

## The Dangerous Intersection of Negative Body Image, Media, the Diet Industry and Eating Disorders

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1

## Battling Misperceptions

- The Power of the Media & Social Media
- The Diet Industry
- Intuitive Eating



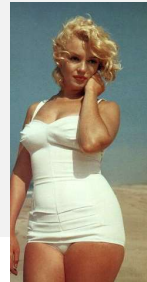
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## The Size of It!

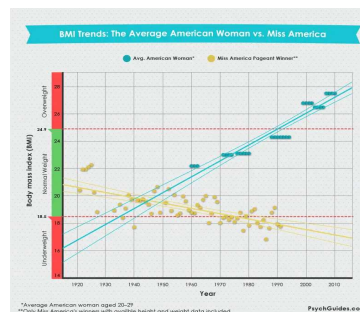
- The average American woman is 5'3.5" and weighs 170.8 lbs., and wears a size 14. (Men 5'9" and weighs 199.8)
- The average model is 5'11" and weighs 117 lbs. and wears a size 2.
- Although the ideal figure has become thinner, the average woman's figure has become larger.

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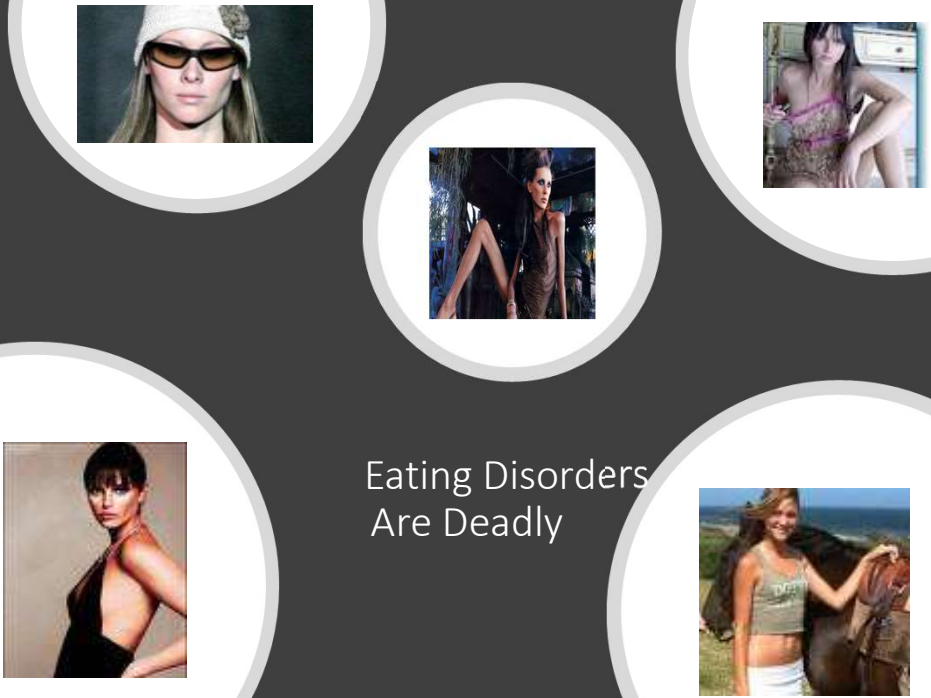
## Lessons from the past



- 1959-1996: 60% of Miss America and 69% of Playboy centerfolds were 15% or more below expected weight for height
- Models have had similar losses.
- Marilyn Monroe was a size 12 to 14 in her time.
- The average BMI of Miss America winners has decreased from around 22 in the 1920s to 16.9 in the 2000s. The World Health Organization classifies a normal BMI as falling between 18.5 and 24.9 (Martin, 2010).




4



Eating Disorders  
Are Deadly

5



## Why Statistics Matter

- Eating Disorders have the 2<sup>nd</sup> highest mortality rate of any psychiatric illness.
- Males represent 25% of individuals with anorexia nervosa.
- 10,200 deaths of year, that's one death every 52 minutes.
- Less than 6% of individuals with eating disorders are underweight.
- As many people die from eating disorders as breast cancer each year.
- 78 million dollars was spent on breast cancer research vs 44 million spent on eating disorders in 2021.

6

## Prevalence vs Funding

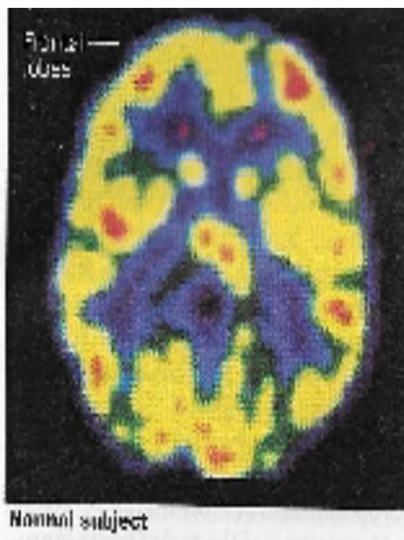
### Illness Prevalence NIH Research Funds (2022)

- |                       |              |               |
|-----------------------|--------------|---------------|
| • Alzheimer's Disease | 58 million   | \$3.5 billion |
| • Autism              | 5.4 million  | \$306 million |
| • Schizophrenia       | 20 million   | \$173 million |
| • Eating Disorders    | 28.8 million | \$55 million  |
- Research dollars spent on every person with **Alzheimer's: \$60.34.**
  - Research dollars spent on every person with **Autism: \$56.67**
  - Research dollars spent on every person with **Schizophrenia: \$8.65**
  - Research dollars spent on every person with an **Eating Disorder: \$1.91**

**This is Why Statistics Matter!**

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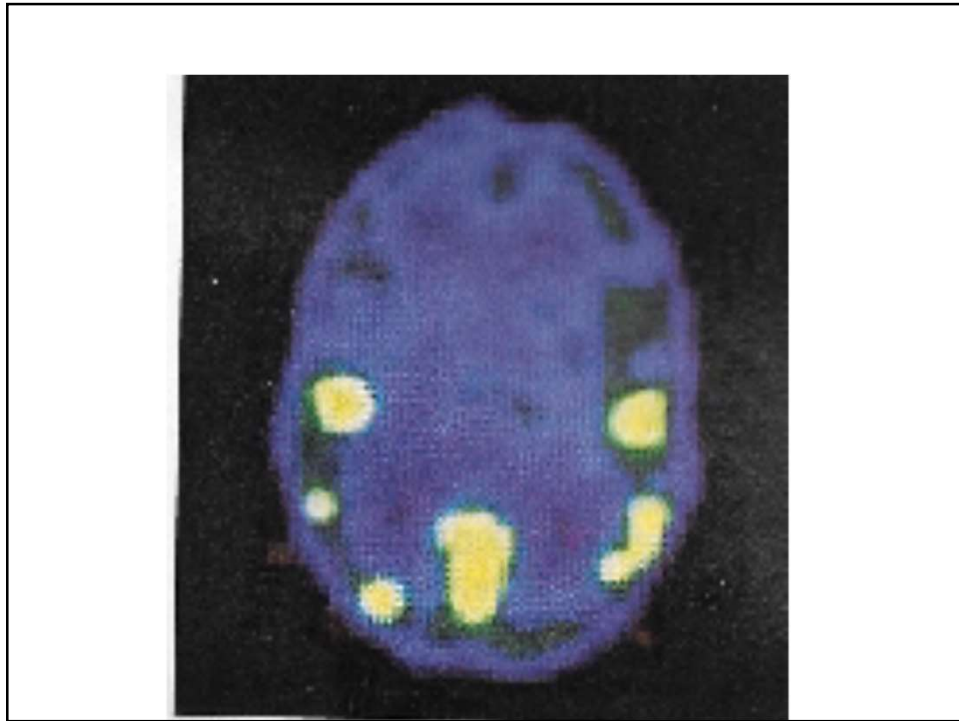
## Eating Disorders are not a disorder of "choice"



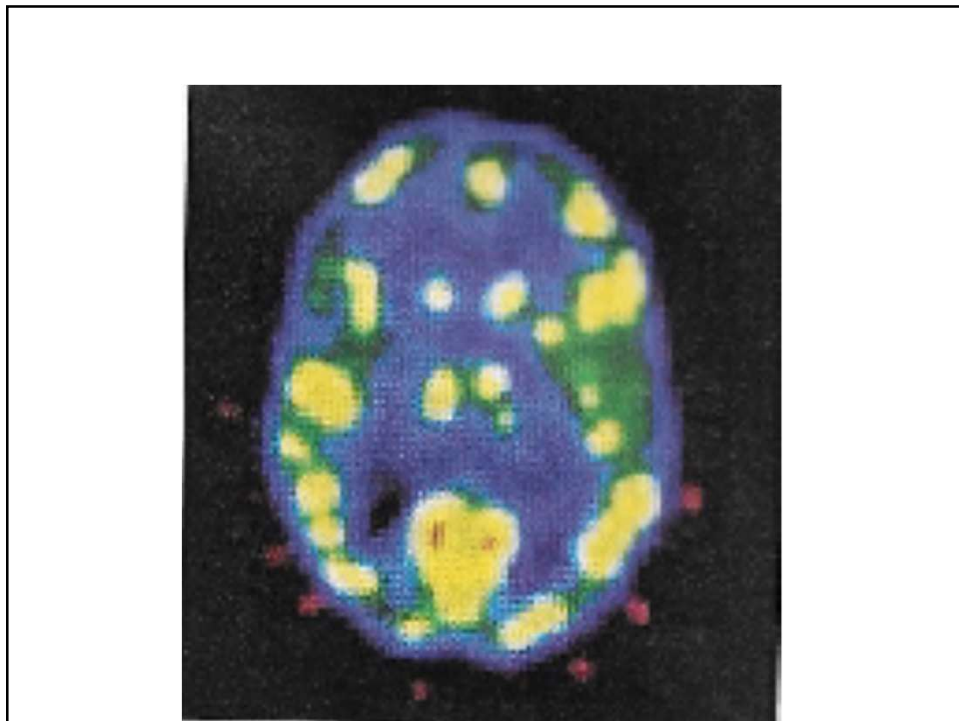
- Prefrontal Cortex:
- Executive function- knowing good and bad
- Planning of complex cognitive behavior, thinking of future consequences
- Empathy
- Insight
- Response Flexibility
- Personality expression- emotional regulation
- Ongoing decision making
- Moderating social behavior
- Impulse control

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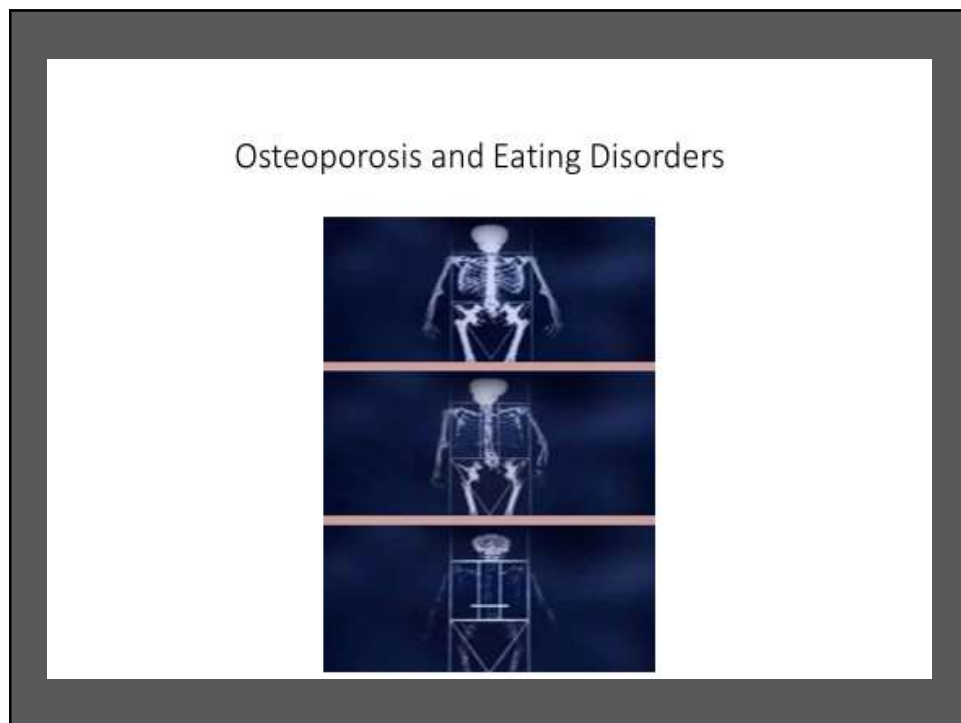
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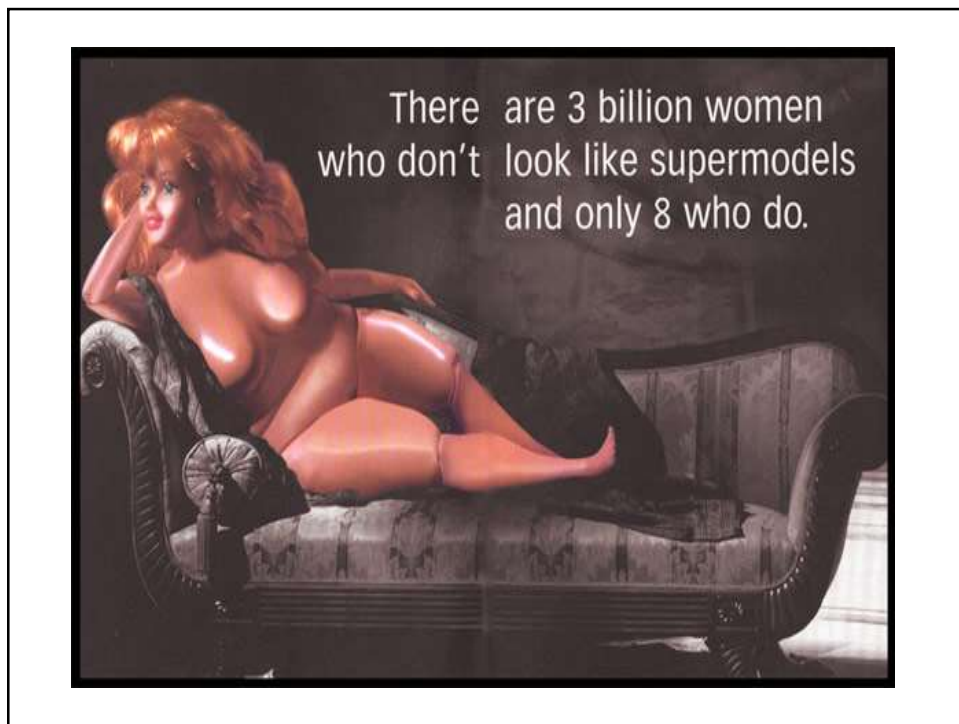




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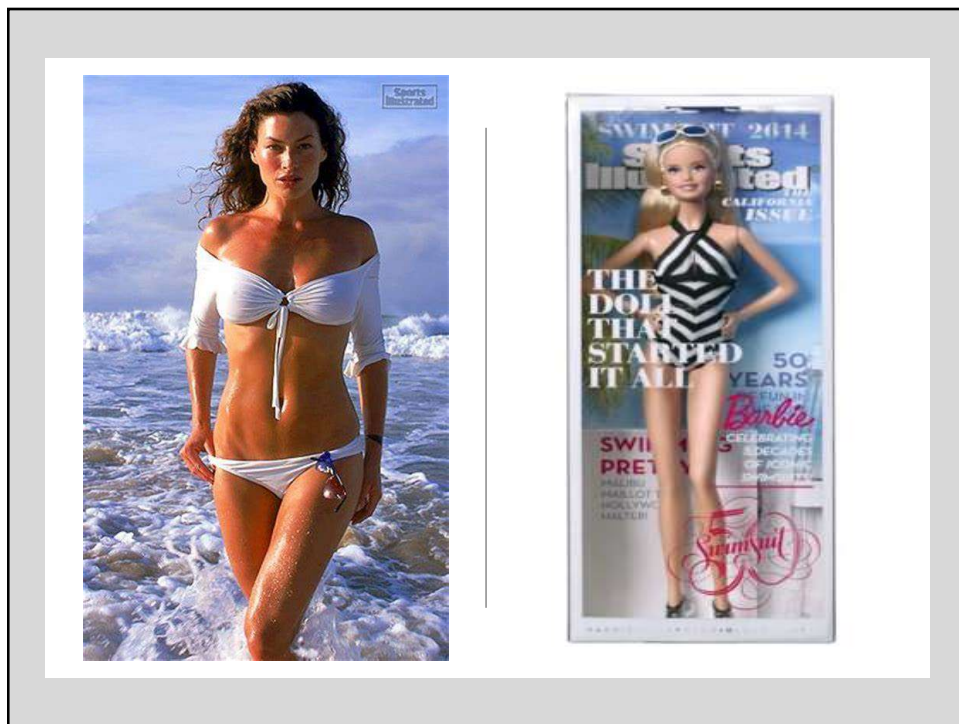
## 1965 Slumber Party Barbie

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27

## Does Barbie Impact Us?

- Girls age 5 to 7 years old reported less body esteem and greater desire for a thinner body after exposure to Barbie's compared to girls who saw images of dolls with healthy body size, Emme doll



28

## Barbie Reduces Girl's Career Dreams

- Girls age 4 to 7 years old demonstrated that playing with Mrs. Potato Head girls believed they could grow up to do pretty much anything a boy could do. Girls that played with Barbie's had fewer occupations than boys.



29

## Does Barbie's Body Really Matter?

- In 2016 Mattel produced new Barbie dolls with "tall," "curvy," and "petite" body types.
- Research on 6 -14 years old are impacted on Barbie's body. Research suggest that young girls and women process physique-salient images automatically and unconsciously, and that the body type portrayed in the image can moderate the extent to which individuals engage in self-other matching processes.



• Nesbitt A, Sabiston CM, deJonge M, Solomon-Krakus S, Welsh TN. Barbie's new look: Exploring cognitive body representation among female children and adolescents. PLoS One. 2019 Jun 25;14(6).

30

## Does Barbie's Body Really Matter?



- Dr. Harriger at Pepperdine University researched 3 to 10 year old girls, little girls clearly favored the thin Barbie.
- Over half selected the **curvy** Barbie as the one who was **not pretty**. She was also their top choice for the Barbie who **has no friends** and the **least likely to be** selected for the adjectives **happy, smart, and pretty**.
- **Only 6 percent** of girls selected curvy Barbie as the one they would like to play with.
- Notably, when asked *why* they would not want to play with her, at least **25 percent** of the girls said it was because curvy Barbie was **fat, chubby, or "big."**

31

## Toys Don't Impact Body Image?



- **Boothyroyd, Tovee & Evans (2021)** published in the journal *Body Image* tested how the effects of playing with ultra-thin dolls (Barbie and Monster High dolls) compared with playing with more realistically proportioned dolls (Dora and Lottie dolls).
- **The ultra-thin dolls changed girls' perceptions of the ideal body shape, moving it toward the thinner end of the spectrum.** Unfortunately, playing with realistic dolls didn't undo these negative effects.

32



## The Barbie Movie, Is This A Good Thing For Women? It is Complicated!

- Barbie Movie- highest grossing movie this year and was directed by a woman!
- It has feminists ideas and theme: and has messages about toxic masculinity.
- Stock is up 33% since the movie was released.
- Toys R US sales are up 30%, there are now more Barbie dolls in the hands of little girls.
- Mattel reports Barbie doll sales are up 34% since the release



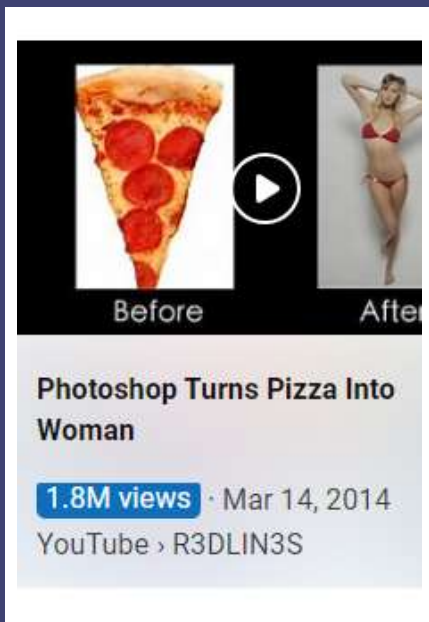
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Media:  
Barbie can't  
even look this  
good!

- The majority of the images presented in the media have been airbrushed or manipulated.
- Average magazine cover costs \$60,000 to produce and 6 months of airbrushing.
- 56% of girls believe models have "perfect bodies."
- Teen Ideal- 5'7" and 100 lbs., size 2, blonde hair and blue eyes.

34



35



36



37



38



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41

# doctored cover photo add up to controversy

By Donna Freydkin  
Special for USA TODAY

**NEW YORK** — If you noticed that **Julia Roberts**' head is slapped on the wrong body on the cover of the new *Redbook*, you've got a sharp set of eyes.

In fact, Roberts and other Hollywood A-listers are fuming over altered magazine covers that look bizarre at best and disproportionately freakish at worst.

It's known as airbrushing, or digital manipulation. At magazines, it's standard practice to zap a zit, or brighten those baby blues. It's even de rigueur for a supermodel like **Tyra Banks**, whose flawless printed perfection is at odds with her actual persona, and comes at a price.

"I disappoint people who meet me in person because I don't look like me," Banks says. "But the public is really hard on people in the industry, and your image has to be perfect, and I openly admit that I have cellulite and I get that touched off."

But, as those who do the tweaking point out, there's a huge difference between eradicating stretch marks and cutting body parts from two separate photos and fusing them together into a composite shot, as *Redbook* did with Roberts in its July issue and a clipped-together **Jennifer Aniston** in June. Magazines run such doctored shots to give their covers an air of exclusivity and originality, even when celebs don't grant the magazine an interview or sit for a photo shoot, as was the case with Aniston.

"It's not immoral to retouch people, and everyone does it," says *Rolling Stone* art director Andy Cowles. "The difficulty is when you mess with the truth, when it's distorted and done to the point where you can see it and the person doesn't look real."

A spate of recent cover scandals proves his point.

**The cover:** On *Redbook*'s July cover, Roberts' head comes from a paparazzi shot taken at the 2002 People's Choice awards. Her body, meanwhile, is from the *Notting Hill* movie premiere four years ago.

**The commotion:** Although this cover was put to bed before the Aniston issue hit stands, it doesn't bode well for a magazine that, like its competitors, relies on celebs such as Aniston, Roberts and **Gwyneth Paltrow** to move major copies.

**The conclusion:** Publisher Hearst admits its mistake. "In an effort to make a cover that would pop on the newsstand, we combined two different shots of Julia Roberts. We acknowledge that we may have gone too far and hope that Ms. Roberts will accept our apology," Roberts' publicist, Marcy Engelman, simply says that "it's a shame they didn't use the body that went with the head, because it was a great Giorgio Armani pantsuit" that she wore to the People's Choice awards.

**The cover:** *Redbook*'s June issue promised the real scoop on Aniston: re-living with hubby Brad Pitt. But the article was a clip job and the oddly flat cover photo, which still mystify Aniston's publicist Stephen Huvane. He says he declined a *Redbook* cover because Aniston had a core issue with *Harper's Bazaar*. *Redbook* informed him eight weeks before the cover hit that she'd be on it, anyway.

**The commotion:** "It's a combination of three pictures," says Huvane of the photo. "If you're going to do it, then at least match her head up to her body, and make the neck look like it belongs to her. I still can't figure out which exact picture the face came from." A *Redbook* spokeswoman refutes his statements: "The only things that were altered in the cover photo were the length of her hair, very slightly, in order to reflect her current length."

**The conclusion:** Huvane says Aniston is mulling legal action. "She doesn't like the blatant manipulation of her image," he says.

42



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Social  
Media is  
Now the  
New  
Media



46

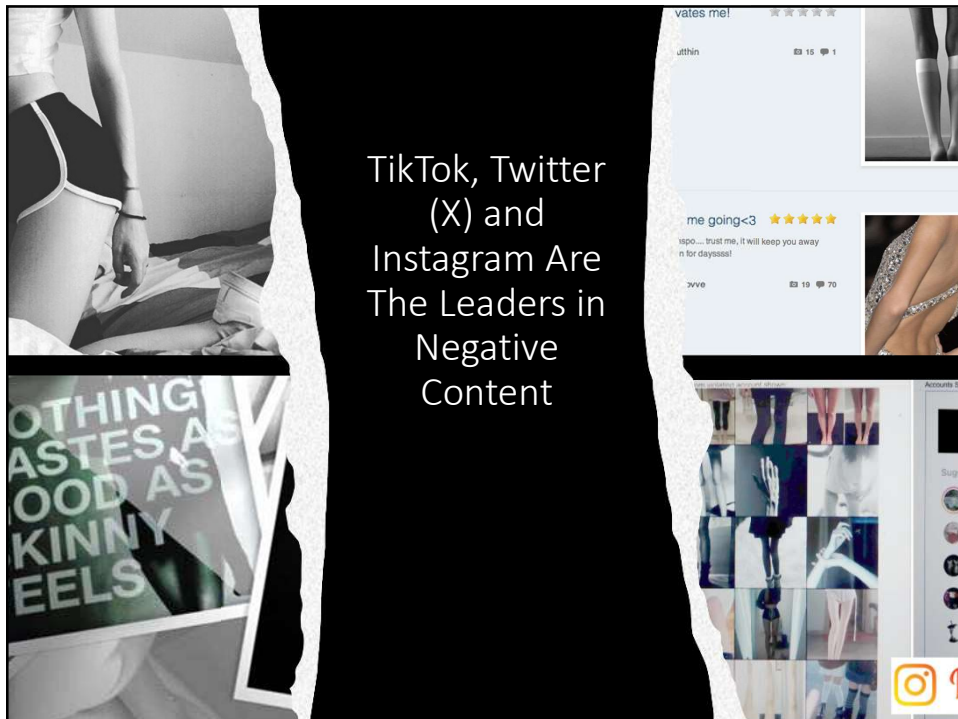
## Media Consumption: traditional vs digital

- After only 3 mins. of looking at the thin-ideal image, 70% feel depressed, guilty and shameful.
- Girls that idealize the thin-ideal are 6 times higher for disordered eating.
- Women with eating disorders are highly impacted.
- My research in the 1990's classified as "too dangerous."



47

## TikTok, Twitter (X) and Instagram Are The Leaders in Negative Content



48

## Teens and Media Use

- According to The Nielsen Company, the average American spends more than **11 hours a day using media**—that is more than the average time spent sleeping or working each day.
- Teens ages 13-18 spend an average of 9 hours a day and tweens ages 8-12 average 6 hours a day using entertainment media. These amounts vary by race, income, and gender, and do not include using media in school or doing homework (Common Sense Media Inc., 2019).



49

## Our Girls Are In A Mental Health Crisis

- Social media began taking off among teens in the 2010's.
- The first iPhone was released the summer of 2007.
- Facebook started allowing anyone age 13 and older to join in 2006 and Twitter launched the same year.
- Instagram launched in 2010 and Snapchat launched in 2011 and that is when things started to change. **Dramatically.**



50

## Increasing rates of depression

- The skyrocketing depression rates are highly gendered, impacting younger teenage girls far worse than everyone else.
- In **2017**, **1 in 5** teenage girls between the ages of 12 and 17 experienced a major depressive episode.
- In **2021**, **3 in 5** teenage girls felt persistent sadness, double the rates of boys.
- In 2021, 25% of girls had made a suicide plan.



51

## CDC: Results are In (2/13/23)

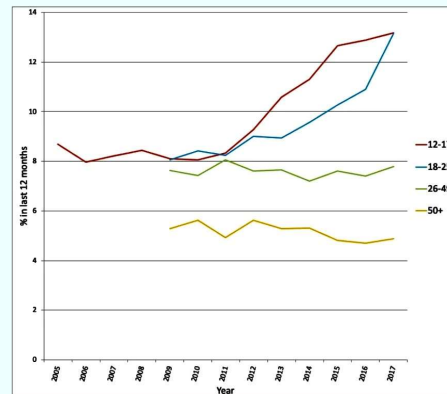
- Youth Risk Behavior Survey was given to 17,000 high school students in the fall of 2021.
- **Girls**- persistent feelings of sadness or hopelessness
- **Boys**- depression often exhibited in irritability or aggression.
- **57%** girls reported major depression
- **69%** of gay, lesbian or bisexual teenagers reported major depression



52

## Rising Rates of Depression Among Our Girls

- This graph shows the percentage of people in different age groups who experienced a major depressive episode in the prior 12 months. You see that spiking **red line**? That reflects the rise of depression among **12-17 year-old** Americans. The **blue line** shows depression rates for **18-25 year-olds**. Sharp, steep and ongoing spike starting in 2010!



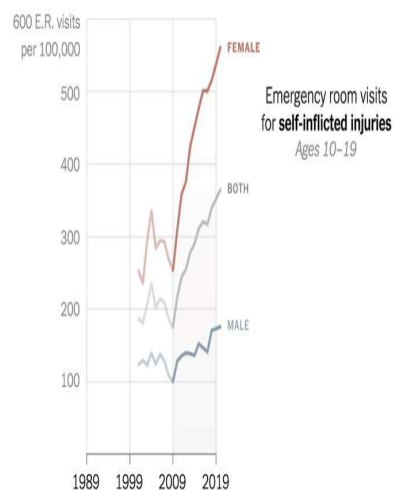
Twenge, Cooper, Joiner, Duffy, & Binau (2019). *Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005-2017*. Journal of Abnormal Psychology.  
<https://www.apa.org/pubs/journ>

53

## ER Visits for Self-harm

- This graph is devastating shows emergency room visits for children and adolescents for self-inflicted injuries before and after the widespread use of social media.
- The rates went up for both sexes early in 2010, the increase was far more dramatic for girls.
- The kids are not alright.

Emergency room visits for self-harm by children and adolescents rose sharply over the last decade, particularly among young women.



By The New York Times | Source: Centers for Disease Control and Prevention

54



## 2023 Office of Surgeon General Advisory: Social Media and Youth Mental Health

- Dr. Vivek Murthy- “Teens who spend more than **3 hours per day** on social media face double the risk of poor mental health outcomes, including symptoms of depression and anxiety.”
- Social media may perpetuate body dissatisfaction, disordered eating behaviors, social comparison, and low self-esteem, especially among adolescent girls.
- When asked about the impact of social media on their body image: **46%** of adolescents aged 13-17 said social media makes them feel worse, **40%** said it makes them feel neither better nor worse, and only 14% said it makes them feel better.”
- Roughly two-thirds (64%) of adolescents are “often” or “sometimes” exposed to **hate-based content**.

55

## 2023 Office of Surgeon General Advisory: Social Media and Youth Mental Health

- Some social media platforms show suicide- and self-harm-related content including even live depictions of self-harm acts, content which, in certain tragic cases, has been limited to childhood deaths.
- On a typical weekday, nearly one-in-three adolescents report using screens (most commonly social media) until midnight or later.
- Studies have shown a relationship between excessive social media use and poor sleep quality, reduced sleep duration, sleep difficulties, and depression among youth.
- One-third or more of girls aged 11-15 say they feel “addicted” to certain media platforms and over half of teenagers report that it would be hard to give up social media.

56



## Social Media and Our Mood

- 2022 Journal of Cyberpsychology, Behavior and Social Networking- researchers randomly assigned 154 from 18-72 who used social media every day to two groups.
- Group 1- no social media for 7 days
- Group 2- normal use (7 hours per week)
- Results: Those who took a break from social media had **significant improvements in well-being, depression and anxiety** compared to those who continued on the site.
- 2020 Study found 40% of users reported feeling “unattractive” when they started using Instagram.



57



### Instagram: Safe platform for girls?

- Approximately a billion users world- wide
- Around 160 million users in the U.S.
- About 22 million U.S. teenagers use Instagram daily.
- Instagram is free... that means our teenagers are the product!
- Advertisers exchanged around \$70 billion annual advertising revenues in 2019.
- Young users are being exploited.

58

## Instagram: Safe platform for girls?

- **"We make body image issues worse for 1 in 3 teen girls."**
- Frances Haughen testifies to congress
- 2021- Investigative report by WSJ found Instagram is very harmful for young users, most evident for teenage girls.
- INSTAGRAM AND "FACEBOOK SEEMS TO BE TAKING A PAGE FROM THE TEXTBOOK OF BIG TOBACCO-TARGETING TEENS WITH POTENTIALLY DANGEROUS PRODUCTS WHILE MASKING THE SCIENCE IN PUBLIC" said Sen. Blumenthal.
- Intentional pushing harmful eating disorder, self-harm and suicidal content to young users.



59



1<sup>st</sup> Lawsuit citing Meta as the cause of their children's eating disorder and self harm

- Lawsuit filed in U.S. District Court for the Northern District of California, heavily cites [the Facebook Papers](#), a trove of internal Meta research documents leaked the fall of 2021.
- The case was filed on behalf of Alexis Spence, who was able to create her first Instagram account at the age of 11 without her parents' knowledge. The complaint alleges that Instagram's artificial intelligence engine almost immediately steered the then-fifth grader into an echo chamber of content glorifying anorexia and self-cutting, and systematically fostered her addiction to using the app.

60

## 2nd Lawsuit filed last month against Meta

Alex was repeatedly bombarded with and exposed to content recommended and/or made available to her by Meta, which increasingly included underweight models, unhealthy eating, and eating disorder content

“Meta knows that its product is contributing to teen depression, anxiety, even suicide and self-harm. Why doesn’t it change these harmful product features and stop utilizing algorithms in connection, at least, with teen accounts? Because Meta’s priority is growth and competition concerns, and it sees ‘acquiring and retaining’ teens as essential to its survival,” the lawsuit said.



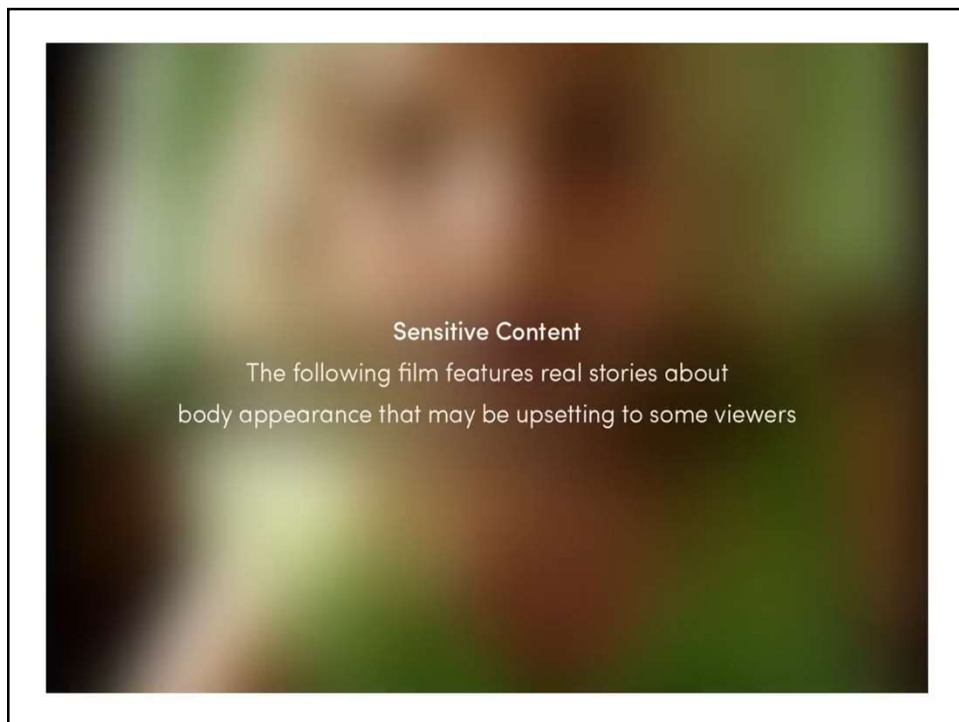
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## Current State of Lawsuits

- There are about 80 lawsuits and 1200 families had been filed in 35 different courts in the USA against social media platforms for causing addiction and self-destructive behavior in adolescents due to their respective algorithms.
- A judicial panel created a formal “Multidistrict Litigation” where these 80 lawsuits against Facebook, Instagram, TikTok, YouTube and other similar platforms could be consolidated and potentially resolved.
- The federal court in San Francisco was selected to hear these 80 lawsuits, and all future similar lawsuits that are filed, on November 10, 2022.



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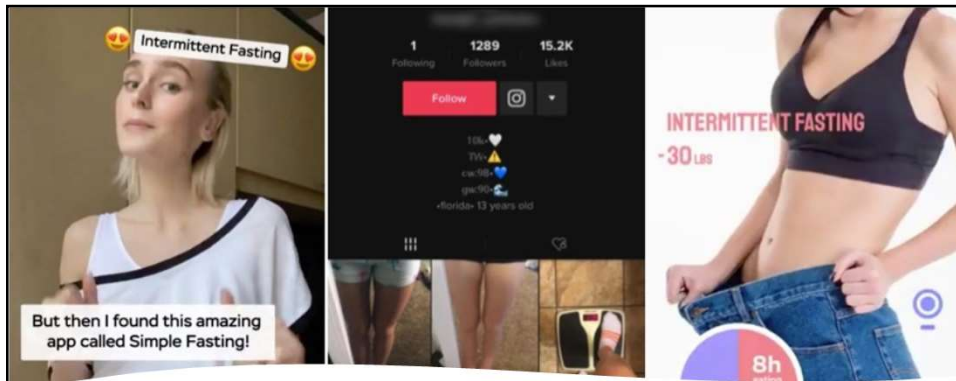
## TikTok “More Dangerous than Instagram?”

- Video app surpassed 1.8 billion active monthly users in
- TikTok generated an estimated \$4.6 billion revenue in 2021, a 142% increase year-on-year
- 33% are 14 or younger
- 60% are between 16-24 years old
- TikTok search features get around censorship.
- Dangerous hashtags #WhatIEatInADay
- Augmented reality camera filters
- Recovery accounts are not positive, can be more harmful
- Governors are taking action against TikTok and legislation introduced by Marco Rubio. (Maryland, Alabama, Maryland, South Dakota)
- Congressional Hearings with TikTok CEO 3/23/23
- Pew data: 74% of Americans think TikTok harms teens mental health




64





Intermittent Fasting

But then I found this amazing app called Simple Fasting!

1 Following 1289 Followers 15.2K Likes

Follow

100% ❤️  
70% 🚩  
ca:98% 🌊  
ga:98% 🌊  
-Florida- 12 years old


INTERMITTENT FASTING  
-30 LBS

8h

## TikTok Research

- 2022 University of Vermont
- 1,000 TikTok videos under the hashtags related body image and eating.
- 10 Hashtags-had at least one billion or more views.
- #WhatIEatINADAY- 3.2 billion views
- #Weightloss- 10 billion views
- 44% shared videos included content about weight loss
- 20% portrayed someone's weight transformation

65



## The Dieting Myth

- 90% of women diet regularly, 47% of men
- 90% of diets fail after 1 year.
- 98% of diets fail after 5 years.
- Dieters regain all weight lost, plus another 10%.

66



## Getting Younger and Younger....

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- By age 6, girls especially start to express concerns about their own weight or shape. 40-60% of elementary school girls (ages 6-12) are concerned about their weight or about becoming too fat. This concern endures through life (Smolak, 2011).

67



## Getting younger and younger...

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- Only 56% of 7<sup>th</sup> graders like the way they look.
- 42% of elementary school students between the 1st and 3rd grades want to be thinner.
- 80% of children who are ten years old are afraid of being fat.
- When asked, 51% of girls aged 9-10 stated that they did feel better about themselves when they were on a diet.

68



69

## Dieting & Disordered Eating

- 62.3% of teenage girls and 28.8% of teenage boys report trying to lose weight. 58.6% of girls and 28.2% of boys are actively dieting. 68.4% of girls and 51% of boys exercise with the goal of losing weight or to avoid gaining weight.
- 35-57% of adolescent girls engage in crash dieting, fasting, self-induced vomiting, diet pills, or laxatives. Overweight girls are more likely than normal weight girls to engage in such extreme dieting (Boutelle, Neumark-Sztainer, Story, & Resnick, 2002; Neumark-Sztainer & Hannan, 2001; Wertheim et al., 2009).

70

## Dangers of Dieting

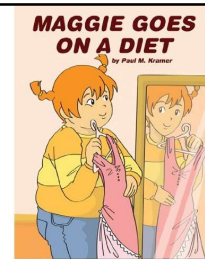


- In a large study of 14- and 15-year-olds, dieting was the most important predictor of a developing eating disorder. Those who dieted moderately were **5x more** likely to develop an eating disorder, and those who practiced extreme restriction were **18x more** likely to develop an eating disorder than those who did not diet.
- 19.1% of teenage girls and 7.6% of teenage boys fast for 24 hours or more, 12.6% of girls and 5.5% of boys use diet pills, powders or liquids, and 7.8% of girls and 2.9% of boys vomit or take laxatives to lose weight or to avoid gaining weight.

71

## Fear of fat

- Research shows that young girls are more afraid of becoming fat than they are of nuclear war, cancer, of losing their parents.
- 2023 American Academy of Pediatrics- recommending weight loss surgery and medications.



72



## Dieting is not the answer

- Study by Stice and colleagues of 700 girls over 4 year period- girls that dieted in 9<sup>th</sup> grade were more than 3x more likely be overweight by 12<sup>th</sup> grade
- Field and colleagues looked at 15,000 teenagers and found girls who dieted frequently were 12x more likely to binge than non dieters.



73

## Dieting and Depression

- Stice and colleagues looked at 1,000 high school girls over 4 years and found initial dietary restraint scores strongly predicted the onset of depression four years later, for each unit of dietary restraint, risk of onset of major depression increased 50%



74

## Eating Disorders, Depression, and Suicide

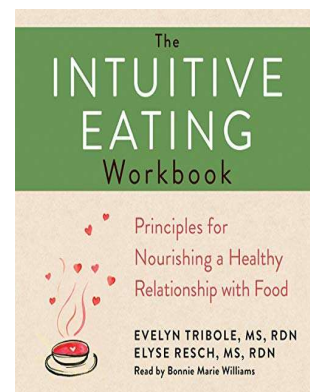
- Anorexia sufferers are 31 times more likely to make a suicide attempt than the general population.
- Recent research reveals that most anorexia-related deaths are due to suicide.
- Individuals with bulimia are 7 times more likely to die by suicide.
- Males with eating disorders exhibited more than double the attempted suicides than females.
- 58% of LGBTQ diagnosed with an eating disorder have considered suicide.



75

## Intuitive Eating- Non diet approach

- 1.Reject the Diet Mentality
- 2.Honor Your Hunger
- 3.Make Peace with Food
- 4.Challenge the Food Police
- 5.Discover the Satisfaction Factor
- 6.Feel Your Fullness
- 7.Cope with Your Emotions with Kindness
- 8.Respect Your Body
- 9.Movement – Feel the Difference
- 10.Honor Your Health with Gentle Nutrition



76