups, restrictive dieting accompanied by binge eating and excessive exercise. Disordered eating can also include purging behaviours such as laxative abuse and self-induced vomiting.

Disordered eating can result in significant mental, physical and social impairment and is associated with not only eating disorders but also health concerns such as depression, anxiety, nutritional and metabolic problems and weight gain.

Dieting

While moderate changes in diet and exercise have been shown to be safe, significant mental and physical consequences may occur with extreme or unhealthy dieting practices.

Dieting is associated with the development of eating disorders. It is also associated with other health concerns including depression, anxiety, nutritional and metabolic problems, and, contrary to expectation, with an increase in weight.

Dieting and adolescents at risk

Puberty is a time of great change biologically, physically and psychologically. Teenagers are often vulnerable to societal pressures and can often feel insecure and self-conscious, factors that increase the risk of engaging in extreme dieting behaviour.

The act of starting any diet increases the risk of eating disorders in adolescent girls. Research shows that young people who engage in unhealthy dieting practices are almost three times as likely as their healthy-dieting peers to score high on measures assessing suicide risk.
Studies in Australia and New Zealand have found:

- Approximately half of adolescent girls have tried to lose weight and practise extreme weight loss behaviours such as fasting, self-induced vomiting and smoking
- As many as 75 per cent of high school girls feel fat or want to lose weight
- Young people who diet moderately are six times more likely to develop an eating disorder; those who are severe dieters have an 18-fold risk
- Among girls who dieted, the risk of obesity is greater than for non-dieters

**Protective Factors**

In contrast to risk factors, protective factors may reduce the likelihood of the development of an eating disorder. Protective factors have not been as widely studied as risk factors. There is a great need for further study in this area as research and clinical literature have suggested that specific individual factors may protect against disordered eating behaviours.

Possible protective factors against eating disorders and disordered eating behaviours can be separated into individual, family and socio-cultural groups.

**Individual protective factors**

- High self-esteem
- Positive body image
- Critical processing of media images (i.e. media literacy)
- Emotional well-being
- School achievement
- Being self-directed and assertive
- Good social skills with success at performing multiple social roles
- Problem solving and coping skills

**Family protective factors**

- Belonging to a family that does not overemphasise weight and physical attractiveness
- Eating regular meals with the family
Socio-cultural protective factors

- Belonging to a less westernised culture that accepts a range of body shapes and sizes
- Involvement with sport or industry where there is no emphasis on physical attractiveness or thinness
- Peer or social support structures and relationships where weight and physical appearance are not of high concern

Protective factors that reduce the likelihood of the development of an eating disorder often represent the opposite experience to that associated with risk. Examples of this are shown in the table below.
CASE STUDY - SCOPE OF THE PROBLEM

The Children’s Hospital Westmead (NSW)

Anorexia Nervosa (AN) is the third most common chronic disorder affecting adolescent girls (Beaumont, et al., 1993) with a lifetime mortality rate of up to 20 per cent (Steinhausen, 2002), a rate higher than for any other psychiatric disorder and 12 times greater than that of death from all causes in women aged 15-24 years (Sullivan, 1995).

Lifetime prevalence rates in women are 2.9 per cent for AN and 4.3 per cent for partial AN (excluding amenorrhea as a diagnostic criteria; Wade, et al., 2006) with onset primarily in adolescence (Lewinsohn, et al., 2000). AN prevalence in adolescents has increased over the past 50 years (Lucas, et al., 1999) while the age of onset decreased (Bryant-Waugh, 2000).

Young people with AN are at risk for developing serious and chronic health and mental health concerns (Pike & Moore, 1997) and other complications from malnutrition associated with AN including growth retardation, osteoporosis, infertility and changes in brain structure as well as psychological complications including depression, anxiety, obsessive compulsive disorder and cognitive impairment (Pike & Striegel-Moore, 1997; Katzman, et al., 2000).

Effective treatment is particularly critical in the child and adolescent patient group where early intervention reduces length of illness and improves recovery rates.

Recent randomised controlled trials and research has demonstrated an average length of illness in children and adolescents provided with an evidence based treatment called Family Based Treatment (FBT) of between 12 and 18 months with a 80 – 90 per cent 5 year recovery rate compared with an average length of illness of 7 years and a recovery rate of less than 50 per cent in patients treated as adults.

The Eating Disorder Team at The Children’s Hospital has been leading the development of FBT for children and adolescents with AN in Australia since 2003 (Wallis et al. 2007). FBT is now widely recognised as the treatment of choice for this age group.

Increased demand for service

The Children’s Hospital at Westmead Eating Disorder Service is the largest eating disorder service in NSW. It has a State-wide mandate for the treatment of children and adolescents with eating disorders and plays leading roles in research, teaching, training and supervising clinicians throughout NSW and Australia.
Since the commencement of the eating disorder service there has been a significant increase in demand for services with a 270 per cent increase in inpatient admissions since 2000 (30 inpatient admissions in 2000 increasing to 81 admissions on 2009) and a 1000 per cent increase in outpatient occasions of service since 2003 (298 outpatient appointments in 2003 increasing to 3157 appointments in 2009).

These increases in demand have occurred despite a statistically significant reduction in readmission rates between 2002 and 2006 from 2.08 admissions per patient to 1.26 admissions per patient per year and a reduction in length of illness through the introduction of family based treatment.

The statistical breakdown of admission per age and sex

<table>
<thead>
<tr>
<th>mid 2007-mid 2008</th>
<th>5 males</th>
<th>40 females</th>
</tr>
</thead>
<tbody>
<tr>
<td>6% 12 yo</td>
<td>44% 13 yo</td>
<td>44% 14 yo</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>mid 2008-mid 2009</th>
<th>2 males</th>
<th>52 females</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% 12 yo</td>
<td>25% 13 yo</td>
<td>35% 14 yo</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>mid 2009-mid 2010</th>
<th>7 males</th>
<th>49 females</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% 12 yo</td>
<td>20% 13 yo</td>
<td>60% 14 yo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2011</th>
<th>13 males</th>
<th>72 females</th>
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</thead>
<tbody>
<tr>
<td>4.7% &lt;12</td>
<td>56% 12-14</td>
<td>34% 15-16</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>2012</th>
<th>16 males</th>
<th>95 females</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6% &lt;12</td>
<td>53% 12-14</td>
<td>48.6% 15-16</td>
</tr>
</tbody>
</table>

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