

Introduction

Group 6's Presentation on "Food for Thought: A Guide to Eating Disorders"



Why Did We Pick This Topic?

We wanted to learn and understand the effect that socioeconomic factors have on the development of eating disorders.

We also wanted to research the relationship between various demographic factors and eating disorders.

How Was The Art Created?

Inspiration:

Google Images

Canva

Art Platforms:

ibisPaint X

Google Slides



Main Art Inspiration

ANIMAL FUN

ANIMAL RASCALS

5 mischief-makers you'll never forget

Do you know people who are clever or sneaky, who enjoy pulling crazy pranks or fooling you? Sometimes animals exhibit this same type of behavior. See for yourself with these five stories about animal tricksters.



1 UP AND OVER

One day, Mavis Knight, of Toronto, Canada, spots a raccoon on her garage roof. From there he climbs a nearby tree until he reaches the utility lines. Then he stands up on the bottom of the wire, holds the top one, and side-steps across—all the way to a neighbor's backyard.

A week later, he does it again.

Why? A tall, wooden fence separates the properties. Instead of taking time to run around the barrier, this

furry daredevil has found a quicker "highway" over the top. "He's very clever," Knight says. "I'm no longer angry at him. I just enjoy him." It's like having front-row seats at the circus.



A RACCOON USES A NEIGH WIRE TO GET FROM YARD TO YARD.

2 PULLING TEETH

Bill Exner of Waterville, Maine, U.S.A., is eating a peanut butter sandwich in bed when he gets sleepy. So he takes out his false teeth, sets them on the nightstand, and falls asleep.

The next morning, his teeth are gone! He searches under the bed and behind the dressers. No nearby whites. Then, Exner remembers seeing a mouse near his bed the night before. He pries off the baseboard, shines a flashlight into the space behind the wall, and... ah ha! Exner spots his dentures—safe and licked clean. He livetraps two sneaky little mice, then releases them on a college campus. Luckily, it's not a law school.



3 GONE FISHIN'

Bailey the Labrador retriever has eaten something he shouldn't. "His owners see it poking out behind his rib cage, but they don't know what it is," says Gary Stoniker, a veterinarian in Spooner, Wisconsin, U.S.A. The vet takes the dog in for an x-ray. What do they see? A 24-inch (61-cm) ice-fishing pole!

Stoniker thinks Bailey was chewing the handle when he stretched his neck, making the pole slide right into the puppy's mouth. His swallowing reflex kicked in, and down it went.

The vet reaches down Bailey's throat with long-handled tweezers and "fishes" out the hookless pole.



THIS X-RAY OF BAILEY'S INWARDS SHOWS THE ICE-FISHING POLE HE SWALLOWED.

THE ROD THAT BAILEY SWALLOWED HAS SIMILAR TO THIS ONE BUT DIDN'T HAVE THE REEL ATTACHED.



4 SWEET THIEF

Huh? Jo Adams opens her candy store in Estes Park, Colorado, U.S.A., to find dirt on the checkout counter and a candy tin on the floor. Curious, she plays the video from her surveillance cameras.

A small black bear can be seen sliding his claws under the locked front door and jiggling it open. The store is packed with yummy treats, but the bear chooses to chow down on only peanut butter cups, English toffee, fudge balls, and rice cereal treats. Then he tops it all off with four big cookies called—drumroll, please—cookie bears.

5 NIGHT MUSIC

It's a humid July evening in Katonah, New York. At the Caramoor Music Festival, an opera is being performed on an outdoor stage. The audience falls silent as one of the female stars begins to sing. *Tra-la-la... CROAK!* *Tra... CROAK!* *La... CROAK!*

Opera goers look at each other. They shift in their seats. "The croaking sounds very loud and very close," says Paul Rosenblum, managing director of the festival. By Act 2, Michael Barrett, head of Caramoor at the time, can't stand it anymore. Wearing dress clothes, he leaves his seat and goes backstage. He climbs a ladder onto the roof of the nearest building. And there's the culprit: a lone frog no bigger than a golf ball. Barrett catches the little loudmouth and releases him in the woods. The opera continues. And the famous soloist no longer sounds like she has a frog in her throat.



AMAZING ANIMALS



Why did we decide to make our topic into a children's book?

1. To Raise Awareness

By presenting eating disorders in an age-appropriate manner, our nonfiction children's book works to destigmatize these conditions and increase understanding.



Why did we decide to make our topic into a children's book?

2. To Educate adolescents about risk factors



By outlining the prevalence of common eating disorders by SES and demographic factors, the readers will develop a steady grasp on the myriad of factors that contribute to disordered eating.

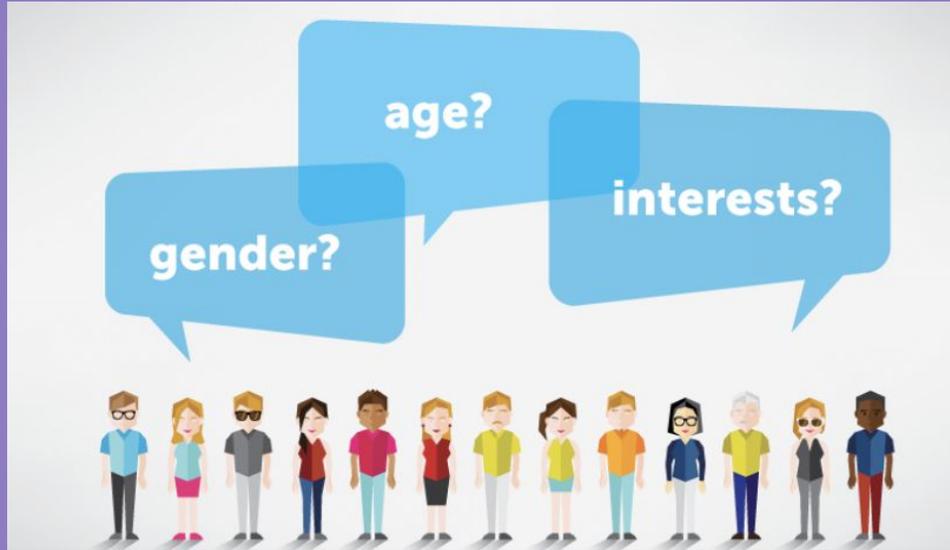
Why did we decide to make our topic into a children's book?

3. To Encourage Early
Intervention/Preventive measures

By helping the audience recognize the warning signs and implement preventive methods, our book hopes to reduce the likelihood of the reader developing an eating disorder.



Who is our target audience and why?



Our target audience:

- Mainly consists of young, adolescent girls (around middle school-aged)

Likewise, our book can be a helpful resource to their families, friends, and caregivers.

Overall, our book is a good resource for anyone who wants to educate a younger audience about eating disorders!

Contributions

- Jackie and Jaelyn gathered the educational content of the book by dividing the information of each eating disorder based on the Literature Review.
- Likewise, they researched additional information (i.e. risk factors, social media affects, and preventative strategies).
- Briana organized the slides by ordering, structuring and designing the art.



Food for Thought: A Guide to Eating Disorders



By: Jacqueline Medda, Jaelyn Derisse, Briana Smith

Content Warning and Trigger Warning

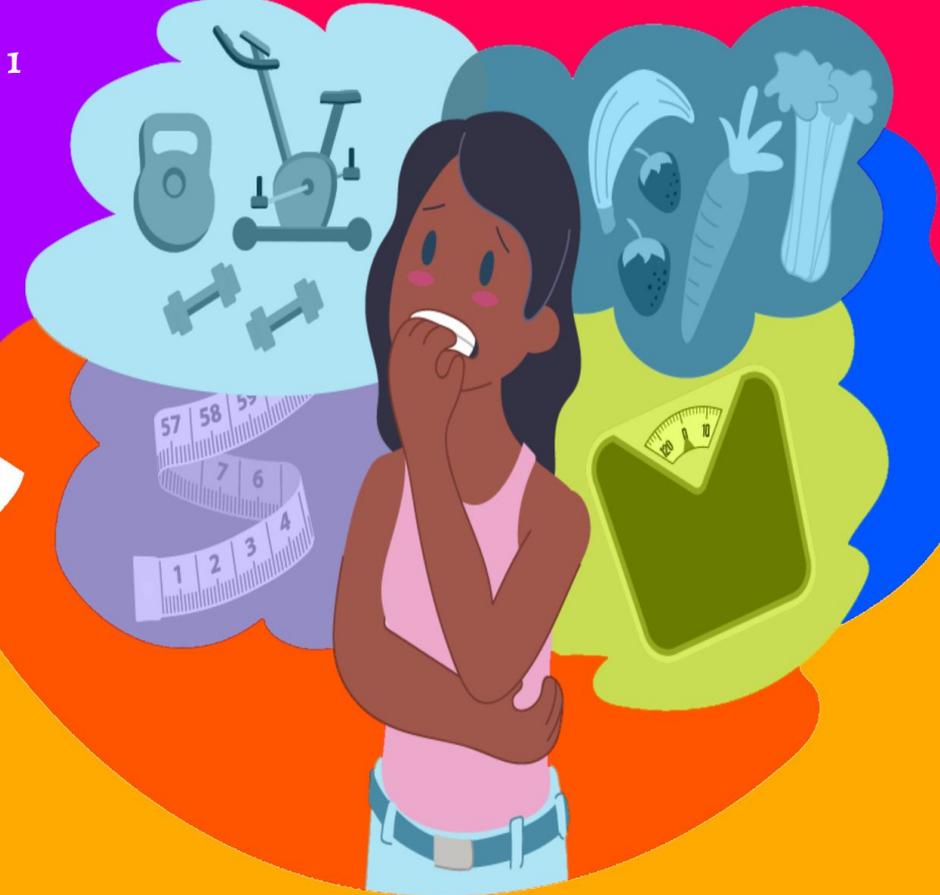
This book contains themes related to eating disorders, including restrictive eating, binge eating, and body dysmorphia. It may be triggering for readers who have experienced or are currently experiencing disordered eating patterns. Please exercise caution when reading and seek support if needed.

Hotlines for those suffering from eating disorders:

1. National Eating Disorders Association Helpline: 1-800-931-2237
2. Crisis Text Line: Text "NEDA" to 741741
3. National Association of Anorexia Nervosa and Associated Disorders Helpline: 1-630-577-1330
4. Eating Disorders Hope Helpline: 1-888-745-0112

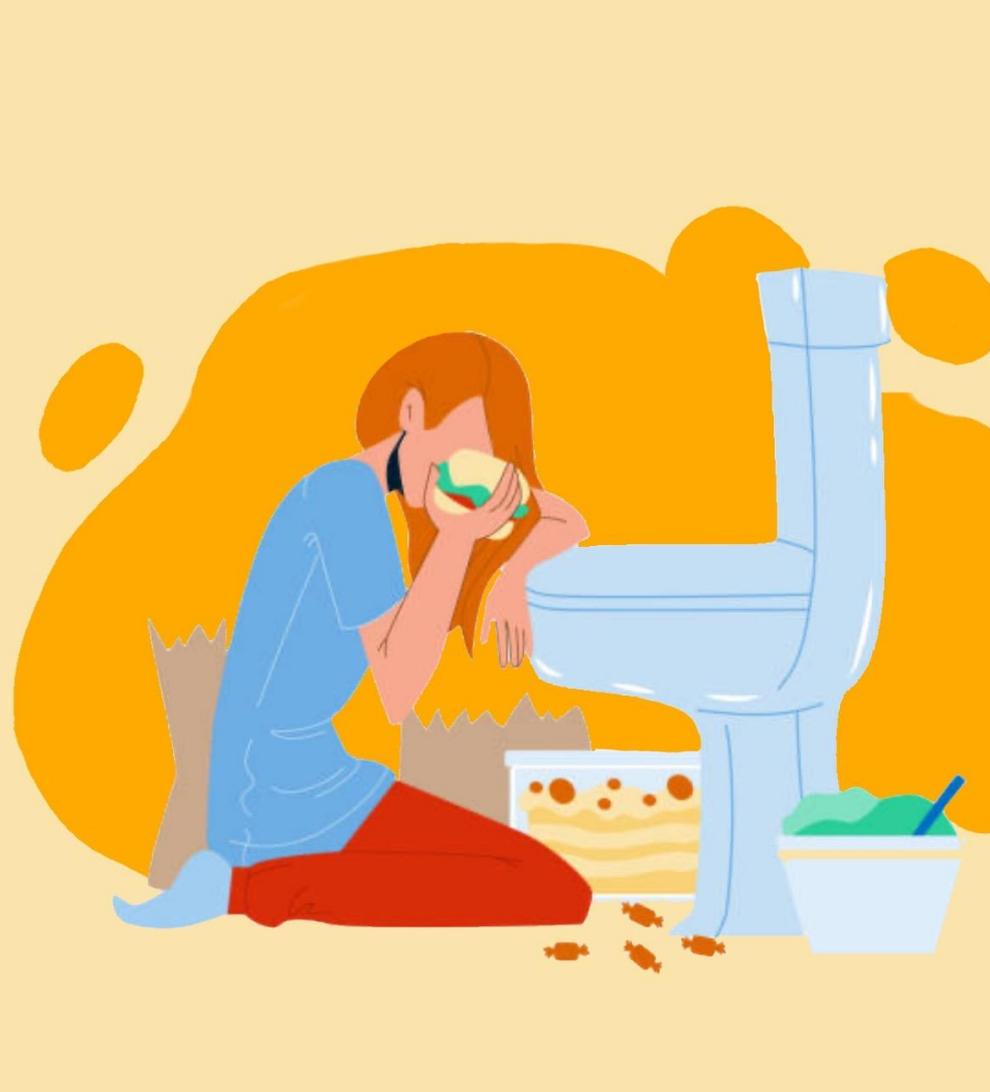
Table of Contents

What are eating disorders?	Pg 1
What is anorexia nervosa?	Pg 3
BMI Scale	Pg 4
Anorexia nervosa and Body Dysmorphia	Pg 5
What is bulimia?	Pg 6
What is binge eating disorder?	Pg 6
Prevalence of anorexia nervosa	Pg 7
Prevalence of binge eating and bulimia	Pg 8
Eating disorders in children and teens graphic	Pg 9
Socioeconomic factors of anorexia	Pg 10
Socioeconomic factors of binge eating	Pg 11
Socioeconomic factors of bulimia	Pg 12
Social support	Pg 13-14
Case 1	Pg 15
Case 2	Pg 16-17
Case 3	Pg 18-19
Social media and Eating Disorders	Pg 20-21
How to reduce your risk	Pg 22-23
Final tips	Pg 24
References	Pg 25-27



What are eating disorders?

Eating disorders are characterized by a persistent disturbance of eating or eating-related behavior, leading to the altered consumption of food, therefore severely impairing physical and psychosocial functioning. The most common eating disorders which will be discussed in this book are anorexia nervosa (AN), bulimia nervosa (BN), and binge-eating disorder (BE).

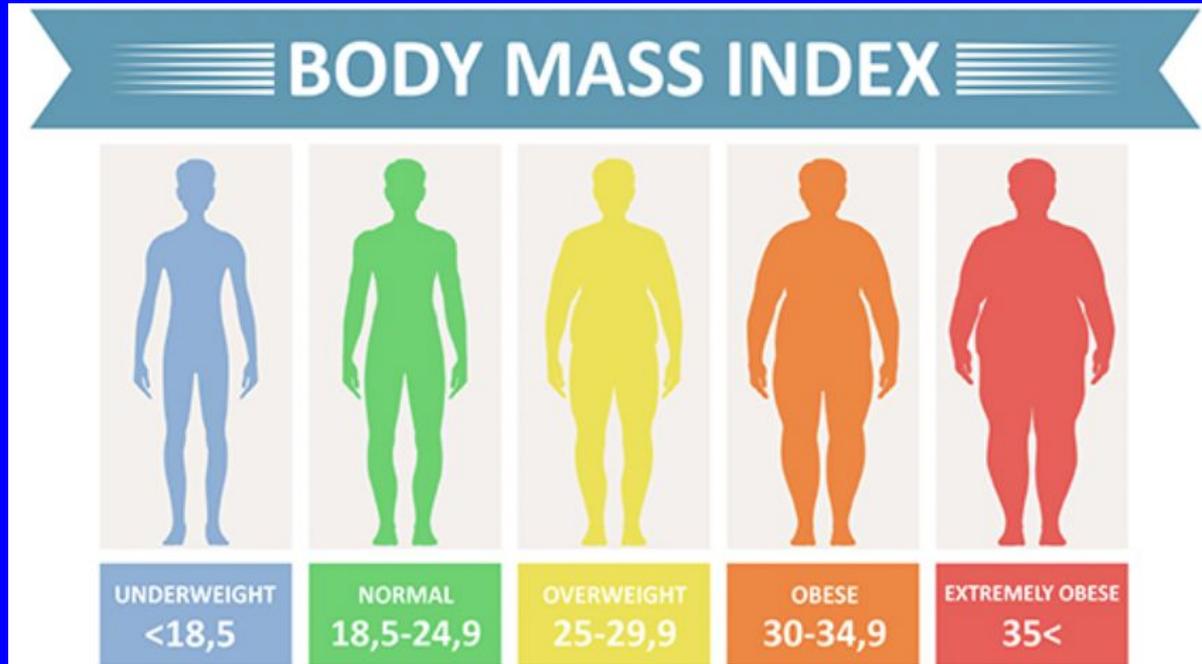


Anorexia Nervosa

Anorexia nervosa is categorized by three essential characteristics: a distorted perception of one's body, an intense fear of gaining weight, and consistent behavior to reduce the likelihood of gaining weight—resulting in periods of starvation and extreme weight loss. For additional context, A BMI (body mass index) of 18.5 kg/m² is on the lower limit of a healthy body weight for adults. Therefore, a case of “mild” anorexia is identified with a BMI of 16-16.99 kg/m².



BMI SCALE



Anorexia Nervosa and Body Dysmorphia

Regardless of their emaciated outward appearance, many AN (anorexia nervosa) patients believe themselves to be grossly overweight—displaying vital symptoms of body dysmorphia. Body dysmorphia is categorized as the obsessive disconnect between one's outward appearance and their perception of themselves. Likewise, AN patients employ various methods to further obsess about their perceived flaw (frequently checking their appearance in the mirror and excessively weighing themselves on a scale). Although many AN patients are aware of their thinness, oftentimes they are in denial about the severity and high risk implications of their behavior.



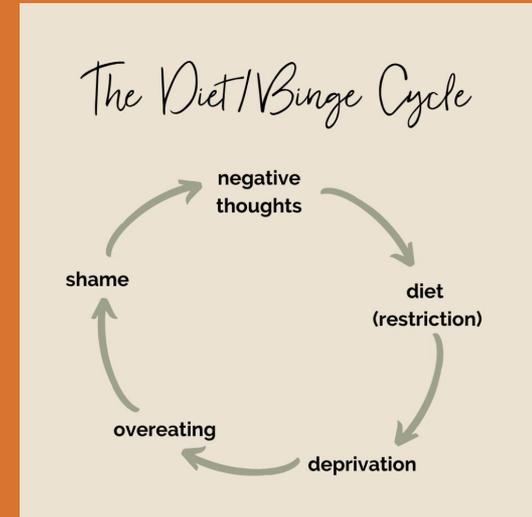
Bulimia

Bulimia is defined as recurrent inappropriate behavior such as periods of bingeing followed by self induced vomiting.



Binge Eating

Binge eating is the excessive intake of food followed by intense feelings of guilt and a desire to eat alone to avoid embarrassment.



7 Prevalence of Anorexia

Gender

The prevalence of anorexia nervosa is greatly dependent on sex. The clinical population of AN patients typically reflect a 10:1 ratio of female-to-male patients. The lifetime prevalence of eating disorders has been estimated between 8.4% for women and 2.2% for men, globally.



Age

Alongside gender, age plays a role in one's likelihood of developing anorexia nervosa. Anorexia nervosa commonly originates between a period of young adolescence to young adulthood. The median age of onset for AN is reported to be 17.0 years.

Prevalence of Binge Eating and Bulimia

Binge eating is found most commonly amongst women and younger girls. Many BE patients report feeling a “loss of control” and guilt. Binge eating is most prevalent within the Hispanic Population.



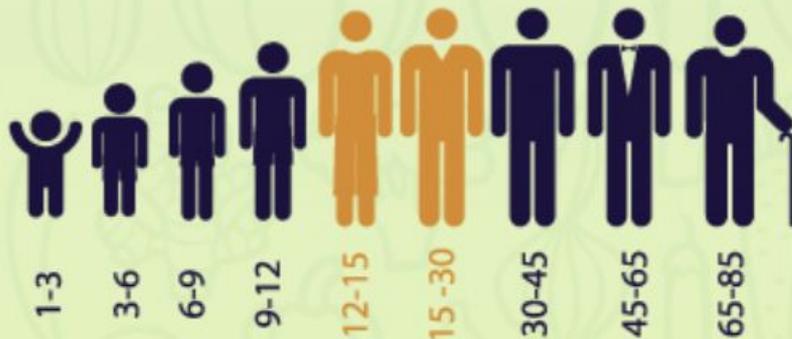
The lifetime prevalence of Bulimia shows a female-to-male ratio of 3:1, and average age of onset 16–17 years. In terms of race, it is highest among the Hispanic/Latino population (2%), and African-Americans (lowest in non-Latino whites).

EATING DISORDERS CHILDREN AND TEENS

95%

OF EATING DISORDER
CASES OCCUR IN
PEOPLE AGES

12 THROUGH 25





Social Stratification



Socioeconomic Factors of Anorexia

Anorexia nervosa is more prevalent in high-income, post-industrialized countries such as many countries in the EU, Australia, Japan, New Zealand, and the United States.

However, the incidence of anorexia nervosa in most low/middle-income countries is uncertain due to food insecurity.

Social Stratification



11 Socioeconomic Factors of Binge Eating

Adolescents of a higher socioeconomic status are more likely to face BE than children of a lower status, however, food insecurity: the limited access to nutrition and quality foods, is the main cause for people of a lower-class to engage in binge eating.



12 Socioeconomic Factors of Bulimia



Outside of demographic factors, many factors such as income, educational status, employment and social support can affect people's dietary habits. Similarly to binge eating disorder, Bulimia can be attributed to food insecurity. There is a greater risk of food insecurity for people going through financial difficulties.

Social Support



Social support is also a meaningful factor that can be associated with the development and maintenance of eating disorders. Social support is defined as the resources provided by one's social network with the intention to increase one's coping ability. Think of the people who you reach out to for social support?

- There is an association between a lack of social support and clinical and subclinical bulimia nervosa.

Social Support

- Undergraduate students with lower social support experienced greater bulimic symptoms when faced with negative life events.
- Higher social support was associated with greater calorie consumption through lower stress perception among individuals with high dietary restraint.





Case 1

Answer: Binge Eating

This is Dana Beezer. She is a Hispanic 12 year old girl that lives in a low income neighborhood in Philadelphia. Her favorite color is blue and she has a cat named Harley. Recently, Dana has become more self conscious of her appearance as her BMI is above average for her age. Due to a multitude of stressors and insecurities, Dana has started eating more frequently. After episodes of indulging in a variety of unhealthy foods, Dana begins to feel immense guilt associated with her actions. Knowing her age, race, SES, and additional factors, what is the most probable diagnosis for Dana?

16 Case 2



This is Bette Smith! She is a White 14 years old girl from an upper middle class family located in the suburbs of Maryland. Some of her favorite activities include art (specifically sculpting), going on hikes, spending time with her two younger siblings, and reading science fiction novels! Despite her tendency to spend her time outdoors or with family, Bette has been consuming an alarming amount of unsupervised content on social media.

Case 2 (cont)

Answer: Anorexia

Bette spends hours a day scrolling past posts that encourage dieting, excessive exercise, and counting calories. Due to her unsupervised access to such content, Bette has begun counting her calories and restricting her intake of food, specifically—carbs. Likewise, Bette developed an unhealthy relationship with exercise. Bette exercises everyday for multiple hours prioritizing cardio workouts. Regardless, Bette is unhappy with her appearance and can not recognize herself when she looks in the mirror. Due to her recent behaviors, Bette lost an alarming amount of weight and now has a BMI of 16.5 kg/m². Knowing her age, race, SES, and additional factors, what is the most probable diagnosis for Bette?





Case 3

This is Maria Garcia. She is a Hispanic 17 year old high school student who lives in a low income neighborhood in New Jersey with her parents, older brother and younger sister. Her favorite activities include going to the park with her best friends, going to the movies, skateboarding, and writing music. Maria and her friends have been looking forward to the summer as it will be the summer following their graduation and her best friend, Jane Henry, won't stop talking about her "summer bod." Maria begins to think more about her weight as she wants to achieve her summer body, but her family's pantry mainly consists of sweets and processed foods.

Case 3 (cont)

Answer: Bulimia

Maria's access to healthy food is limited to when her father cooks dinner once every few weeks. As a result, she begins binging on the sugary snacks in her pantry and shortly follows this by purging (self-induced vomiting). Due to her actions, her weight has begun to fluctuate. Maria expressed her concern to her parents about wanting to lose weight, but they felt as if Maria were being too paranoid and dismissed her concerns. Her mom had also implied they wouldn't be able to afford many nutritious foods as the grocery stores nearby didn't sell the healthiest options. Knowing her SES, age, race, and additional factors, which eating disorder is Maria struggling with?

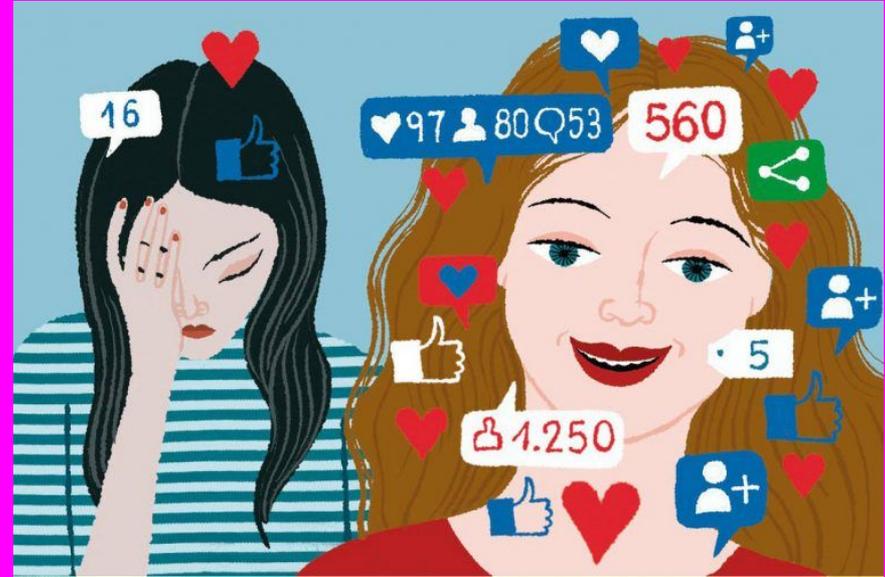


Social Media use and Eating Concerns among U.S. Young Adults

A 2016 study found that higher social media use was associated with greater eating concerns, including higher levels of body dissatisfaction, disordered eating behaviors, and negative beliefs about body image. This association was particularly strong among female participants.



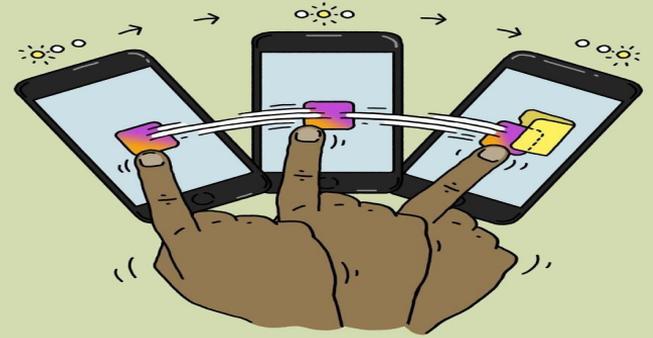
The comparison of oneself to another is common amongst those who use social media, causing body dissatisfaction and eating concerns. Social media can be harmful to adolescents and young adults, therefore, people should minimize their daily media consumption.



Reduce Your Risk!



Restrict screen time on social media platforms (set time limits on the app or general settings on your smart gadget).



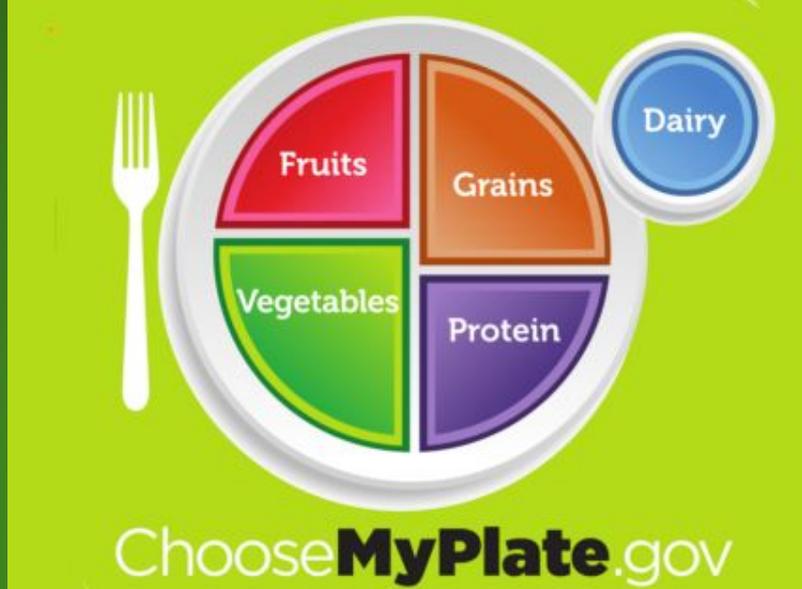
Block pro-eating disorder content! (ED twt; eating disorder Twitter, ED facebook groups, Tumblr hashtags, etc.) Stay away from groups/accounts dedicated to glorifying eating disorders.



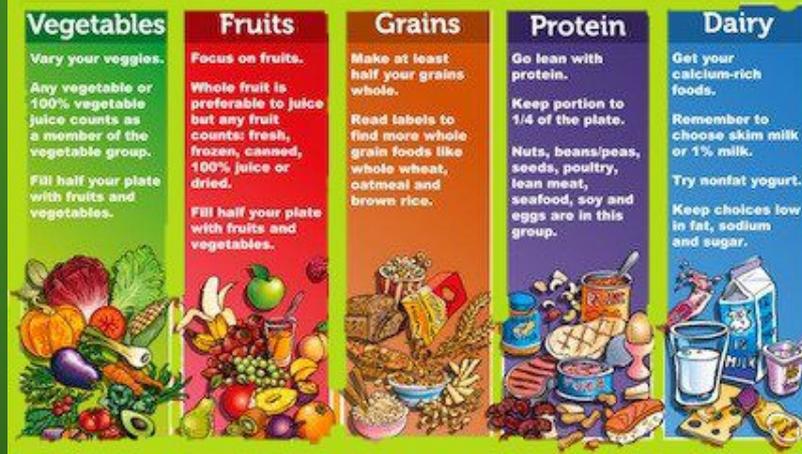
Be aware of the language associated with pro-eating disorder content and do not engage in it. Oftentimes, the words have multiple forms of spelling to avoid getting restricted by social media platforms (pro-ana, pro-mia, thinspo/th1nspo/th1nsp0)

23
Avoid engaging in diet culture (unless you are placed on a diet by your physician or dietician).

Avoid abusing dietary supplements (example: laxatives, any product that induces weight loss)



Avoid eating alone, instead enjoy meals surrounded by your family or friends.



Follow the FDA's Dietary guidelines for Americans.

Final Tips!

- **Positive mindset** (Not being too hard on yourself)
- **Strong social support** (having family or friends to rely on in need)
- **Resisting social pressures** (avoid engaging in toxic relationships with peers, surround yourself with people who don't apply pressure on your or their own image)
- **Communicate feelings/thoughts** (Express stress and anxiety related concerns as internalized stress can lead to eating disorders)
- **Daily exercise** (sixty minute exercising everyday or frequently can help build towards body acceptance and/or mental clarity)
- **Be aware of the warning signs and reach out for help** if needed (tell a trusted family member and/or your physician about your symptoms)



References

- Argyrides M, Anastasiades E, Alexiou E. (2020). Risk and Protective Factors of Disordered Eating in Adolescents Based on Gender and Body Mass Index. *International Journal of Environmental Research and Public Health*, 17(24):9238. <https://doi.org/10.3390/ijerph17249238>
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders. *Diagnostic and Statistical Manual of Mental Disorders*, 5(5), 339–342. <https://doi.org/10.1176/appi.books.9780890425596>
- Burke, Hazzard, V. M., Schaefer, L. M., Simone, M., O'Flynn, J. L., & Rodgers, R. F. (2022). Socioeconomic status and eating disorder prevalence: at the intersections of gender identity, sexual orientation, and race/ethnicity. *Psychological Medicine*, 1–11. <https://doi.org/10.1017/S0033291722001015>
- Castillo, M., & Weiselberg, E. (2017). Bulimia nervosa/purging disorder. *Current Problems in Pediatric and Adolescent Health Care*, 47(4), 85–94. <https://doi.org/10.1016/j.cppeds.2017.02.004>
- Centers for Disease Control and Prevention. (2022, June 3). *About Adult BMI*. Centers for Disease Control and Prevention. https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html
- Frederick, D. A., & Essayli, J. H. (2016). Male body image: The roles of sexual orientation and body mass index across five national U.S. Studies. *Psychology of Men & Masculinity*, 17(4), 336–351. <https://doi.org/10.1037/men0000031>
- Galmiche, M., Déchelotte, P., Lambert, G., & Tavolacci, M. P. (2019). Prevalence of eating disorders over the 2000–2018 period: a systematic literature review. *The American Journal of Clinical Nutrition*, 109(5), 1402–1413. <https://doi.org/10.1093/ajcn/nqy342>
- Goode, Cowell, M. M., Mazzeo, S. E., Cooper Lewter, C., Forte, A., Olayia, O., & Bulik, C. M. (2020). Binge eating and binge eating disorder in Black women: A systematic review. *The International Journal of Eating Disorders*, 53(4), 491–507. <https://doi.org/10.1002/eat.23217>

References

- Heaner, & Walsh, B. T. (2013). A history of the identification of the characteristic eating disturbances of Bulimia Nervosa, Binge Eating Disorder and Anorexia Nervosa. *Appetite*, 71, 445–448. <https://doi.org/10.1016/j.appet.2013.06.001>
- Kaye, W. (2017). *Health Consequences*. National Eating Disorders Association. <https://www.nationaleatingdisorders.org/health-consequences>
- Kwan, M. Y., & Gordon, K. H. (2016). The effects of social support and stress perception on bulimic behaviors and unhealthy food consumption. *Eating Behaviors: an International Journal*, 22, 34–39. <https://doi.org/10.1016/j.eatbeh.2016.03.024>
- Lee-Winn, Mendelson, T., & Mojtabei, R. (2014). Racial/ethnic disparities in binge eating: disorder prevalence, symptom presentation, and help-seeking among Asian Americans and Non-Latino Whites. *American Journal of Public Health* (1971), 104(7), 1263–1265. <https://doi.org/10.2105/AJPH.2014.301932>
- Lee-Winn, Reinblatt, S. P., Mojtabei, R., & Mendelson, T. (2016). Gender and racial/ethnic differences in binge eating symptoms in a nationally representative sample of adolescents in the United States. *Eating Behaviors :an International Journal*, 22, 27–33. <https://doi.org/10.1016/j.eatbeh.2016.03.021>
- Loth, K. A., Goldschmidt, A. B., Wonderline, S. A., Lavender, J. M., Neumark-Sztainer, D., & Vohs, K. D. (2019). Ecological momentary assessment of the relationship between body dissatisfaction and engagement in protective behaviors among adolescents with anorexia nervosa. *International Journal of Eating Disorders*. <https://doi.org/10.1002/eat.23113>

27 References

- Lydecker, J. A., & Grilo, C. M. (2019). Food insecurity and bulimia nervosa in the United States. *International Journal of Eating Disorders*, 52(6), 735-739. <https://doi.org/10.1002/eat.23074>
- McLean, S. A., Paxton, S. J., Massey, R., Hay, P. J., Mond, J. M., & Rodgers, B. (2014). Stigmatizing attitudes and beliefs about bulimia nervosa: Gender, age, education and income variability in a community sample. *International Journal of Eating Disorders*, 47(4), 353-361. <https://doi.org/10.1002/eat.22227>
- Mulders-Jones, B., Mitchison, D., Girosi, F., & Hay, P. (2017). Socioeconomic Correlates of Eating Disorder Symptoms in an Australian Population-Based Sample. *PLOS ONE*, 12(1), e0170603. <https://doi.org/10.1371/journal.pone.0170603>
- Perez, M., Ohrt, T. K., & Hoek, H. W. (2016). Prevalence and treatment of eating disorders among Hispanics/Latino Americans in the United States. *Current Opinion in Psychiatry*. <https://doi.org/10.1097/YCO.000000000000277>
- Ruchkin, V., Isaksson, J., Schwab-Stone, M., & Stickley, A. (2021). Prevalence and early risk factors for bulimia nervosa symptoms in inner-city youth: gender and ethnicity perspectives. *Journal of Eating Disorders*, 9(1). <https://doi.org/10.1186/s40337-021-00479-5>
- Rasmusson, Lydecker, J. A., Coffino, J. A., White, M. A., & Grilo, C. M. (2019). Household food insecurity is associated with binge eating disorder and obesity. *The International Journal of Eating Disorders*, 52(1), 28-35. <https://doi.org/10.1002/eat.22990>
- Sidani, J. E., Shensa, A., Hoffman, B., Hanmer, J., & Primack, B. A. (2016). The association between Social Media Use and Eating Concerns among US Young Adults. *Journal of the Academy of Nutrition and Dietetics*, 116(9), 1465-1472. <https://doi.org/10.1016/j.jand.2016.03.021>
- Tomoko, U. (2019). Three separate studies reveal noteworthy trends regarding eating disorders in the U.S. - *University at Albany-SUNY*. <https://www.albany.edu/news/92365.php>
- West, Goldschmidt, A. B., Mason, S. M., & Neumark Sztainer, D. (2019). Differences in risk factors for binge eating by socioeconomic status in a community based sample of adolescents: Findings from Project EAT. *The International Journal of Eating Disorders*, 52(6), 659-668. <https://doi.org/10.1002/eat.23079>

Areas of Improvement

1. Order of the slides
 - The “Social Media use and Eating Concerns among U.S. Young adults” should have gone before the character profiles to add additional context.
2. Artwork
 - Consistent art design/graphics
3. Slide structure
 - Editing the color of the words on some slides to make them bolder/easier to read.

Thank you!

Please feel free to ask us any questions