



*Brain's On-Off Switch, illustration by geralt / Wikimedia Commons*

# The Dead End of Binary Thinking in Obesity and Health Policy

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August 6, 2025

# Disclosures

- **Professional fees**
  - Amgen
  - Boehringer Ingelheim
  - Emerald Lake Safety
  - Novo Nordisk
  - Nutrisystem
  - Roman Health Ventures
- **Personal biases that favor:**
  - Evidence-based interventions, both prevention and treatment
  - Respect for people living with obesity
  - Critical thinking about all evidence

# Presentation Objectives

- Describe binary thinking about obesity
- Explore ways it has led us astray
- Discuss ways to overcome it



Good Question, photograph © Eric (e-magic) / flickr



*Brain's On-Off Switch, illustration by geralt / Wikimedia Commons*

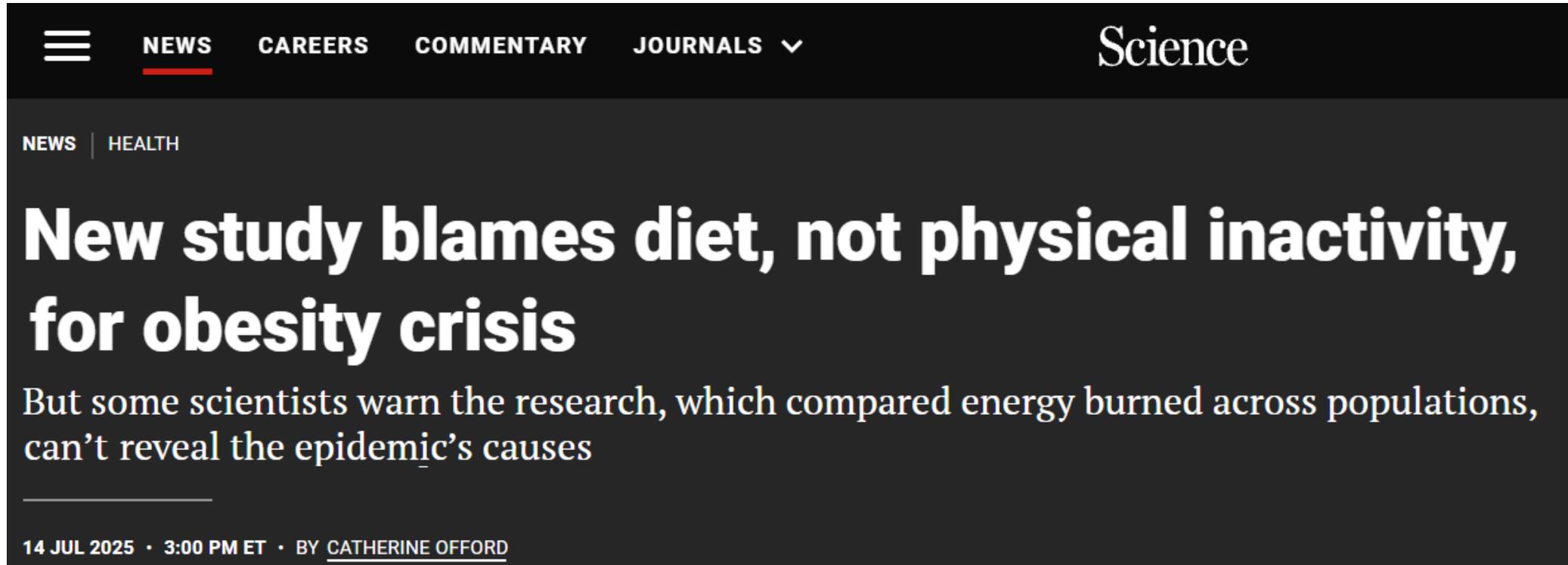
# The Dead End of Binary Thinking: What Is Binary Thinking?

# What Is Binary Thinking?

- “Organizing aspects of our realities into dichotomous or bipolar categories is a pervasive, ordinary, and often useful habit of mind.
- “However, when coupled with a search for certainty, this mode of understanding highlights extremes, superimposes a value hierarchy, neglects nuances of meaning, and leaves us with limited possibilities for understanding and action.”

*Source: S. Berlin, 1990, Social Service Review, “Dichotomous and Complex Thinking”*

# Ubiquitous Examples of Binary Thinking in Obesity



The screenshot shows the top portion of a Science magazine article. The navigation bar includes 'NEWS' (underlined), 'CAREERS', 'COMMENTARY', and 'JOURNALS' with a dropdown arrow. The Science logo is on the right. Below the navigation, 'NEWS | HEALTH' is displayed. The main headline reads 'New study blames diet, not physical inactivity, for obesity crisis'. A sub-headline states 'But some scientists warn the research, which compared energy burned across populations, can't reveal the epidemic's causes'. At the bottom, the date '14 JUL 2025', time '3:00 PM ET', and author 'BY CATHERINE OFFORD' are listed.

Science

NEWS | HEALTH

## New study blames diet, not physical inactivity, for obesity crisis

But some scientists warn the research, which compared energy burned across populations, can't reveal the epidemic's causes

14 JUL 2025 • 3:00 PM ET • BY [CATHERINE OFFORD](#)

## Diet versus physical activity

# Ubiquitous Examples of Binary Thinking in Obesity



Prevention versus care

Source: Allison Hemenstall, MD, MPH, via Twitter

# Ubiquitous Examples of Binary Thinking in Obesity

<p><b>Obesity</b></p> <p><b>Nicola Davis</b> <i>Science correspondent</i></p> <p>🐦@NicolaKSDavis Sun 5 Feb 2023</p>	<p><b>New diabetes drugs do not tackle root causes of obesity, experts warn</b></p> <p><b>Doctors say preventing obesity by avoiding unhealthy food is better than trying to reverse its effects</b></p>	
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Medicine versus lifestyle

# Ubiquitous Examples of Binary Thinking in Obesity



The screenshot shows the NPR website interface. At the top left is the NPR logo (n p r) and the station logo for 90.5 WESA, Pittsburgh's NPR News Station. To the right are links for 'SIGN IN' and 'NPR SHOP'. Below this is a navigation bar with 'NEWS', 'CULTURE', 'MUSIC', 'PODCASTS & SHOWS', and 'SEARCH'. The main content area features a social media share icon on the left and the text 'CHILDREN'S HEALTH' above the article title. The article title is 'New childhood obesity guidance raises worries over the risk of eating disorders'. Below the title is the update date 'Updated February 22, 2023 · 8:15 PM ET' and the author's name 'KAITLYN RADDE' in a blue box.

Obesity versus  
eating disorders

# Ubiquitous Examples of Binary Thinking in Obesity

 The New York Times

## Is B.M.I. a Scam?

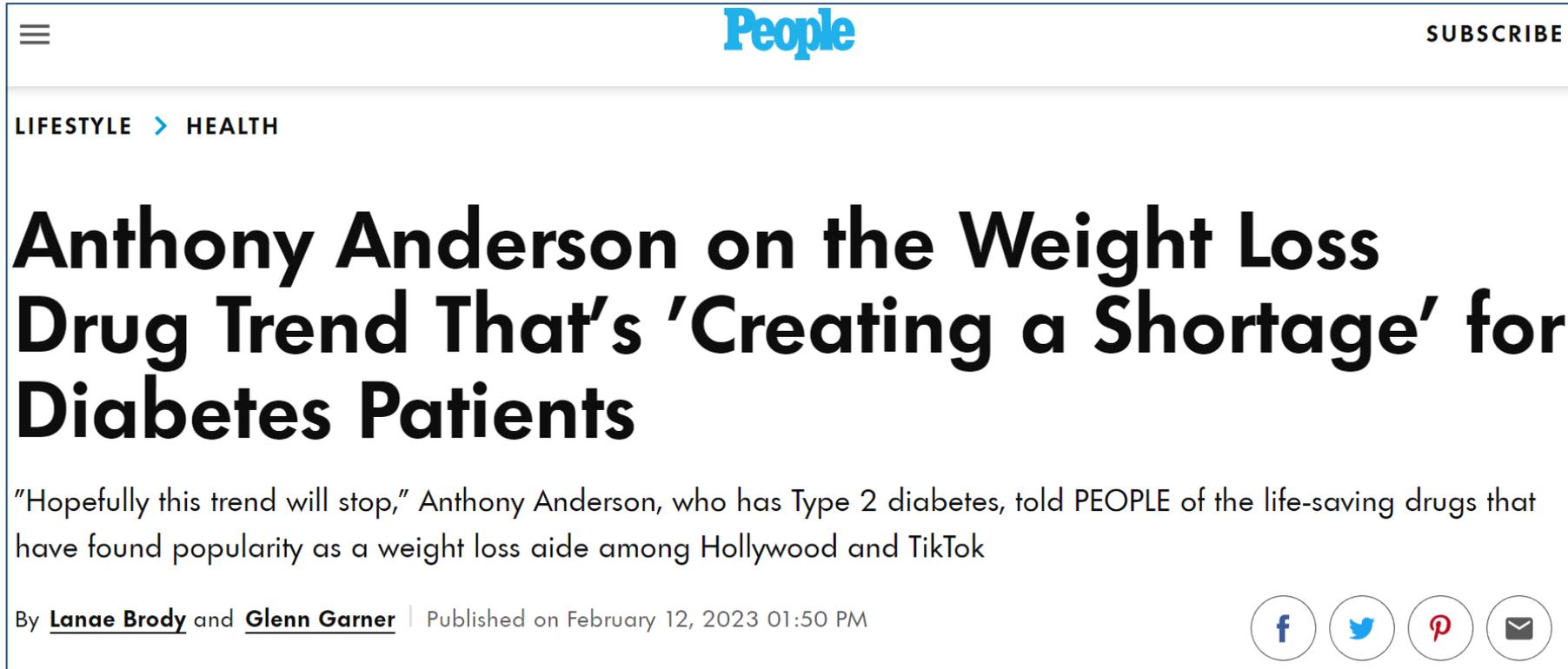
There are few single measures in health care that seem to carry as much weight as body mass index, or B.M.I. We encounter it not just at...

May 18, 2021



## Weight versus health

# Ubiquitous Examples of Binary Thinking in Obesity



The screenshot shows a webpage from People magazine. At the top, there is a hamburger menu icon on the left, the word "People" in blue in the center, and a "SUBSCRIBE" button on the right. Below the header, the text "LIFESTYLE > HEALTH" is displayed. The main headline reads "Anthony Anderson on the Weight Loss Drug Trend That's 'Creating a Shortage' for Diabetes Patients". Below the headline is a short paragraph: "‘Hopefully this trend will stop,’ Anthony Anderson, who has Type 2 diabetes, told PEOPLE of the life-saving drugs that have found popularity as a weight loss aide among Hollywood and TikTok". At the bottom left of the article preview, it says "By Lanae Brody and Glenn Garner | Published on February 12, 2023 01:50 PM". At the bottom right, there are four circular social media icons: Facebook, Twitter, Pinterest, and Email.

## Diabetes versus obesity

# Ubiquitous Examples of Binary Thinking in Obesity

≡> **Newsweek**

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## How Ozempic and Other GLP-1 Drugs Are Eating Away at Body Positivity

Apr 30, 2025 at 5:00 AM EDT

Options for care versus body positivity

# Ubiquitous Examples of Binary Thinking in Obesity



## Which Is More Effective for Weight Loss, GLP-1 Drugs or Surgery? New Study Has Answer

When researchers analyzed weight loss results from patients who took GLP-1 drugs and those who'd undergone bariatric surgery, one method led to much more weight loss.

## Surgical versus medical obesity care



*Brain's On-Off Switch, illustration by geralt / Wikimedia Commons*

# The Dead End of Binary Thinking: How Has It Led Us Astray?

# Fifty Years Ago, We Thought Preventing Obesity Could Be Simple

1974

“Most Obesity Could, with Care, Be Prevented”

doi: [10.1016/S0140-6736\(74\)93004-9](https://doi.org/10.1016/S0140-6736(74)93004-9)

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THE LANCET

Volume 303, Issue 7845, 5 January 1974, Pages 17-18

## Infant and Adult Obesity

OBESITY is the most important nutritional disease in the affluent countries of the world. In the absence of an internationally agreed criterion for diagnosis an exact figure for prevalence cannot be given, but surveys in Britain and the United States show that about a third of the population is overweight to an extent associated with diminished life expectancy.<sup>1</sup>

The exact significance of hyperplastic and hypertrophic obesity is still not clear, but on balance the evidence suggests that we need to be more vigilant in preventing obesity throughout childhood. Probably the obese adult can never be “cured”, but most obesity could, with care, be prevented.

doi: [10.1016/S0140-6736\(74\)93004-9](https://doi.org/10.1016/S0140-6736(74)93004-9)

# Treatment Was Seen by Most as Futile

April 28, 1993

**JAMA**<sup>®</sup>

## **Futility and Avoidance**

### Medical Professionals in the Treatment of Obesity

Arthur Frank, MD

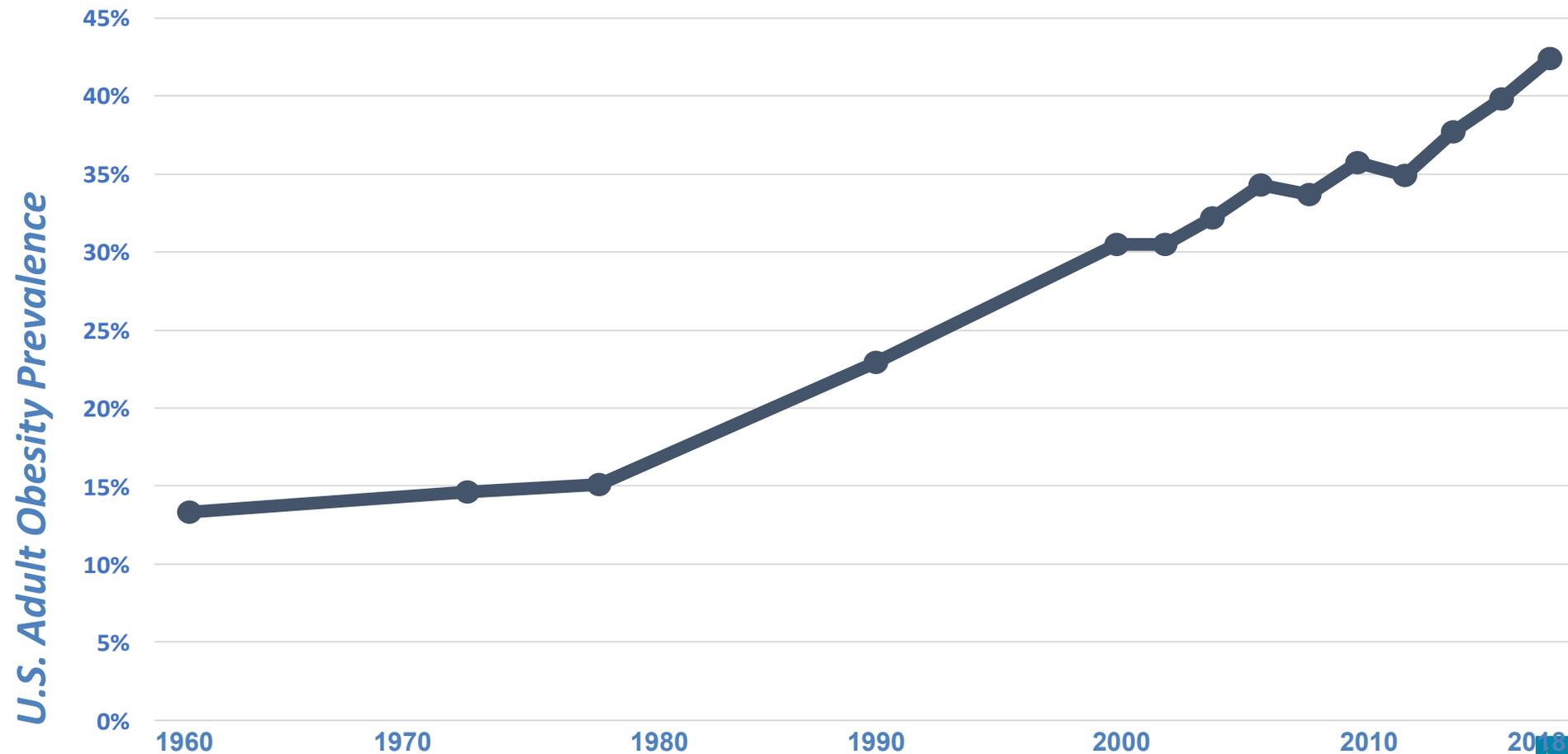
*JAMA*. 1993;269(16):2132-2133. doi:10.1001/jama.1993.03500160102041

#### **Abstract**

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**T**WENTY years ago, I changed course in my internal medicine practice and decided, rather deliberately, to work on the problem of obesity. My friends, my colleagues, and my family thought I was crazy. The warnings were clear. "Don't risk your credibility and your career." "Don't venture into a part of medicine that no one takes seriously." "Don't move into the world of quacks and charlatans."

# Four Decades of Relentlessly Rising Obesity



Source: CDC NHANES data

# Four Decades of Ineffective Efforts to Reduce Obesity

- 1974

“Most Obesity Could, with Care, Be Prevented”

doi: [10.1016/S0140-6736\(74\)93004-9](https://doi.org/10.1016/S0140-6736(74)93004-9)

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doi: [10.1016/S0140-6736\(74\)93004-9](https://doi.org/10.1016/S0140-6736(74)93004-9)

# Four Decades of Ineffective Efforts to Reduce Obesity

- 1974  
Most Obesity Could, with Care, Be Prevented
- 1986  
“Unique Merits of Low Fat for Weight Control”  
doi: 10.1016/0306-9877(86)90125-8



<https://www.snackwells.com/product/devils-food-cookie-cakes>

# Four Decades of Ineffective Efforts to Reduce Obesity

- **1974**  
Most Obesity Could, with Care, Be Prevented
- **1986**  
Unique Merits of Low Fat for Weight Control
- **1998**  
Clinical Guidelines for Overweight and Obesity  
doi: [10.1093/ajcn/68.4.899](https://doi.org/10.1093/ajcn/68.4.899)



Primary Care, illustration © Morgan Schweitzer / flickr

# Four Decades of Ineffective Efforts to Reduce Obesity

- **1974**  
Most Obesity Could, with Care, Be Prevented
- **1986**  
Unique Merits of Low Fat for Weight Control
- **1998**  
Clinical Guidelines for Overweight and Obesity
- **2003**  
Low Carb Diets Gain Prominence

ORIGINAL ARTICLE

## A Randomized Trial of a Low-Carbohydrate Diet for Obesity

Gary D. Foster, Ph.D., Holly R. Wyatt, M.D., James O. Hill, Ph.D., Brian G. McGuckin, Ed.M., Carrie Brill, B.S., B. Selma Mohammed, M.D., Ph.D., Philippe O. Szapary, M.D., Daniel J. Rader, M.D., Joel S. Edman, D.Sc., and Samuel Klein, M.D.

May 22, 2003

N Engl J Med 2003; 348:2082-2090

DOI: 10.1056/NEJMoa022207



The NEW ENGLAND  
JOURNAL of MEDICINE

# Four Decades of Ineffective Efforts to Reduce Obesity

- **1974**  
Most Obesity Could, with Care, Be Prevented
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- **2003**  
Low Carb Diets Gain Prominence
- **2010**  
Let's Move! doi: [10.1089/chi.2012.0800.obam](https://doi.org/10.1089/chi.2012.0800.obam)



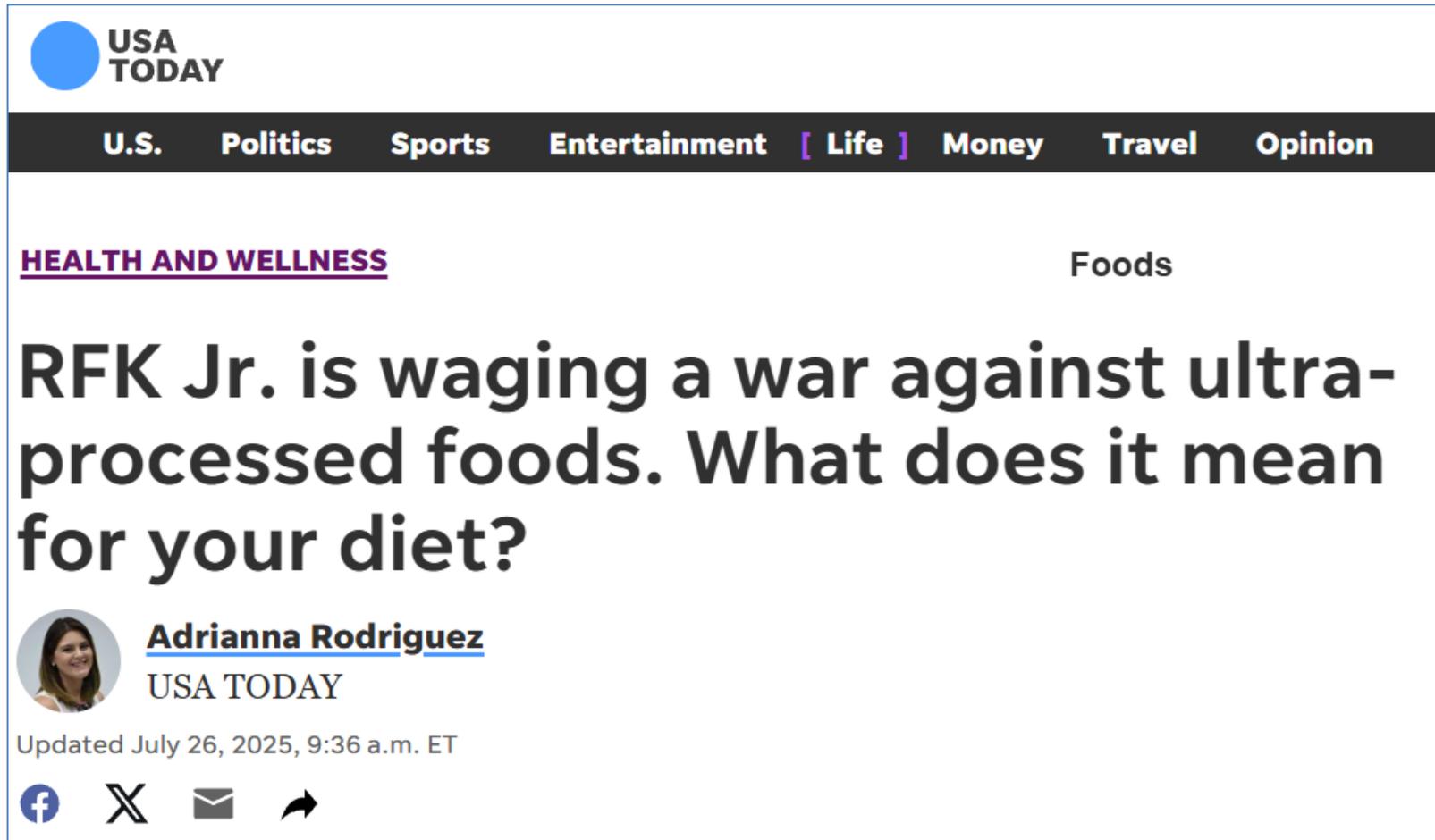
# Now: Big Promises for Plant-Based Diets To Reduce Obesity and Save the Planet

“ Compared with typical Western diets with high amounts of animal products, healthy plant-based diets are not only more sustainable, but have also been associated with lower risk of chronic diseases such as obesity, type 2 diabetes, cardiovascular disease, and some cancers. ”

“ If widely implemented, interventions and policy changes that shift the globe towards healthy plant-based dietary patterns could be instrumental in ensuring future personal, population, and planetary health. ”

Hemler & Hu: Plant-Based Diets for Personal, Population, and Planetary Health (2019)

# At the Same Time, Policy Advocates Call for Targeting Ultra-Processed Foods



The image shows a screenshot of a USA Today article. At the top left is the USA Today logo. Below it is a navigation bar with categories: U.S., Politics, Sports, Entertainment, [ Life ], Money, Travel, and Opinion. The article is categorized under 'HEALTH AND WELLNESS' and 'Foods'. The main headline reads: 'RFK Jr. is waging a war against ultra-processed foods. What does it mean for your diet?'. The author is 'Adrianna Rodriguez' from USA TODAY. The article was updated on July 26, 2025, at 9:36 a.m. ET. At the bottom of the snippet are icons for Facebook, X, email, and a share icon.

USA TODAY

U.S. Politics Sports Entertainment [ Life ] Money Travel Opinion

HEALTH AND WELLNESS Foods

## RFK Jr. is waging a war against ultra-processed foods. What does it mean for your diet?

 **Adrianna Rodriguez**  
USA TODAY

Updated July 26, 2025, 9:36 a.m. ET



*Brain's On-Off Switch, illustration by geralt / Wikimedia Commons*

## The Dead End of Binary Thinking: **Why Is It Problematic?**

# Binary Thinking Fuels Bias About Obesity

- **Intellectual bias**  
favoring personal convictions
- **Weight bias**  
directed at people with obesity

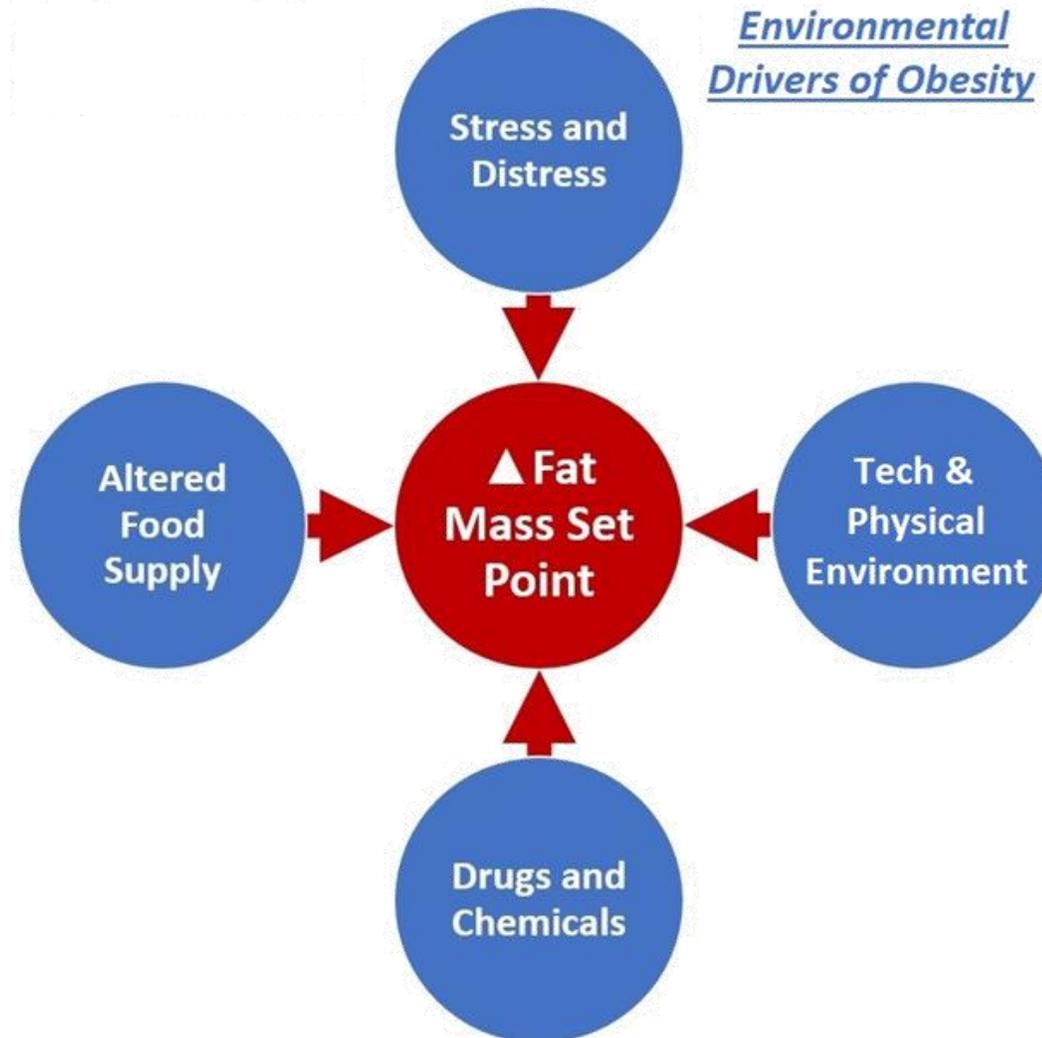


God Judging Adam, Etching by William Blake / WikiArt

# Binary Thinking

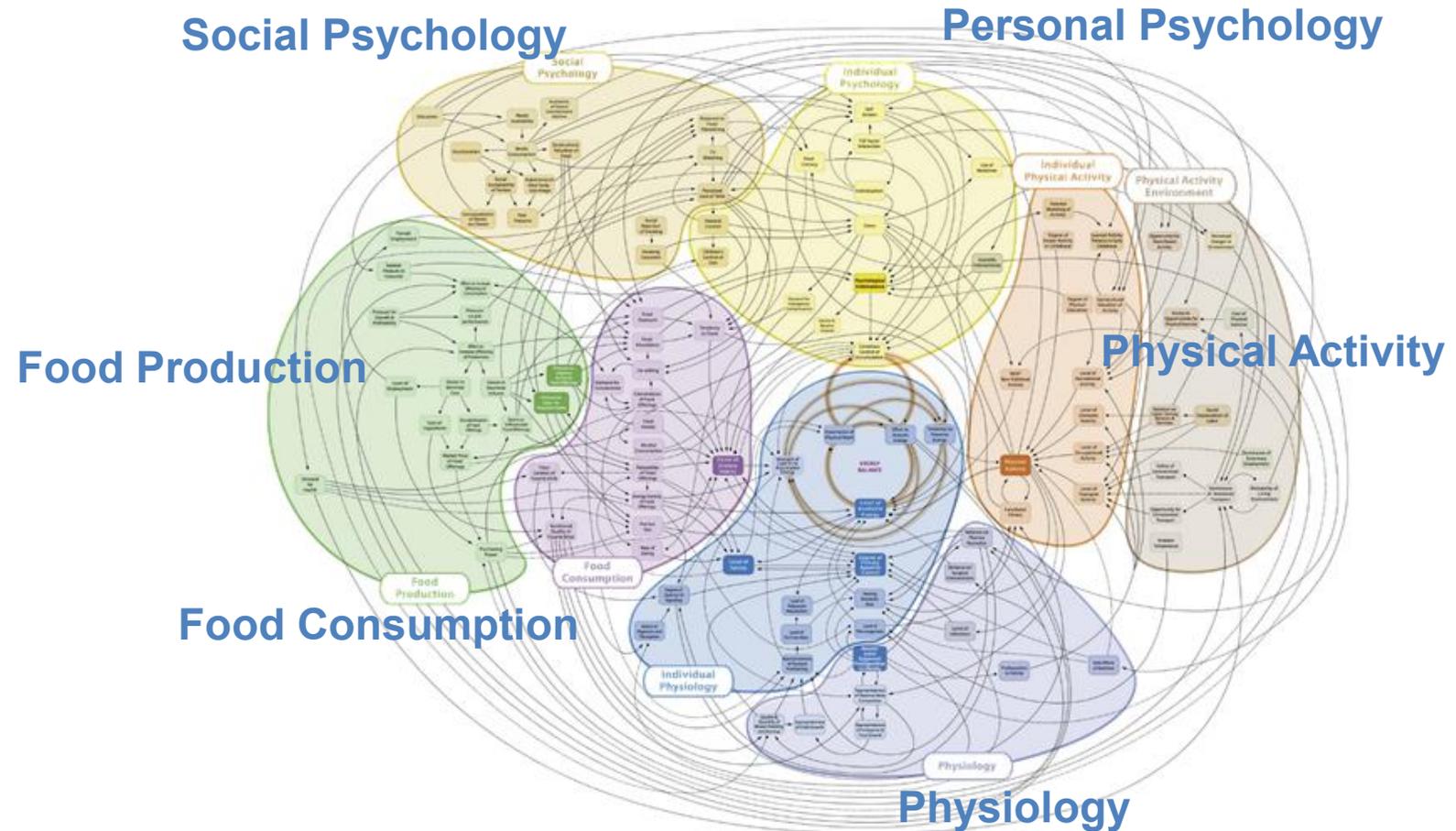
## Obscures the Complexity of Obesity

Multiple factors are driving obesity rates



# Binary Thinking Obscures the Complexity of Obesity

Those factors interact  
with complex adaptive  
systems to drive  
obesity rates





*Brain's On-Off Switch, illustration by geralt / Wikimedia Commons*

# The Dead End of Binary Thinking: How Can We Overcome It?

# A Prescription for Overcoming Binary Thinking

- Reject bias and stigma
- Stick to the facts
- Dispel false dichotomies
- Foster a deeper understanding of obesity science
- Seek effective primary prevention
- Build systems to deliver better care



War Production poster by J. Howard Miller

# Reject Bias and Stigma

Dimension	Explicit Bias Trend 2007-2020	Implicit Bias Trend 2007-2020
Sexuality	↓	↓
Race	↓	↓
Skin Tone	↓	↓
Age	↓	↔
Disability	↓	↔
Weight	↓	↑ ↔

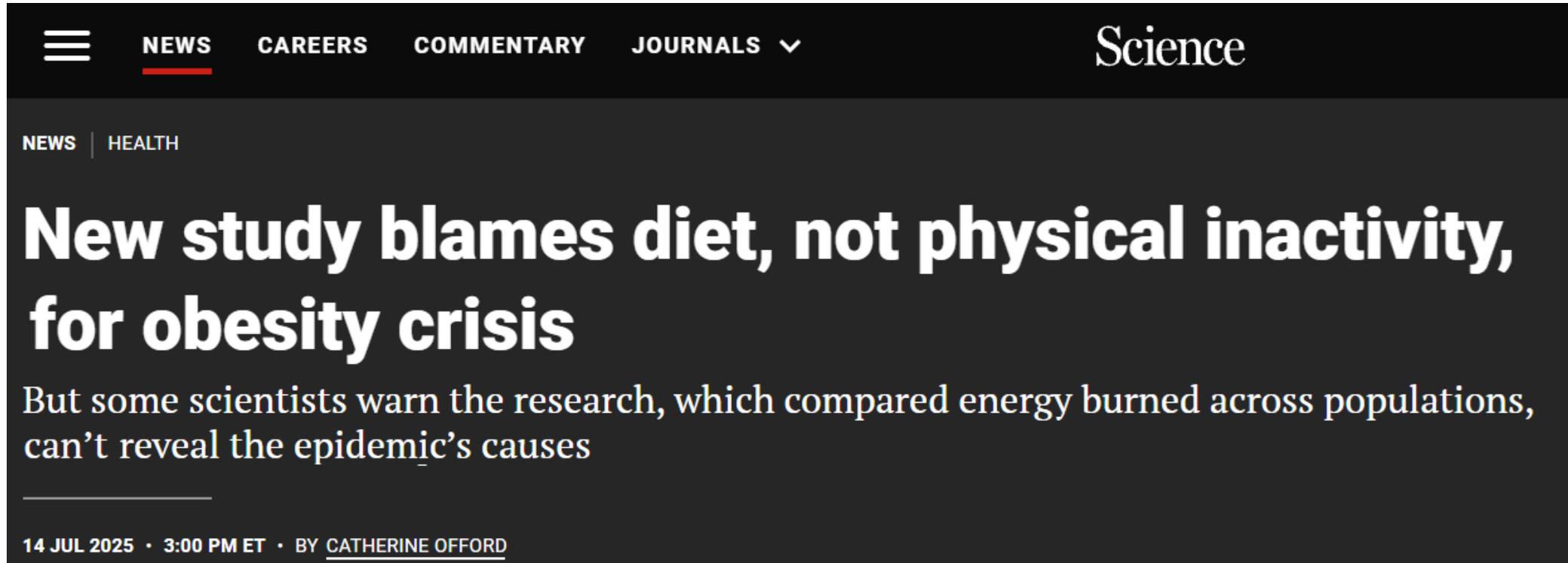
*Explicit bias no longer goes unnoticed, but implicit bias is sneaky and prevalent*

Source: Charlesworth & Banaji, 2022, *Psychological Science*

# Build Awareness of Key Facts

- It is undeniable that obesity is a chronic disease.
- Obesity is driven by powerful underlying biology, not choice.
- The many health effects of excess weight can start early.
- Obesity is treatable.
- Weight bias, stigma, and discrimination are harmful.

# Dispel False Dichotomies



The screenshot shows the top portion of a Science magazine article. At the top, there is a navigation bar with a hamburger menu icon on the left, followed by the words 'NEWS', 'CAREERS', 'COMMENTARY', and 'JOURNALS' with a dropdown arrow. The word 'Science' is displayed in a large, serif font on the right side of the navigation bar. Below the navigation bar, there is a sub-header area with 'NEWS' and 'HEALTH' separated by a vertical line. The main headline is in a large, bold, white sans-serif font: 'New study blames diet, not physical inactivity, for obesity crisis'. Below the headline is a sub-headline in a smaller, white sans-serif font: 'But some scientists warn the research, which compared energy burned across populations, can't reveal the epidemic's causes'. At the bottom of the article header, there is a line of text: '14 JUL 2025 • 3:00 PM ET • BY CATHERINE OFFORD'.

NEWS | HEALTH

## New study blames diet, not physical inactivity, for obesity crisis

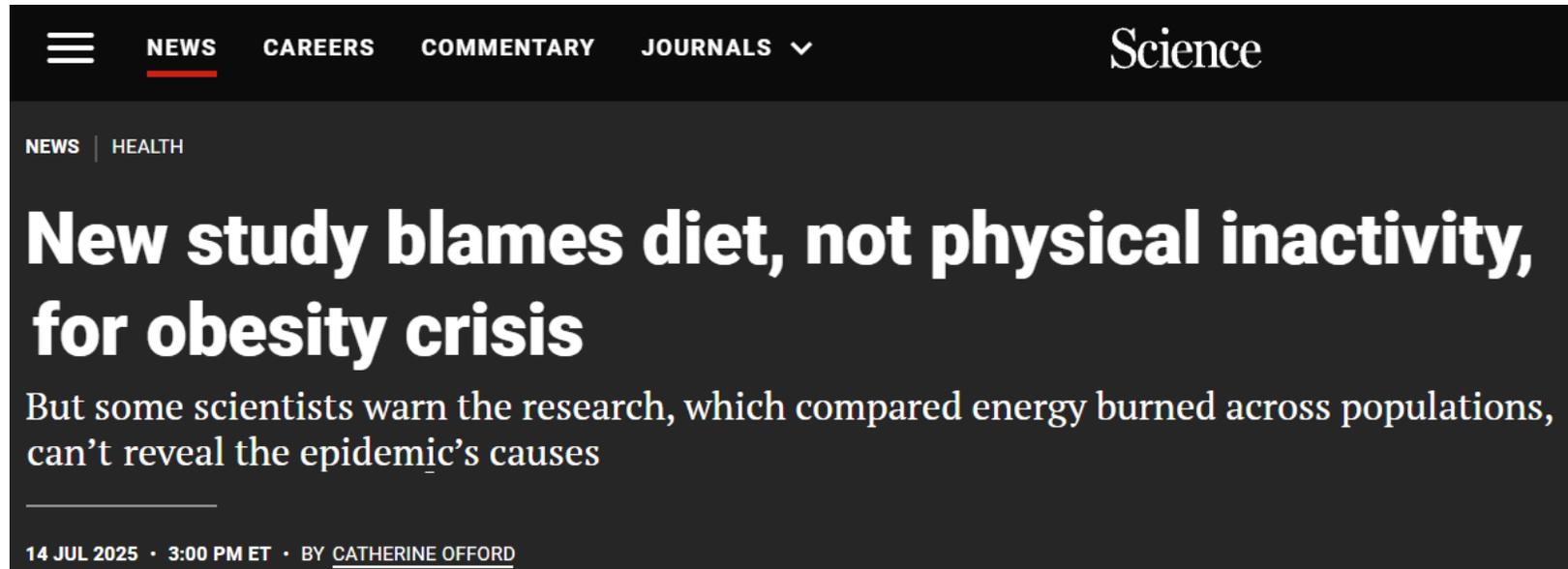
But some scientists warn the research, which compared energy burned across populations, can't reveal the epidemic's causes

14 JUL 2025 • 3:00 PM ET • BY CATHERINE OFFORD

## Diet versus physical activity

# Dispel False Dichotomies

*Many more factors than diet and exercise are fueling the rise of obesity and complex systems are at work*



The screenshot shows a news article from Science. The navigation bar includes 'NEWS', 'CAREERS', 'COMMENTARY', and 'JOURNALS'. The article is categorized under 'NEWS | HEALTH'. The headline is 'New study blames diet, not physical inactivity, for obesity crisis'. The sub-headline reads: 'But some scientists warn the research, which compared energy burned across populations, can't reveal the epidemic's causes'. The byline is '14 JUL 2025 • 3:00 PM ET • BY CATHERINE OFFORD'.

# Dispel False Dichotomies

*We don't have to choose between obesity prevention and obesity care...*



Source: Allison Hemenstall, MD, MPH, via Twitter

# Dispel False Dichotomies

*...Because good obesity care is indeed preventive care.*



Source: Allison Hemenstall, MD, MPH, via Twitter

# Dispel False Dichotomies

*Recognizing the importance of physiology does not diminish the value of lifestyle strategies for coping*

**Obesity**

**Nicola Davis**  
*Science  
correspondent*

🐦@NicolaKSDavis  
Sun 5 Feb 2023

**New diabetes drugs do not tackle root causes of obesity, experts warn**

**Doctors say preventing obesity by avoiding unhealthy food is better than trying to reverse its effects**

**The  
Guardian**

# Dispel False Dichotomies

*We don't have to choose between caring for people who live with obesity or live with an eating disorder*



CHILDREN'S HEALTH

## New childhood obesity guidance raises worries over the risk of eating disorders

Updated February 22, 2023 · 8:15 PM ET

KAITLYN RADDE

# Dispel False Dichotomies

*BMI alone is not a measure of health,  
but it can be suggestive of excess adiposity*

 The New York Times

## Is B.M.I. a Scam?

There are few single measures in health care that seem to carry as much weight as body mass index, or B.M.I. We encounter it not just at...

May 18, 2021



# Dispel False Dichotomies

*People living with obesity are no more or less worthy of medical care than those living with diabetes or other chronic diseases*



People

SUBSCRIBE

LIFESTYLE > HEALTH

## Anthony Anderson on the Weight Loss Drug Trend That's 'Creating a Shortage' for Diabetes Patients

"Hopefully this trend will stop," Anthony Anderson, who has Type 2 diabetes, told PEOPLE of the life-saving drugs that have found popularity as a weight loss aide among Hollywood and TikTok

By [Lanae Brody](#) and [Glenn Garner](#) | Published on February 12, 2023 01:50 PM



# Ubiquitous Examples of Binary Thinking in Obesity

≡> **Newsweek**

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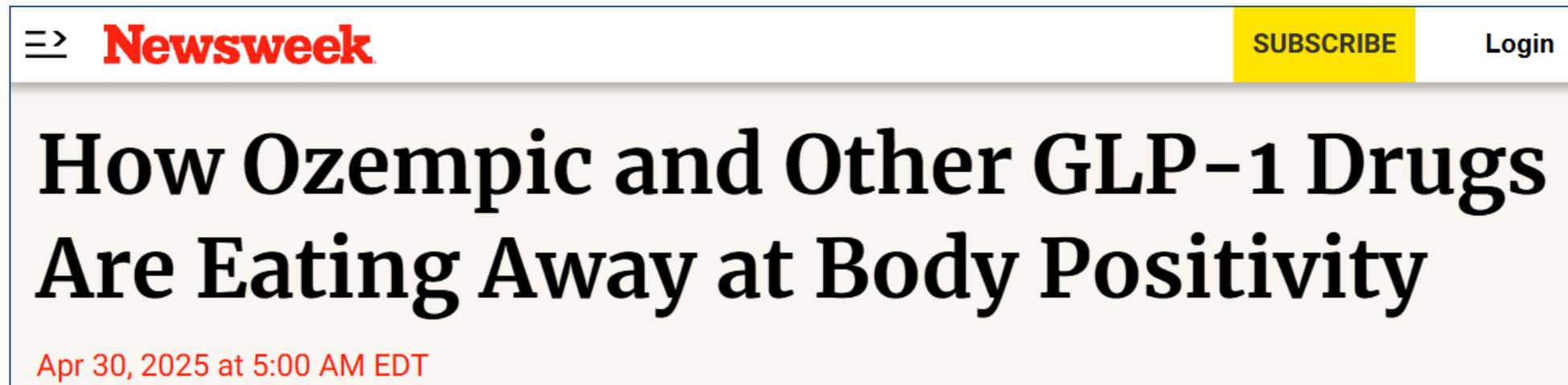
## How Ozempic and Other GLP-1 Drugs Are Eating Away at Body Positivity

Apr 30, 2025 at 5:00 AM EDT

Options for care versus body positivity

# Dispel False Dichotomies

*Effective long-term obesity care actually requires caring for one's body and supports a more positive outlook.*



Newsweek SUBSCRIBE Login

## How Ozempic and Other GLP-1 Drugs Are Eating Away at Body Positivity

Apr 30, 2025 at 5:00 AM EDT

The image shows a screenshot of a Newsweek article header. At the top left is the Newsweek logo with a hamburger menu icon. To the right of the logo is a yellow 'SUBSCRIBE' button and a 'Login' link. The main headline is 'How Ozempic and Other GLP-1 Drugs Are Eating Away at Body Positivity' in large, bold, black font. Below the headline is the date and time 'Apr 30, 2025 at 5:00 AM EDT' in a smaller red font.

# Ubiquitous Examples of Binary Thinking in Obesity



## Which Is More Effective for Weight Loss, GLP-1 Drugs or Surgery? New Study Has Answer

When researchers analyzed weight loss results from patients who took GLP-1 drugs and those who'd undergone bariatric surgery, one method led to much more weight loss.

## Surgical versus medical obesity care

# Dispel False Dichotomies

*Surgical and medical care are complementary and both may be necessary for optimal long-term health outcomes*

 **TODAY**



## Which Is More Effective for Weight Loss, GLP-1 Drugs or Surgery? New Study Has Answer

When researchers analyzed weight loss results from patients who took GLP-1 drugs and those who'd undergone bariatric surgery, one method led to much more weight loss.

# Foster a Deeper Understanding of Obesity Science

**HUFFPOST** HIGHLINE [TWITTER](#) | [FACEBOOK](#) | [SUBSCRIBE](#)

# Everything You Know About Obesity Is Wrong

For decades, the medical community has ignored mountains of evidence to wage a cruel and futile war on fat people, poisoning public perception and ruining millions of lives.

# Foster a Deeper Understanding of Obesity Science

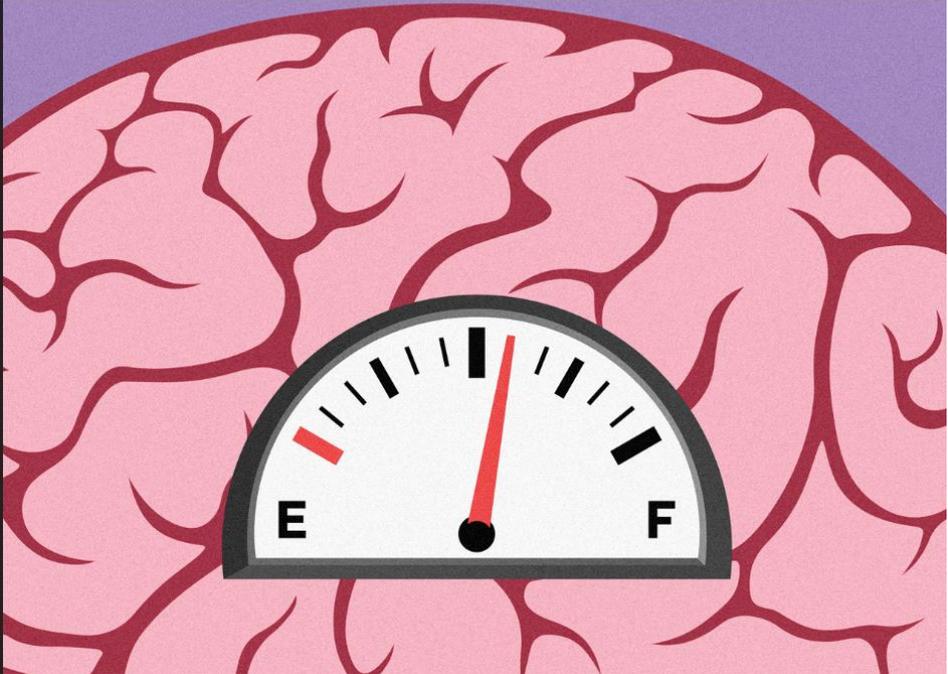
## THE WALL STREET JOURNAL.

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World Business U.S. Politics Economy Tech Finance Opinion Arts & Culture Lifestyle Real Estate Personal Finance **Health** Science Style Sports

### Ozempic Settles the Obesity Debate: It's Biology Over Willpower

Weight-loss drugs affect the brain in ways that help researchers understand how the body regulates weight



# Seek Effective Primary and Primordial Prevention

- Address the complex, adaptive systems that drive obesity
- Move beyond the narrow focus on diet and exercise
- Account for social stresses and environmental obesogens
- Bring more curiosity and objectivity



*Mother and Child, painting by Pablo Picasso / WikiArt*

# Build Systems to Deliver Better Care



**KFF**

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## Will Where You Live Determine Access and Coverage of Emerging Anti-Obesity Drugs?

**Rakesh Singh**  and **Patrick Drake**

Aug 30, 2023

**Bloomberg**

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[Opinion](#) | Lisa Jarvis, Columnist

## Insurers Can't Avoid Covering Weight-Loss Drugs Forever

Evidence is mounting that drugs like Ozempic and Wegovy not only help patients lose weight but also help prevent heart attacks and strokes.

August 8, 2023 at 1:00 PM EDT



**By Lisa Jarvis**

Lisa Jarvis is a Bloomberg Opinion columnist covering biotech, health care and the pharmaceutical industry. Previously, she was executive editor of Chemical & Engineering News.

# Build Systems to Deliver Better Care



News

Weather

Sports

VERIFY



HEALTH

## Class-action lawsuits allege healthcare companies discriminate by not covering obesity treatments

The Washington State Health Care Authority and Regence Blueshield are accused of unlawfully excluding obesity treatments like Ozempic.

Author: KING 5 Staff

Published: 1:20 PM PDT October 10, 2023

Updated: 9:00 PM PDT October 10, 2023

# In Sum, Binary Thinking Doesn't Work in Obesity



*Brain's On-Off Switch, illustration by geralt / Wikimedia Commons*

- Perpetuating misconceptions
- Fueling bias
- Undermining care and prevention
- Advocacy grounded in science can overcome this

# More Information

 [conscienhealth.org/news](https://conscienhealth.org/news)

 [linkedin.com/in/ted-kyle-conscienhealth/](https://www.linkedin.com/in/ted-kyle-conscienhealth/)

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