Austin ACED

Adolescent and Child Eating Disorders

Austin HEALTH

Your Treatment Care Team

Paediatrician
Paediatric Nurse
Dietitian
FBT Therapist
Other mental health clinician/s
Psychiatrist
GP
School Contact/s

Contact Information

Emergency / Ambulance Victoria	000
Austin Hospital Switchboard	9496 5000
Eating Disorders Nurse	paediatriceatingdisorders@austin.org.au Phone 9496 5000, pager 5515
Austin CYMHS Intake	1300 859 789 (Option 1)

Details of Appointments

Clinician	Date of appointment	Location
Paediatrician		
Dietitian		
FBT Therapist		
Psychiatrist		
GP		
Other		

What are Eating Disorders?

Eating disorders affect males and females of all ages, of all socio-economic backgrounds, and of all shapes and sizes. Eating disorders are prevalent within our community.

Eating disorders are not lifestyle choices, or a ‘diet gone too far’. They are a serious mental illness that carries the highest mortality rate (from medical complications and suicide) of any psychiatric disorder. They can result in a multitude of physical complications.

Eating disorders are not phases that people snap out of and recovery requires treatment and support. With early appropriate treatment, dedication and hard work, recovery *is* possible.

Carers can play a pivotal role in this recovery process, and it is hoped that the information in this booklet will equip you with some of the knowledge you will require to steer your child towards health and happiness once more.

Eating disorders are serious mental health illnesses characterized by extreme concerns about weight, shape, eating and/or body image. These concerns lead to disordered and unhealthy patterns of behaviour, including restricting food intake, fasting, counting calories, vomiting, laxative abuse, and overexercise. These behaviours greatly affect a person’s physical, psychological and social functioning.

Types of Eating Disorders

Five of the more common types of eating disorders recognized by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) are Anorexia Nervosa, Atypical Anorexia Nervosa, Avoidant Restrictive Food Intake Disorder (ARFID), Bulimia Nervosa and Binge Eating Disorder.

Anorexia Nervosa (AN)

Anorexia Nervosa is characterized by persistent restricted intake leading to significantly low body weight. This is accompanied by an intense fear of weight gain. For a person with AN, self-worth is often very much caught up with weight, shape or control overeating. Individuals also often experience a distorted view of their body, believing that they are underweight when in fact they are dangerously underweight.

There are two types of AN – restricting subtype and binge/purge subtype. Restricting subtype refers to individuals who severely restrict the amount and type of food they eat. They may also engage in other weight control behaviours such as excessive exercise, and misusing laxatives or diuretics.

Binge/purge subtype also involves extreme restriction, but this is accompanied by episodes of binge eating and compensatory purging.

Atypical Anorexia Nervosa (AAN)

In Atypical Anorexia Nervosa all of the criteria for AN are met, except that despite significant weight loss, the individual's weight is within or above the normal range.

Avoidant Restrictive Food Intake Disorder (ARFID)

An ARFID diagnosis describes a disorder where an individual struggles to obtain adequate nutrition, in the absence of the fear of weight gain &/or preoccupation with weight and shape. Feeding or eating disturbances such as lack of interest in food or lack of appetite and aversion to certain textures lead to weight loss and slowed growth.

Bulimia Nervosa (BN)

Bulimia Nervosa is characterized by recurrent episodes of binge eating, followed by compensatory behaviours to control weight. Binge eating involves eating a very large amount of food within a short period of time and feeling out of control or unable to stop. Compensatory behaviours are ways of attempting to control weight or shape, including vomiting, misusing laxatives or diuretics, fasting, excessive exercise, or misusing over the counter or prescription medications for the purpose of weight control. Weight can fluctuate, and individuals often keep their eating and compensatory behaviours very secretive, and therefore the disorder can go undetected by friends and family.

Binge Eating Disorder (BED)

Binge eating disorder is characterized by regular episodes of binge eating, without compensatory behaviours. Individuals will often eat alone or in secret because of feelings of shame and guilt about their eating behaviours. Many people with BED are overweight

Eating Disorders and Neurobiology

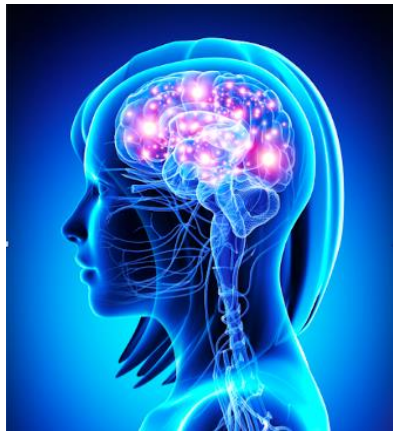
Our current knowledge, thanks to a growing body of scientific evidence, is helping us to better understand the neurobiology of these disorders: how they develop and how we can best support people to recover.

People with eating disorders and their loved ones may wonder how the disorder developed or blame themselves. Science can help dispel harmful myths and improve our understanding of the complexity of eating disorders. Through research we have come to understand that there is no single cause of eating disorders – for example, you don't have to have other psychological problems or trauma. However, it is common for eating disorders to develop after a period of caloric restriction or inadequate nutritional intake (intentional or through stress/illness).

The Role of Genetics in Eating Disorders

Mood, personality, anxiety and impulse regulation, as well as appetite, body weight and metabolism have a strong genetic basis (ie are heritable). On average, about half the risk of developing an eating disorder comes from genetic influence, but this risk differs from person to person. People with higher heritability need only a slight toxic environment for an eating disorder to manifest itself, while in a protected environment, may not go to develop an eating disorder.

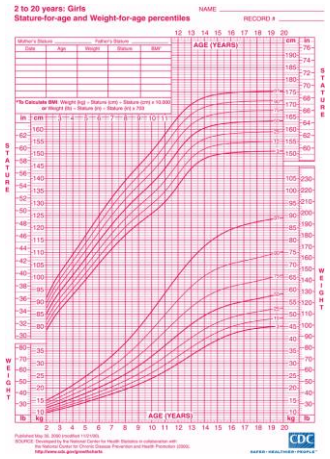
'Epigenetics' is the study of biological mechanisms that cause our Underlying genetic predispositions to be 'switched on' or 'switched off'. In certain environments, especially where there is a lot of stress and/or inadequate nutrition, the risk is higher – the genes might get 'switched on'.

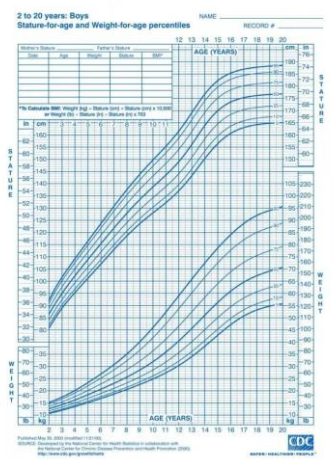


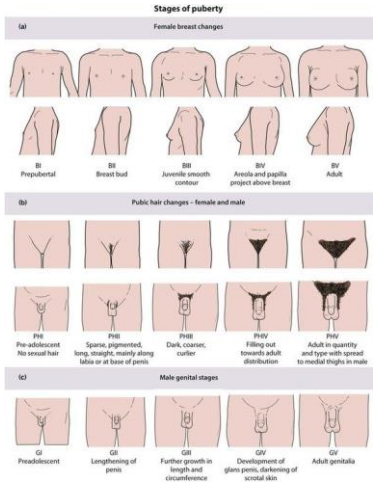
Some people worry that eating disorders are caused by a chemical imbalance in the brain, but there is no evidence for this. However, research has shown that brain activity can be affected by even modest dieting, and a young person's developing brain is particularly vulnerable. When a person is malnourished, their brain is not adequately fueled, and this may mean they struggle to make decisions, solve problems and regulate their emotions.

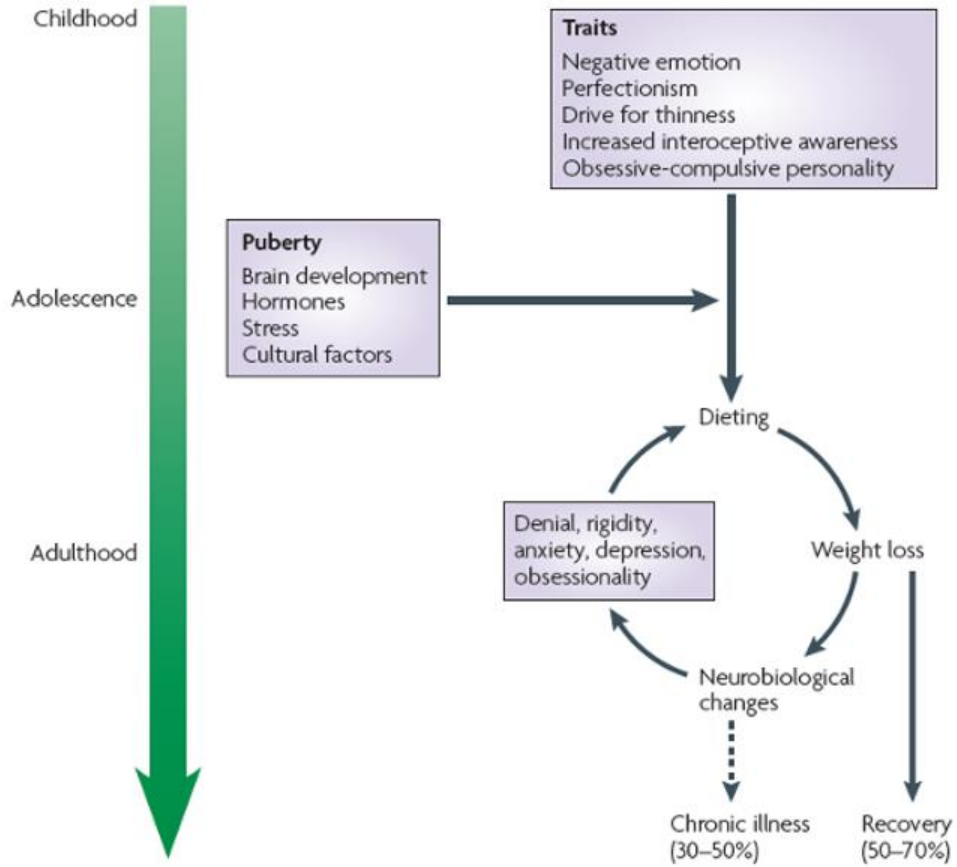
Also, although eating disorders aren't caused by a chemical imbalance in the brain, restricted eating, malnourishment, and excessive weight loss can result in problematic changes to brain chemistry. For example, the brain produces less serotonin, which results in increased symptoms of depression.

Adolescent Growth, Development and Maturation









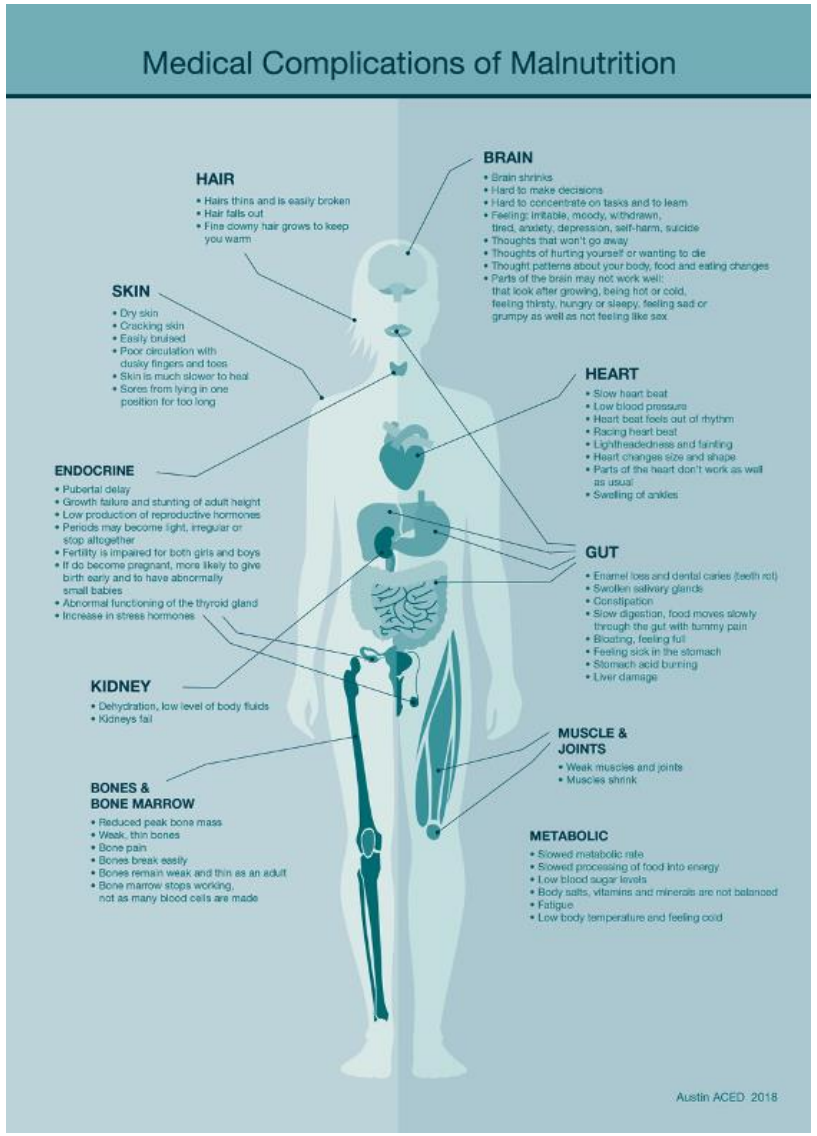
Adolescence is one of the most rapid phases of human development. Children undergo puberty and typically rapid rates of growth.

Important brain changes also take place during adolescence, often linked to the hormonal changes. Developments occur in regions of the brain, such as the limbic system, that are responsible for pleasure seeking and reward processing, emotional responses and sleep regulation.

At the same time, changes occur in the pre-frontal cortex, the area responsible for what are called executive functions: decision making, organization, impulse control and planning for the future.

Healthy brain development is critical for all facets of life, including for optimal learning and educational outcome.

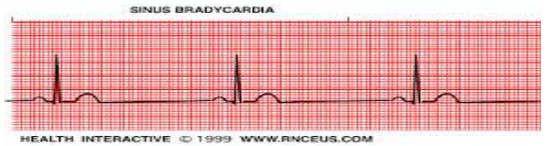
Medical Complications of Eating Disorders

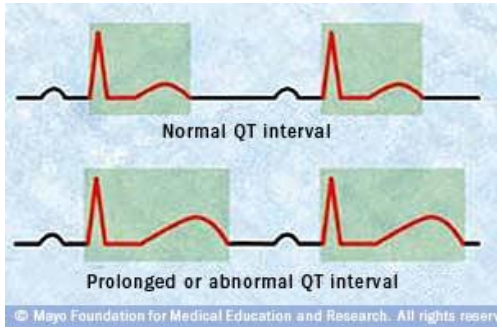


Restricting eating disorders including Anorexia Nervosa, Atypical Anorexia Nervosa and ARFID cause dehydration and malnutrition as a result of starvation. All individuals with an eating disorder need to regularly consult with a medical practitioner, to monitor and manage potential health risks and avoid more serious and irreversible changes. Adolescents are particularly vulnerable to lifelong medical risks including infertility and osteoporosis.

Heart

One very concerning medical risk of having an eating disorder is heart problems. Heart problems may cause a person to tire easily, feel light-headed and faint, be sensitive to the cold, have an irregular heartbeat, or experience chest pains. These heart problems are very serious and in extreme cases may lead to sudden death.





Medical Complications of Eating Disorders

When a person rapidly loses weight, the size and strength of their heart substantially decreases. As a result, their heart is not able to pump blood around their body as efficiently as it should. This can lead to feeling light-headed and dizzy when standing up suddenly from a sitting or lying position. Poor circulation can also cause cool and dusky fingers and toes. With gradual renourishment a person's heart can return to its normal size and strength and therefore pump more efficiently.

Electrolytes, or salts in the body such as potassium and sodium, help our muscles work properly. Since your heart is a muscle, electrolytes maintain its regular beat. Frequent vomiting or the use of laxatives or diuretics can cause fluid loss, which may lead to fluctuations in the body's electrolytes, and as a result cause an irregular heartbeat and possible heart attack.

Hormonal Changes

Eating habits and weight play an important role in our hormone levels. Disordered eating, compensatory behaviours, and being either above or below the weight that is healthy for our body can disrupt hormone production.

Hormonal regulators of growth can be affected with resulting growth failure with stunting of adult height.

Hormones that regulate metabolism, fertility, pregnancy and bone heath are also particularly affected by eating disorders.

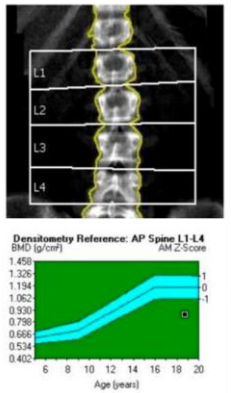
Low levels of the hormones estrogen, progesterone and testosterone can result in delayed puberty and reduced levels of fertility or infertility in individuals with an eating disorder. Menstrual periods may become light, irregular or stop altogether (called amenorrhoea if there has not been any menstrual bleeding in over 3 months). If an adolescent becomes pregnant, she is more likely to give birth early and to have abnormally small babies.

Abnormal functioning of the thyroid gland, and an increase in stress hormones can also occur.

Bones and Bone Marrow

Loss of bone density and bone mineral deficiencies are common in individuals with eating disorders. If damage or insufficient growth occurs during adolescence, an individual may not achieve their optimal bone density, increasing risk of osteoporosis. If low bone density develops, bones become fragile and are likely to break from the slightest injury or fall. Bone fractures, chronic pain and disability may occur.

Optimising nutrition, consuming a well-balanced diet rich in calcium and Vitamin D and K, reaching a healthy weight and body composition, such that there is regularity in menstrual cycling are all important factors in building and maintaining bone strength.



Medical Complications of Eating Disorders

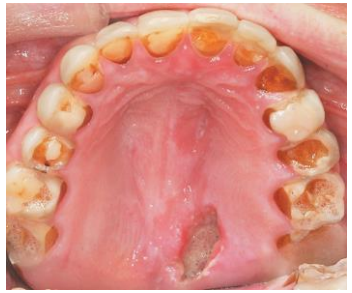
Metabolic

The metabolic rate slows with slowed processing of food into energy. Low blood sugar can occur due to inadequate carbohydrate stores within the body (called glycogen), and as previously mentioned imbalance of various salts, vitamins and minerals can arise.

Fatigue, poor exercise tolerance, cold intolerance and low body temperature is often seen.

Gut

Malnutrition causes slowed gut transit, digestion and constipation. Abdominal discomfort including feeding full and bloated, nausea, and pain are commonly present in patients with eating disorders. If a child is purging (vomiting), he/she may experience upper stomach pain due to reflux (a burning sensation from stomach acid), enamel loss, dental caries and swollen salivary glands. The liver can also be damaged with severe malnutrition.



Kidney

Kidney failure due to dehydration (low levels of bodily fluid) can occur.

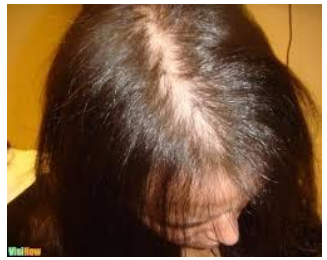
Muscles

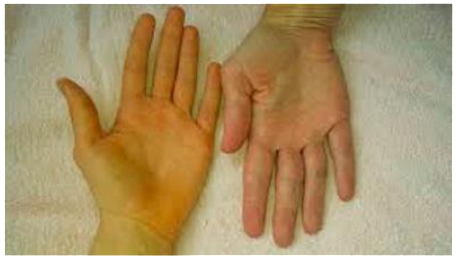
Muscles often weaken and shrink in size.

Skin and Hair

Skin is often dry, and much slower to heal. Sores from lying in one position for too long, and easy bruising is often observed. Skin can be yellow tinged due to a build-up of beta-carotene from an excessive intake of vegetables.

Hair often thins and becomes brittle, and eventually falls out. Fine downy hair (called lanugo) can grow on the side of the face and along the back to keep the body warm.





What is Starvation Syndrome?

When the body is starved of energy, the human body responds in a way known as ‘Starvation Syndrome’. Starvation syndrome refers to both the physiological and psychological effects of prolonged dietary restriction and are seen in any individual who has prolonged restricted access to food, irrespective of the reason (eg effects of an eating disorder, prisoner of war).

Physical changes seen in starvation syndrome include reduced heart muscle mass, low heart rate and blood pressure, feeling cold all the time, fluid retention, dizziness and blackouts, loss of strength and fatigue, hair loss and dry skin.

Emotional changes include depression, anxiety, irritability and a loss of interest in life.

Changes in thinking include impaired concentration, judgement and decision making, impaired comprehension, increased rigidity and obsessional thinking and reduced alertness.

Social changes include withdrawal and isolation, loss of sense of humour, feelings of social inadequacy, neglect of personal hygiene and strained relationships.

Attitudes and behaviour relating to eating also occur. These include thinking about food all the time, meticulous planning of meals, eating very fast or very slowly, increased hunger, binge-eating, tendency to hoard, and increased use of condiments for flavour.

Importantly, it is recognised that renourishment and weight restoration reverses not only the physical effects, but also the cognitive and psychological changes.

When the brain is properly nourished, it can carry out vital processes such as perception, problem solving, planning, memory, decision making and emotion regulation. These processes are essential for a person to engage in psychological treatment for their eating disorder.

This is why eating disorder treatment often begins with physical renourishment. Once semi-starvation has been corrected, an individual will be in a better position cognitively to address the underlying thoughts and feelings that keep disordered eating behaviours going.

Inpatient Medical Care

Your treatment care team will assist you in supporting your child through treatment in the community setting whenever possible.

However, your child may require **admission to Paediatric Ward 2 West** if she/he becomes medically unstable to ensure their safety. Some indications for admission include:

- Low heart rate
- Low blood pressure
- Abnormal changes in blood pressure and heart rate when standing from a seated position
- Heart rhythm abnormality
- Heart failure
- Recurrent fainting
- Low body temperature
- Abnormal salt levels including low phosphate, potassium and sodium
- Low blood sugar
- Dehydration
- Inability to eat or drink anything for greater than 48 - 72hrs
- Dangerously low body weight
- Rapid weight loss over consecutive weeks
- Arrested growth and development
- Associated physical or psychiatric conditions which preclude community treatment, such as severe depression and diabetes

Some indications for **admission to the child and adolescent psychiatric Marion Drummond Units** include**:**

- Suicidality, severe self-harm
- Uncontrolled eating disorder behaviours

Inpatient Medical Care

When patients meet clinical criteria for admission, patients are nursed in a supported ward environment, and an oral based rapid refeeding approach to consuming meals is encouraged from the outset to normalize eating patterns.

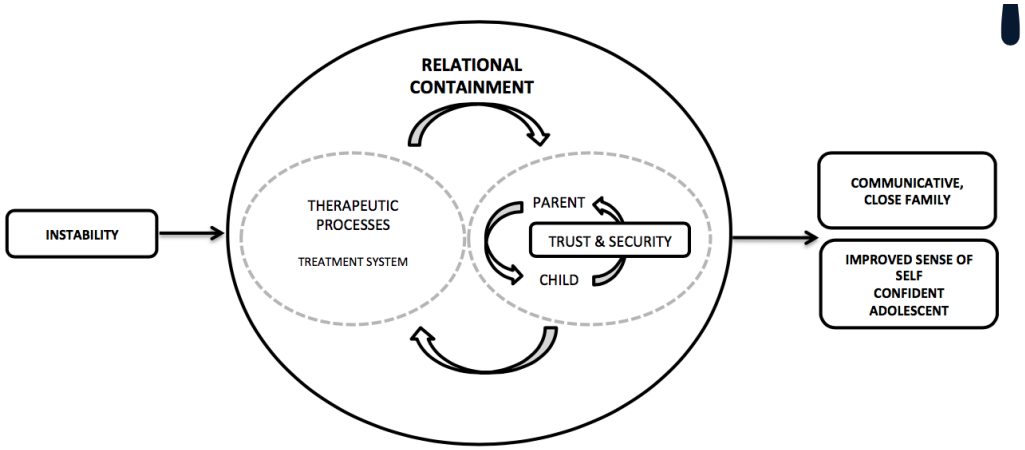
Meal replacement oral supplements and nasogastric regimes are utilized as second and third-line avenues in care respectively.

Patients receive inpatient mental health input to start to learn anxiety management and coping tools to more adaptively deal with emotional distress and challenging circumstances.

Patients are encouraged to engage in creative therapies including art and music and use other sensory tools to help self-soothe.

During the school term, patients also attend a ward-based school program so that the educational impact on the child from their illness is minimized.

What the Research Indicate



Family Based Treatment (FBT) is the internationally recognized first line treatment for eating disorders in children and adolescents with a duration of illness of less than three years.

FBT is divided into three phases of treatment. In Phase 1 the focus is on renourishing the body and weight restoration. In Phase 2 the control of eating is progressively handed back to the young person, and the adolescent is supported in developing independence in self-care. In Phase 3 adolescent issues which impede appropriate adolescent development are addressed, with the goal of assisting the family and young person to return to normal life without an eating disorder.

Research indicate that **early weight restoration positively predicts longer term physical and psychological recovery from an eating disorder**. In order to achieve this, diligent meal support and supervision by caregivers is required. Parents often need to take time off work to facilitate this, and children may require some time off school to reestablish healthier mealtime behaviours.

There are a number of **other evidence-based treatments** for patients with eating disorders.

Your treatment care team will advise you on optimal management strategies for your child to enable complete recovery from their illness.

Renourishing Your Child

It is important to understand that an adolescent recovering from an eating disorder has a much **higher than expected energy requirement** to repair and rebuild bodily tissue.

Eating regularly keeps your blood sugar levels steady, which minimizes tiredness, irritability and poor concentration, and improves metabolic functioning, thereby preventing the body from going into 'starvation mode'. Regular eating may also prevent binge eating.

'**RAVES**' (Regularity, Adequacy, Variety, Eating Socially and Spontaneity) is a useful acronym providing a step-by-step process to help with developing a healthy relationship with food.

Regular meals in the form of **3 main meals** (breakfast, lunch and dinner) with **3 snacks** (morning tea, afternoon tea and supper) are usually required for sufficient weight restoration. Main meals should consist of two generous courses & a nourishing drink, and snacks should consist of a generous food snack & a nourishing drink.

Diets need to be high in energy, protein, calcium, fats and oils. 'Fear foods' will need to be challenged throughout the treatment journey.

Renourishing – Adapt These Principles to Your Family!

Meal Support

Careful planning, care, patience and persistence is required for successful meal support of a child with an eating disorder.

Prior to meals

- Plan meals
- Shopping
- Limit meal choices
- Cooking and food preparation

During the meal

- Serve meals to sustain weight restoration and reverse medical complications
- Supervise and support distress during meals
- Don’t negotiate or rationalise with the eating disorder
- Be wary of common tricks of eating disorders such hiding of food, and patients feeding their pets during meals!

Post meal support

- Limit toileting and showers for ½ hour post meals
- Make finishing a meal a pleasant destination

Planning in advance lowers anxiety

Persistence overcomes resistance

You may find useful this video resources on meal support by the Kelty Mental Health Resource Centre useful:
https://www.youtube.com/watch?v=pPSLdUUlTWE

Managing Emotional Distress and Containment

Helping your child manage emotional distress is critical in treatment.

The following strategies may assist:

- Spending time with family and friends
- Engaging in creative therapies such as art and music
- Playing with pets
- Gardening
- Gentle and relaxing yoga such as Hatha Yoga

These activities can also help soothe and calm the senses and help your child ride the eating disorder waves:

- Stress balls and fidget toys
- Breathing exercises, grounding
- TV, movies
- Homework
- Journaling
- Looking at family albums
- Mindful colouring, drawing, painting
- Crosswords, board games, origami, Sudoku
- Warm bath and special blanket

Relationships and Self-Care

It is important that carers prioritise their own health and wellbeing in order to optimally support their child through their recovery. Treatment is often long and arduous, and self-care is critical in preventing carer burnout.

Austin ACED offers a number of eating disorders support groups which may be of benefit to your family. These include:

- Nourishing Parents Group
- Father's Group

Medical Information

Date	Height	Weight	TGW	% TGW

Clinician	Date	Weight, Lying SBP & PR, Standing SBP & PR, Temperature

Other Eating Disorders Resources

EDV Eating Disorders Victoria

Butterfly Foundation

Inside Out Institute

NEDC National Eating Disorders Collaboration

EDFA Eating Disorders Families Australia

FEAST Families Empowered and Supporting Treatment of Eating Disorders

Kelty Mental Mealth Resource Centre

Maudsley Parents

CEED Centre for Excellence in Eating Disorders – resource for clinicians

Books

Survive FBT, M Ganci

Helping Your Teenager Beat an Eating Disoder, J Lock and D Le Grange

My Kid is Back, J Alexander and D Le Grange

Skills-Based Caring for a Loved One with an Eating Disorders, J Treasure

References

CEED The Centre for Excellence in Eating Disorders

Centre for Clinical interventions

DSM-5 Diagnostic and Statistical Manual of Mental Disorders 5th Edition, 2013

Eating Disorders in Children and Adolescents, D Le Grange and J Lock, 2011

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November 2020

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