# RESEARCH INTO THE UNDERLYING THEMES OF THE FILM



# EATING DISORDERS

"Eating disorders are characterised by an abnormal attitude towards food that causes someone to change their eating habits and behaviour"

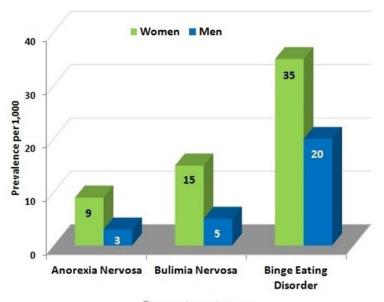
Someone with an eating disorder is seen to excessively focus (negatively) on their weight and body shape, consequently leading them to making unhealthy decisions concerning food in order to change their

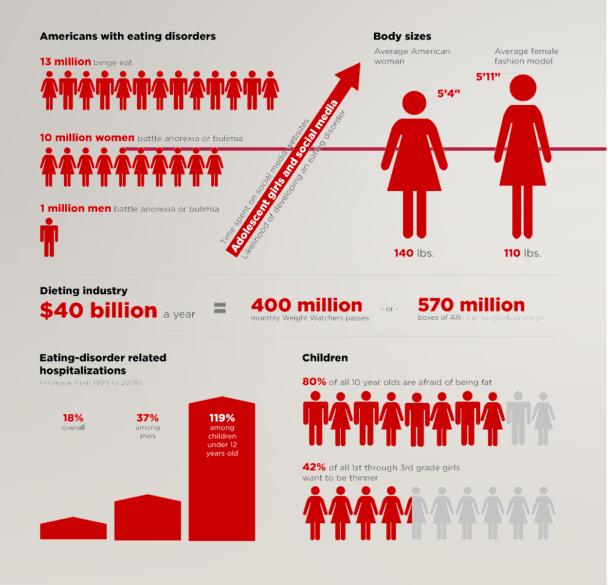
appearance; however, this causes damaging effects of their wellbeing.

### 3 Types:

- anorexia nervosa
- Bulimia
- binge eating disorder (BED)

#### Lifetime Prevalence of Eating Disorders

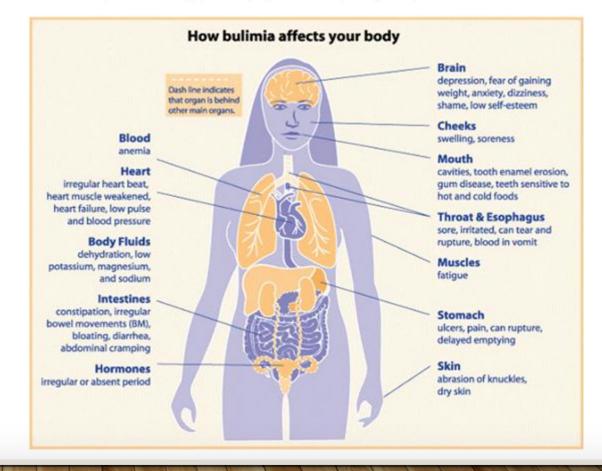




#### **Effects of bulimia**

When you are living with bulimia, you are putting your body—and even your life—at risk. The most dangerous side effect of bulimia is dehydration due to purging.

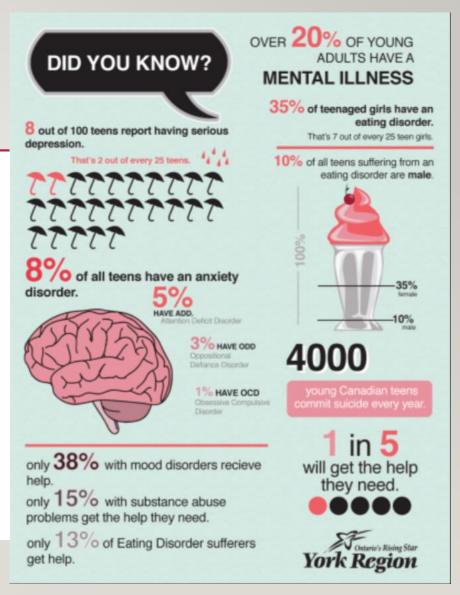
Vomiting, laxatives, and diuretics can cause electrolyte imbalances in the body, most commonly in the form of low potassium levels. Low potassium levels trigger a wide range of symptoms ranging from lethargy and cloudy thinking to irregular heartbeat and death. Chronically low levels of potassium can also result in kidney failure. Using ipecac syrup is also very dangerous, and can cause sudden death.



## **ANXIETY**

Here are some examples of how you might feel if you are anxious:

- + Worried
- + Upset
- + Feeling sick
- + Feeling shaky/dizzy
- + Feeling like you might faint/pass out
- + Thinking unpleasant thoughts
- + Thinking that you might "go crazy"



# THE ANATOMY OF ANXIETY

TIME Diagram by Joe Lertola. Text by Alice Park

#### WHAT TRIGGERS IT ....

... AND HOW THE BODY RESPONDS

When the senses pick up a threat-a loud noise, a scary sight, a creepy feeling-the information takes two different routes through the brain

By putting the brain on alert, the amygdala triggers a series of changes in brain chemicals and hormones that puts the entire body in anxiety mode





#### STRESS-HORMONE

Responding to signals from the hypothalamus and pituitary gland, the adrenal glands pump out

high levels of the stress hormone cortisol. Too much cortisol shortcircuits the cells in the hippocampus, making it difficult to organize the memory of a trauma or stressful experience. Memories lose their context and become fragmented



#### RACING HEARTBEAT

The body's sympathetic nervous system, responsible for heart rate and breathing, shifts into overdrive. The heart beats

faster, blood pressure rises and the lungs hyperventilate. Sweat increases, and even the nerve endings on the skin tingle into action, creating goose bumps



#### FIGHT, FLIGHT OR

RIGHT The senses become hyperalert, drinking in every detail of the surroundings and looking for potential new threats. Adrenaline shoots to the muscles, preparing the body to fight or flee



#### DIGESTION SHUTDOWN

The brain stops thinking about things that bring pleasure, shifting its focus instead to identifying potential dangers. To

ensure that no energy is wasted on digestion, the body will sometimes respond by emptying the digestive tract through involuntary vomiting, urination or defecation

#### THE HIGH ROAD

Only after the fear response is activated does the conscious ind kick into gear. Some sensory information, rather than traveling directly to the amygdala, takes a more circultous route, stopping first at the thalamus—the processing hub for sensory cues-and then the cortex-the outer layer of brain cells. The ortex analyzes the raw data streaming in through the senses and decides whether they require a fear response. If they do, the cortex signals the amygdals, and e body stays on alert

#### **Auditory** and

isual stimuli Sights and sounds are processed first by the thalamus, ich filters the coming cues and hunts them either directly to the amygdala or to the appropriate parts of the cortex

#### 2. Offactory and tactile stimuli

Smells and touch sensations bypass the thalamus altogether, taking a shortcut directly to the amygdala. Smells, therefore, often evoke stronger memories or feelings than 60 sights or

#### Thalamus 4. Cortex The hub for sights

It gives raw sights and sounds meaning, enabling the brain to become conscious of and sounds, the down incoming visual cues by size, shape what it is seeing or and color, and hearing. One region, auditory cues by the prefrontal cortex, may be vital to volume and dissonance, and turning off the anxiety response then signals the appropriate parts of once a threat has the cortex passed

7 Locus

ceruleus

Ory stimuli

#### 5. Amygdala

The emotional core of the brain, the amygdala has the primary role of triggering the fear response. Information that passes through the amygdala is tagged with emotional significance

#### 6. Bed nucleus of the stria

Unlike the amygdala, which sets off an immediate burst of fear, the BNST perpetuates the fear response, causing the longer-term unease typical of anxiety

#### 7. Locus ceruleus It receives signals

from the amygdala and is responsible for initiating many of the classic anxiety responses: rapid heartbeat, increased blood pressure, sweating and pupil

#### Hippocampus

This is the memory center, vital to storing the raw information coming in from the senses, along with the emotional baggage attached to the data during their trip through the

#### Science Donnie S. Characy, M.D., National Institute of Westpl Health