### **PULSAR\***



How audience perceptions shape the way we think and talk about sugar & health

Social and news data reveal the changing in trends in consumption, behavior and outlook

### Move over fat, move over carbs: Sugar is viewed as the new enemy – but no two communities think about it the same way

Different audiences have distinct conversations about the same subject – and sugar, a pivotal topic in health and lifestyle, is no exception. This report delves into the evolving perception of sugar amid changing health paradigms, examining which influential voices holds sway over audiences, where they gather information, and how these dynamics shape attitudes and behaviors. We examine the topic though the lenses of different industries and angles: from health and fitness to food, beverages and even technology.

### This report unpacks:

- · How language about sugar maps onto to social, psychological and retail dimensions
- Perceptions of various brands as either contributors to the problem or else part of the solution
- The engagement of different communities, and their unique concerns in the sugar conversation
- In-depth exploration of products, misinformation, health management, and more in the context of sugar discussions

#### **Approach**

#### **Data Collection Period:**

April 1st - Dec 31st 2023

#### Channels:

() X

- Blogs
- Reddit
- Forums
- **f** Facebook
- (4) Online News
- Instagram
- a Amazon Reviews
- ن TikTok
- Podcast
- Pinterest
- U IV
- **t** Tumblr
- Radio
- YouTube
- Q Google Search

### Markets/Languages:

Global data collection Analysis in English-language



A global, crossplatform, cross-sector, network of sub-topics

The sugar discourse is nuanced and diverse, requiring a comprehensive analysis that spans various conversations on different platforms and in different geographical locations.

Our analysis delves into conversational data points, from news articles shaping narratives to Pinterest posts promoting products and services, and Subreddit discussions addressing or critiquing specific consumer behaviors.

These offer a detailed perspective on the dialoguethis and the diverse audiences actively engaged in it. Below, we've presented examples of the various conversation types that were scrutinized.





American food conglomerates Kellogg's, Coca Cola, Frito-lay, Kraft Heinz, and more are fighting the Mexican government.



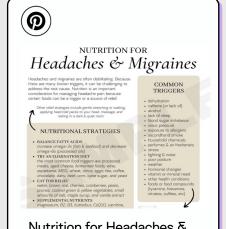


I survived my 1st week of no sugar, dairy, flour and coffee with quite a few temptations. Another year older today and want to be healthy for years...





Food companies know that by targeting our children, they can create a lifelong habit in us preferring an addiction to sugar.



Nutrition for Headaches & Migraines Handout — Functional Health Research + Resources



The Aubrey Plaza ad for Big Dairy that may have violated federal law, explained



Dairy companies may add sugar, vitamins and minerals, or preservatives and emulsifiers, depending on how the milk will be consumed.

Government Wellness Food & Retail Health Advertising & marketing



Understanding the multifaceted associations of sugar



Sugar is causing the new epidemic and is purported to be the number one killer of humans (CAD/Heart Disease, and many cancers). Sugar isn't just the white powder we think of, it's added into almost everything in so many different ways and forms.

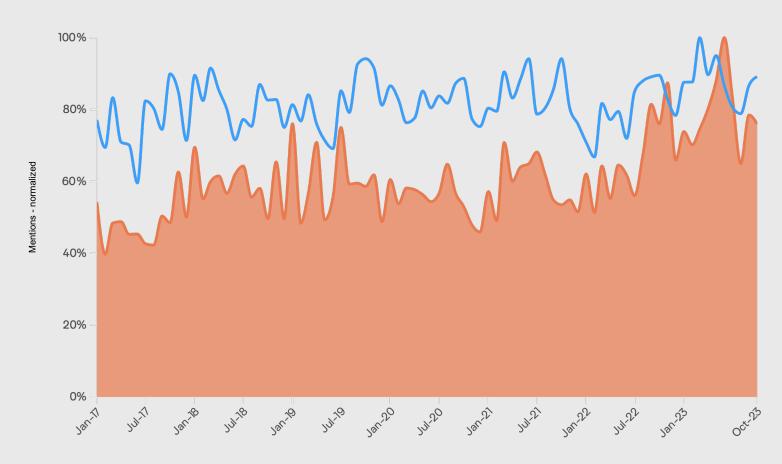
## Sugar & Health: Increasingly intertwined in the minds of audiences

From breakfast to dessert, sugar plays a central role in our culinary experiences, and our discussions about it reflect its pervasive presence in our lives.

While the omnipresence of sugar endures, perspective on it has shifted toward a more medicalized lens. With heightened awareness of health implications, government regulations, and technological advancements, audiences are more informed than ever about the impact of sugar on well-being.

However, this heightened awareness doesn't necessarily translate to informed or educated decision making. The continued high level of search data suggests both how mainstream sugar concerns are as a trend, and how hungry audiences are for information. At the same time, an increase in social activity reflects both the popularity of wellness or exposé-type content formats, and also the rise of social platforms as a forum for gathering information.



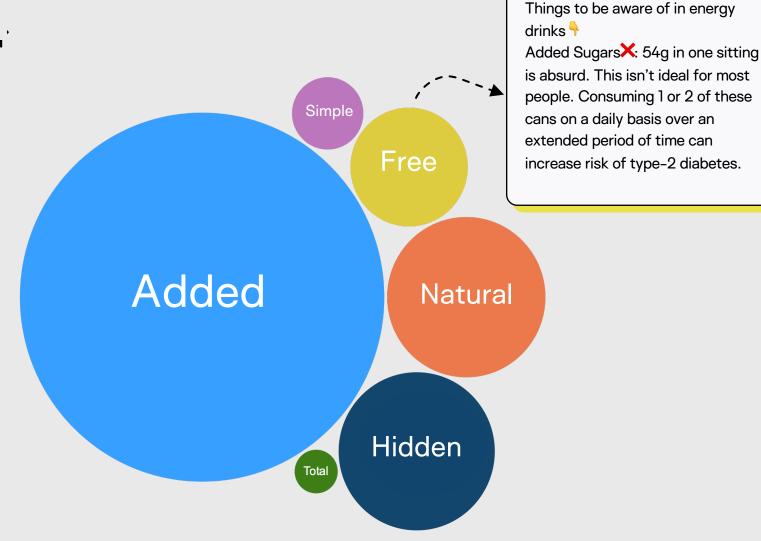


### Language: What terms do people associate with sugar?

Sugar is no longer just sugar; it has become a subject of scrutiny. The prevailing narrative highlighting its adverse effects on health has sparked a fervent quest among consumers to uncover hidden or disguised sugars.

Social media platforms have become a battleground for consumer awareness, as individuals caution one another about the corporate tactics employed to market and sell products.

In this era, added sugars have emerged as the primary adversary, with certain content creators establishing a personal brand centered around revealing the truth about sugar content in various products.



Conversation volume of the most common narratives around sugar consumption across digital platforms including social April 2023 – Dec 2023. Source: Pulsar TRAC.



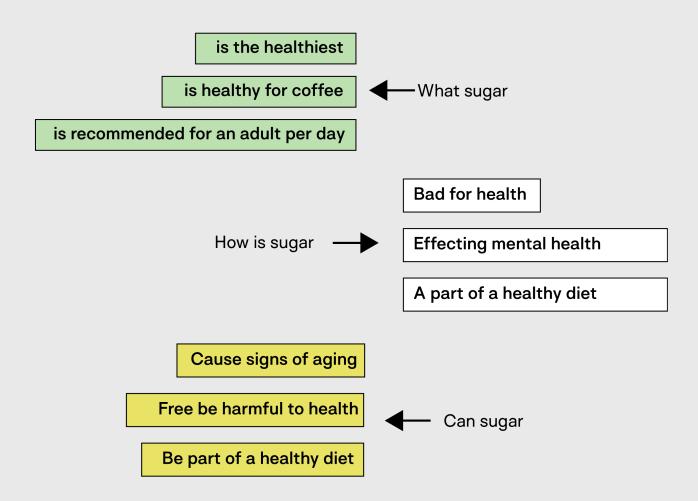
**()** 

## Audiences hungry for information: Sugar, and its impact on health

Google Search data reveals the common questions regarding sugar and health, and highlights priorities and knowledge gaps amongst audiences.

Individuals are increasingly interested in understanding the specific impact of sugar on the body and recognizing visible symptoms associated with excessive consumption.

It goes beyond mere awareness of sugar's potential harm; audiences seek intricate details about sugar intake and the tangible signs indicative of excessive consumption. Motivated by a heightened focus on health, individuals are keen to understand how sugar integrates into their lives and, more importantly, how they can proactively address these health concerns.



Common questions regarding sugar's relation to health, Google search data April 2023 – Dec 2023. Source: Pulsar TRAC.

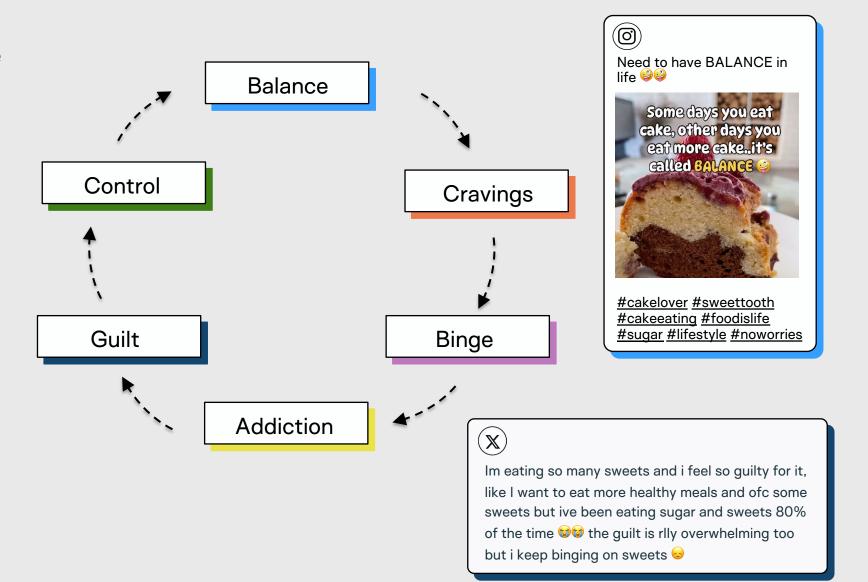
### The sugar cycle: How desire and effort shape audience perceptions

Through the analysis of social and news data, a discernible logic emerges in the way audiences engage in discussions about sugar. Analyzing the journey through this cycle reveals patterns that mirror the ebb and flow of desires and restraint.

Periods of relative equilibrium, where cravings, addiction, and binging are minimal, suggest successful control and balance. However, peaks in cravings and binge episodes punctuate the cycle, often leading to subsequent guilt.

Conversation on guilt and addiction remains constant while talk about balance starts the cycle in waves. Cravings follows and rapidly grows. Binge eating is often impulsive and unpredictable. Individuals then engage in intentional balancing acts, striving to regain control over their sugar intake.

This cyclical process showcases the intricate interplay between desire, indulgence, remorse, and the pursuit of a harmonious relationship with sugar.



### Who's got a sugar high? US & UK

Health obsessives, medical pros and self-development enthusiasts emerge as key communities

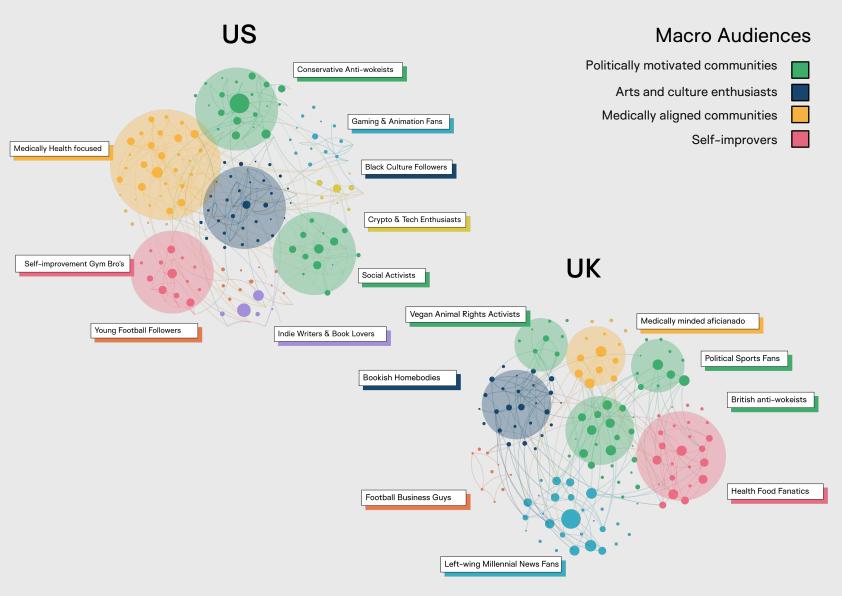
From the United Kingdom and the United States to Australia and New Zealand, and across Southeast Asia, the profound link between sugar and food resonates as a topic. Participation in this conversation differs from region to region, however.

Politically engaged communities underscore the significant role of regulations, particularly those governing sugar, labelling and advertising, as pivotal points of discussion.

In arts, culture, and lifestyle communities, sugar emerges as both a guilty pleasure and a component of the 'treat yourself' mentality, juxtaposed with considerations of health and moderation.

By analyzing the dot size (amount of community activity), and the connecting lines (their interconnectivity), we can identify how content can travel and change. The US has a vibrant, well-connected arts and culture community, while the UK's active self-improvement community is somewhat isolated from other viewpoints in the audience.

Audiences engaging in the conversation around both sugar and health across the US, and the UK regions on Twitter, April– Dec 2023. Source: Pulsar TRAC.



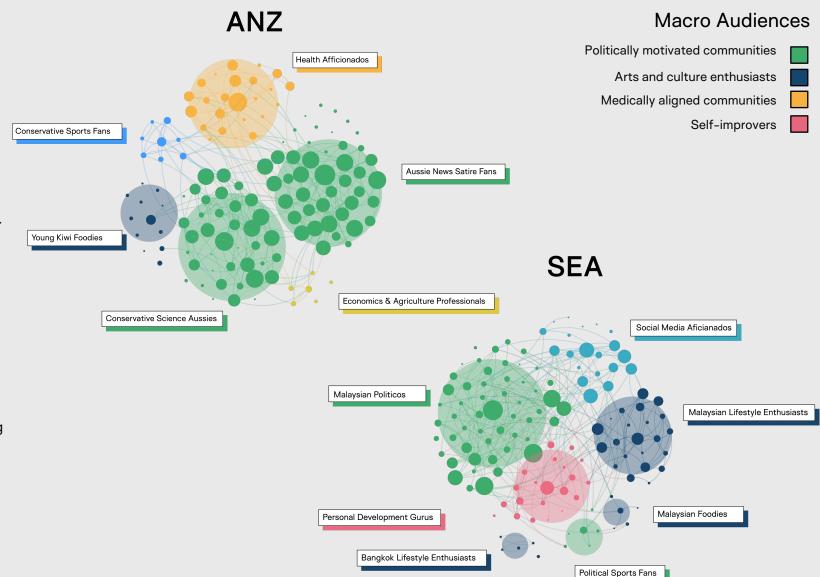
### Who's got a sugar high? APAC

### Political communities hold greater say in ANZ & SEA

Viewing these communities within the ANZ-based discussion, it becomes immediately clear that self-improvement and wellness communities play less of a part. Which is not to say that these communities do not exist within Australia and New Zealand, but rather than their attention appears to be focused elsewhere.

Instead, we see more politically focused audiences engaging with the topic, from both sides of the political divide. Conservatives in particular are likely to paint sugar as one of the pollutants of the modern world, alongside processed food and vaccines.

In the SEA region, meanwhile, conversation fixates on education and knowledge, with particular attention falling onto fruit. Malaysian Politicos are but one audience looking to redress the perception of fruit as something wholly 'healthy' and not sugar laden.



Audiences engaging in the conversation around both sugar and health across Australia and New Zealand, and South East Asia: Brunei, Cambodia, Indonesia Laos, Malaysia, Philippines, Singapore, Thailand, Vietnam) on X, April– Dec 2023. Source: Pulsar TRAC.



## What's the diagnosis? The narratives gaining traction amongst audiences

Al assists in outlining the top narratives framing sugar consumption. As consumers strive to minimize sugar intake, they face hurdles such as misleading labelling and the rising cost of living. Audiences generally perceive healthier food and drink options as less affordable and attainable.

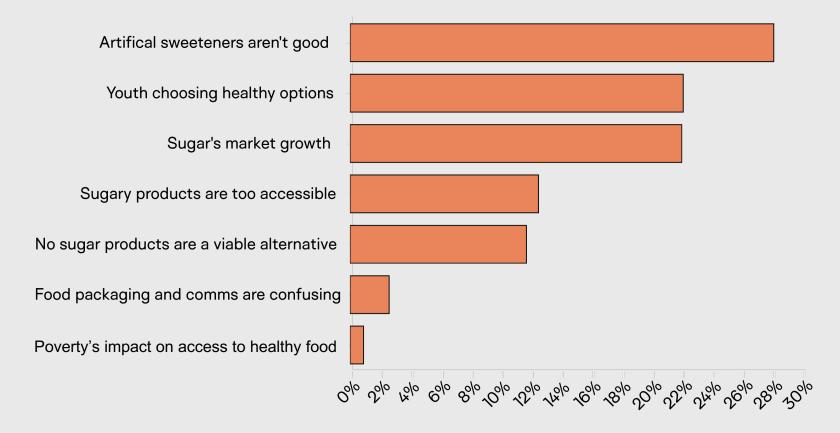
Channels tend to exhibit specific tones and types of content, indicating that audiences are sourcing specific types of information from particular channels.

On Facebook, for instance, groups and businesses are exchanging tips/listicles on diets, ingredients and myths about sugar and sugar alternatives.

Audiences on X typically highlights scandals associated brands communicating and promoting related products.

On Reddit those managing certain afflictions like diabetes can ask others in similar circumstances about personal experiences e.g. reactions to medications, and how certain diets work best for those managing diabetes.

### Conversation narratives, as revealed by Al

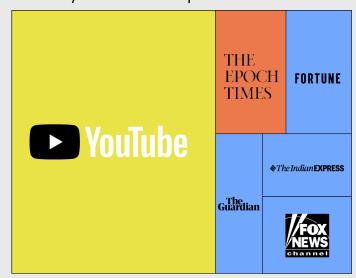


### The media shaping the sugar and health conversation

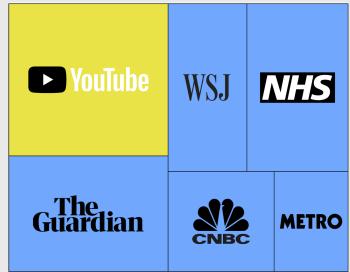
In discussions about sugar and health, news sources play a dominant role, with The Guardian and the Wall Street Journal being popular choices among broader audiences. Social media, particularly YouTube, emerges as a significant platform for most groups, except the Medically Aligned community. Interestingly, the preference for user-generated content is evident across three groups, contrasting with the Medical community's reliance on credible news outlets and government health centers. Notably, the Politically Motivated group tends to favor right-wing news sources such as Fox News and the Epoch Times, which also has a low credibility rating. The Culture group are especially impacted by YouTube's user-generated content, which may come as no surprise when this platform is a space for how-to, recipe and vlog style types of content which aligns with the interests of this audience.



#### Politically Motivated's Top channels



### Self-improvers' Top channels



### Medically Aligned Communities' Top channels





How sugar awareness shapes audience perspectives on food



Brown Rice vs. White Rice – A Glucose Monitor Revelation! For my personal biochemistry, I won't force myself to eat brown rice thinking it's healthier. However, glucose responses are highly individual, and the only way to know how a food is affecting you is to test it for yourself.

### Mealy mouthed: Different communities identify sugar with different meals

These macro audiences, previously identified, approach discussions about sugar in unique ways, and this extends to their perspectives on meals.

Medically aligned communities establish connections between sugar and its effects on specific health aspects. Hidden and added sugars in snacks are hot topics, prompting this group to delve into how various snacking habits impact individuals.

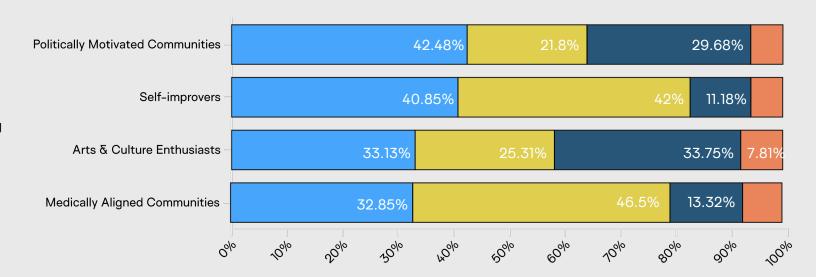
Self-improvers engage in discussions about what healthy and unhealthy eating choices convey about their personal identity; breakfast holds significant importance for this group.

Politically motivated communities delve into the political influence on health and how it shapes communication regarding food.

Culture enthusiasts emerge as the group most engaged in discussions about dinner, often focusing on the guilt associated with late-night snacking, occurring after what is meant to be the final meal of the day.



When it comes to snacking you can either... Eat processed sugar & seed oil filled snacks that will prevent you from reaching your fitness goals.OR Choose whole food nutrient dense snacks that will make you lean & strong.





Breakfast

this guy thinks you're a bad person if you question the government, big pharma and doctors. Like the opioid epidemic never happened. Like they never said high sugar cereal was a healthy breakfast for kids.

Lunch Dinner



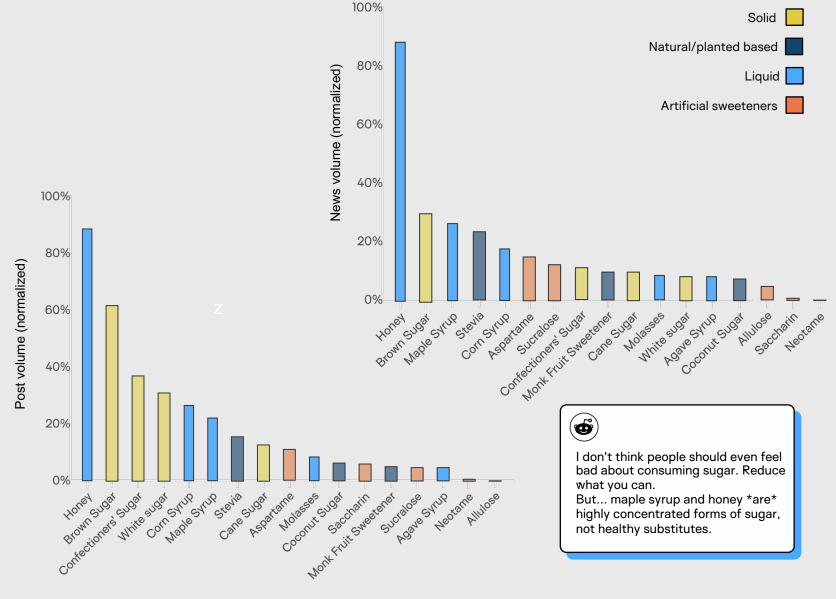
Short activity breaks, even as brief as 2 minutes every 30 minutes, were found to rapidly and significantly flip the switch for healthy sugar processing, highlighting the effectiveness of these "snacks" in maintaining metabolic health.

Mentions of main meals and snacking compared across macro audience groups across X, April 2023 - Dec 2023. Source: Pulsar TRAC.

## Sugar's shelf life: Navigating news and social buzz around cupboard classics & fridge favorites

Sugar assumes various forms, and its coverage varies across social and news outlets. On social platforms, discussions often revolve around the benefits of replacing conventional pantry sugars, like white sugar, with "natural" alternatives such as honey. However, social media serves as a platform for debate, with many asserting that these "healthier" sugars offer no significant advantage over standard types. Individuals share their diverse experiences with different sugars, highlighting the personalized impact of sugar consumption on consumers. This diversity underscores that each person reacts uniquely to their sugar intake.

Conversely, lesser-known sugar alternatives garner a larger share of attention from news outlets. The investigative and journalistic nature of news content illuminates previously undisclosed aspects of these niche sugars, such as the potential link between aspartame and cancer risks. News outlets often serve as early disseminators of new information and facts about these alternatives, presenting insights before they gain widespread attention on social media platforms, like Aspartame's link to cancer risks.



Volume of the most common sugar types discussed on social media (Facebook, Instagram, Pinterest, Reddit, TikTok, Twitch, X, YouTube, Tumblr, Forums) compared with news coverage including April 2023 – Dec 2023. Source: Pulsar TRAC.



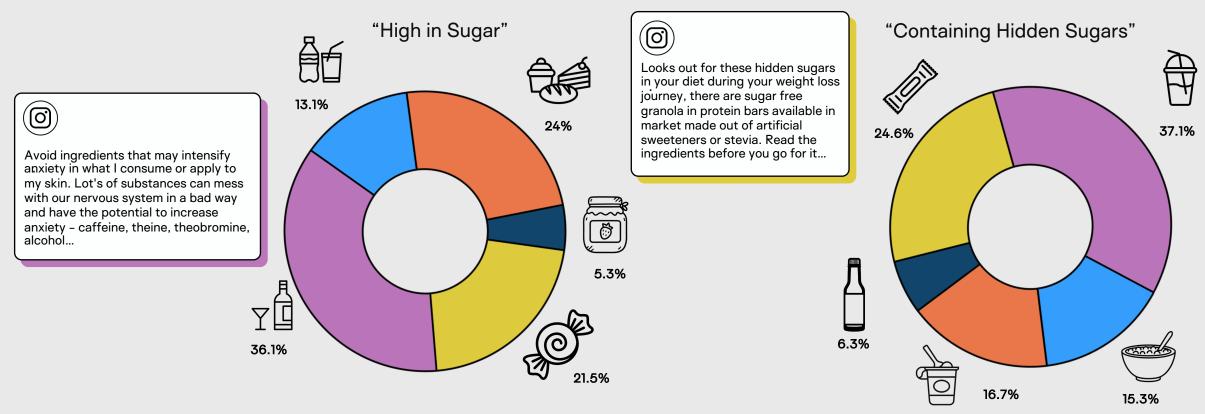
## The consumer perspective: Identifying the problem foods

There are items inherently associated with sugar and some that are associated with hidden sugars. Identifying the difference in tone applied to these groups can assist in understanding how people consume it, and how it impacts their purchasing behaviour.

In discussions about common high-sugar products, alcohol emerges as a frequently discussed subject, not just in relation to weight gain but how excessive consumption heightens anxiety.

Social media buzzes with strategies to discern and avoid hidden sugars, with health-conscious individuals sharing insights on interpreting nutritional information.

When it comes to 'hidden sugars' its more difficult to build clarity and consensus (ie, condiments classify as hidden, given many wouldn't think about them as containing any, whereas ice cream can be shocking for *how much* they contain). When the topic strikes a chord, however, these can achieve the weight & shock factor of bitesize exposes.



Mentions of top foods associated with hidden sugars (left) and high sugar content (right) across social media (Facebook, Instagram, Pinterest, Reddit, TikTok, Twitch, X, YouTube, Tumblr, Forums) April 2023 – Dec 2023. Source: Pulsar TRAC.



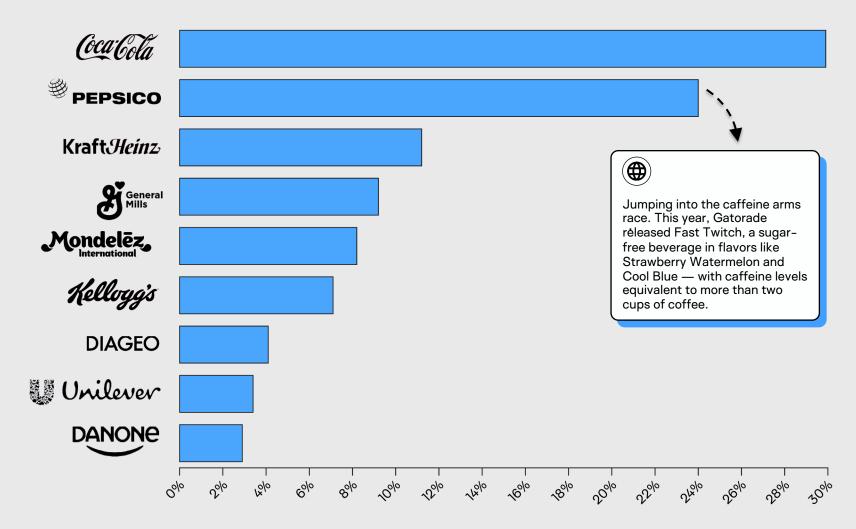
## The brands causing a spike in sugar conversation

The dominant brands in sugar-related discussions are predictably linked to high-sugar products like soda, jelly, energy drinks, cereals, and flavored coffees containing syrups.

Much of the conversation around these brands revolves around healthier homemade recipes that replicate their offerings. However, nostalgic sentiments still surround unhealthy, sugary foods and beverages, especially in blogs and forums discussing favorite theater snacks or the resurgence of retro/vintage foods like Jell-O salad.

Leading this discussion are Coca-Cola and PepsiCo, particularly highlighted by recent news revealing links between certain ingredients in their products and cancer. Additionally, Capri Sun, known for its low-sugar juices, has made headlines by separating its sales and distribution in Western Europe from Coca-Cola

Gatorade, a popular energy drink from PepsiCo, has notably entered the conversation, particularly regarding its increased caffeine content rather than its sugar content. As audiences lean towards healthier lifestyle choices, energy drinks are opting for a less sugary approach in favor of a more caffeinated one.



Source: Global brand analysis Coffee conversation across X, Facebook, Instagram, TikTok, Pinterest, News, Tumblr, YouTube, Forums, Blog and more April – Dec 2023. Source: Pulsar TRAC

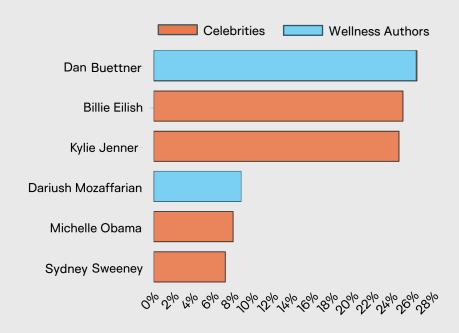


### Influential voices within the sugar conversation: celebrities vs wellness authors

Influencers and trends are key to Coca–Cola's brand dominance within the sugar  $\delta$  health. Sometimes this relates to a conscious business move, like Kylie Jenner's release of a no–sugar vodka soda. But they also result from celebrities disclosing a relationship with sugar (largely sugary *drinks*) that either identifies them as a 'normal' relateable person (Billie Eilish's fridge Cola explosion) or else someone living a distinctly 'celebrity' lifestyle (Sydney Sweeney admitting she's never tried coffee).

Other drivers of Coca-Cola content are wellness and medical experts like Dan Buettner and Dr. Dariush Mozaffarian, who highlight ingredients in Coca-Cola products that can lead to disease. Their perspective is strictly critical, even when it comes to apparently healthier alternatives like diet coke.

### Influential voices around Coca Cola





Kylie Jenner Just Launched a Line of No-Sugar-Added Vodka Sodas—Here's Our Honest Review



Sydney Sweeney has "never tried coffee"



Mentions of top brands associated with sugar (left) and trending influencers within the Coca-cola conversation (right) across social media (Facebook, Instagram, Pinterest, Reddit, TikTok, Twitch, X, YouTube, Tumblr, Forums) April 2023 – Dec 2023. Source: Pulsar TRAC.



How are audiences managing their health?



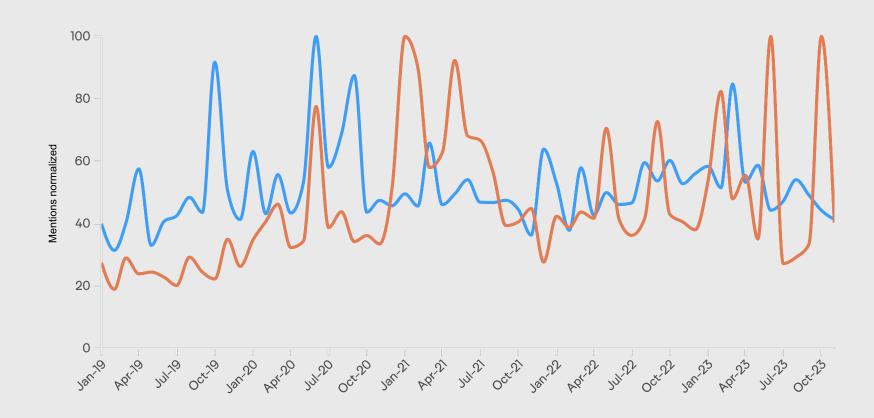
Using a continuous glucose monitor to track my daily blood sugar fluctations to aid in the treatment protocol for my hormonal and nervous system health. We are all so \*unique\* so knowing what factors affect YOU is key to your healing.

# Audiences show increased interest in sugar management: Control, rather than absolutism, on the rise

A shift in interest from "no sugar" diets to a continuous monitoring of glucose and blood sugar levels has emerged. Personalizing how the body reacts and sugar levels adjust to different foods and beverages is garnering interest online; not just for people managing diabetes but anyone who wants to be healthier.

Continuous glucose monitoring is no longer just for people managing diabetes. With the growing adoption of CGM apps and tech like the Fitbit, Libre and Dexcom, people who want a healthier lifestyle can obtain this data and can tailor their sugar intake.

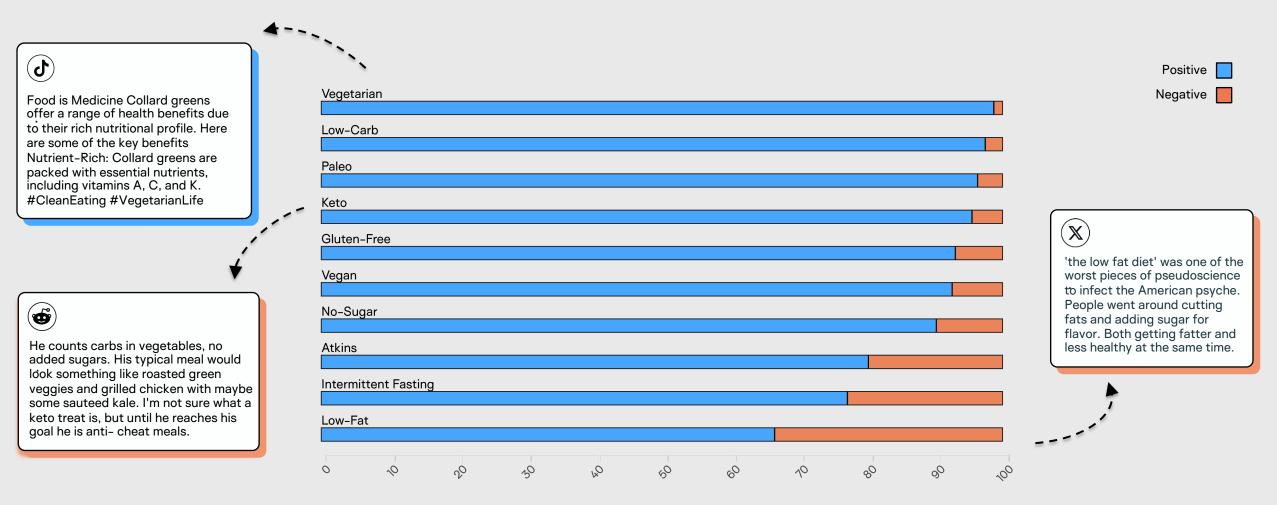




### A positive outlook for diet culture

One of the fundamental tenets of sugar management is nothing new – adopting specific diets. These different diets cater for a wide array of needs and preferences. And it's worth noting that despite some cooling off in interest around veganism, for instance, within wider conversation, in this context it still attracts overwhelming positivity.

Variance exist in how these diets are discussed, of course, with vegetarian, paleo, and Keto discussions often framing food as a source of healing, while Atkins, low-fat, and low-carb content tends to focus on dietary restrictions, adopting a more medical tone to discuss outcomes.



Mentions of diets most commonly associated with remedying high sugar intake across social media (Facebook, Instagram, Pinterest, Reddit, TikTok, Twitch, X, YouTube, Tumblr, Forums) April 2023 – Dec 2023. Source: Pulsar TRAC.

**PULSAR\*** 

### The quest for better health – where are the answers seen to lie?

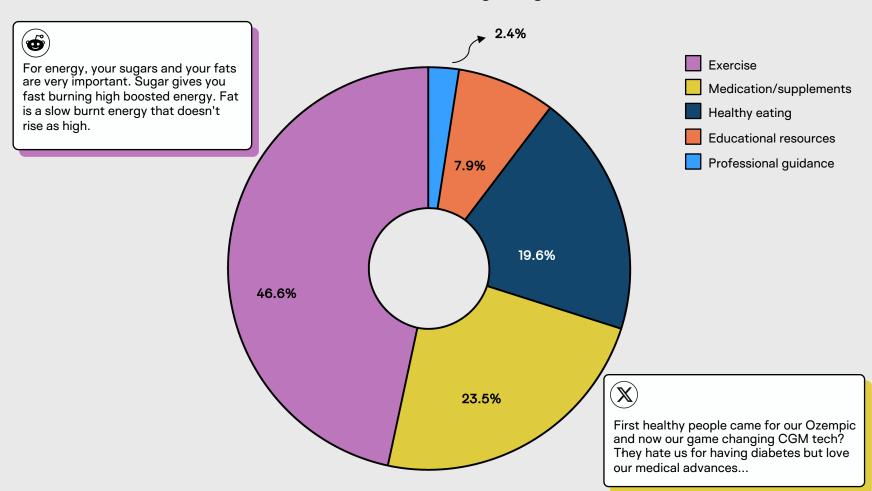
Beyond diet discussions, communities actively share a wealth of information and tips on healthy living.

Exercise takes the spotlight as the most popular topic on social media, with many posts cooking to foster commitment and healthy routines amongst readers

Medications such as Ozempic and supplements are gaining recognition as potential options for improved health and weight loss. However, some audiences criticize their use for cosmetic purposes.

As far as professional advice goes, on the other hand, the numbers are pretty minimal. This can either reflect the expense or unavailability of such services – or else a reluctance to divulge this kind of information.

### Solutions for Effects of High Sugar Intake







## The Doctor will see you now: who is informing the conversation, Influencers or Health Professionals?

Influencers without any stated medical qualification hold significant sway withinthis conversation.

"Doctor" identifiers contribute content rich in medical details and education, while these more generic 'influencers', the most prevalent group, adopt a more inflammatory tone, often prioritizing engagement over education.

Wellness coaches emphasize an "all-natural" lifestyle, advocating for healing through natural means. Their content can be competitive and critical of the medically qualified influencers they compete for attention with.

Nutritionists, meanwhile, can overlap with wellness coaches in tone but subject matter is mostly focused on nutritional labels and product communication.

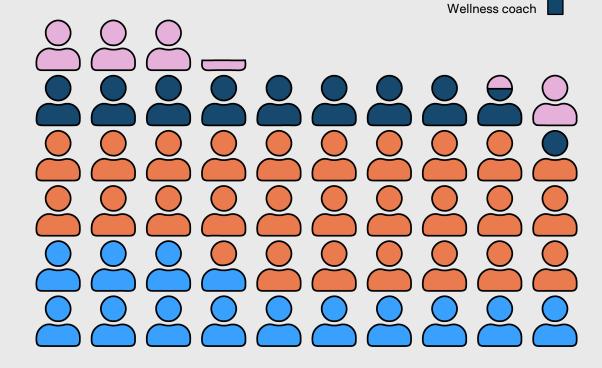
Bio keywords in social media profiles of individuals taking part in sugar, health conversation on social media (left), Social activity compared by self-described profession/qualifications. April 2023 – Dec 2023. Source: Pulsar TRAC.



The process that turns oats into oat milk includes enzymes that break down the oats, turning them into maltose, athat's responsible for the sweet taste. high-glycemic sugar

Specialists engaging in the conversation about sugar and health







## Analyzing Influencer Engagement: Influencers or health professionals?

Having established the majority "expert" voices within the conversation, we can investigate the engagement metrics for the top 12 influencers, which are split between influencer, doctor, and wellness coach subcategories.

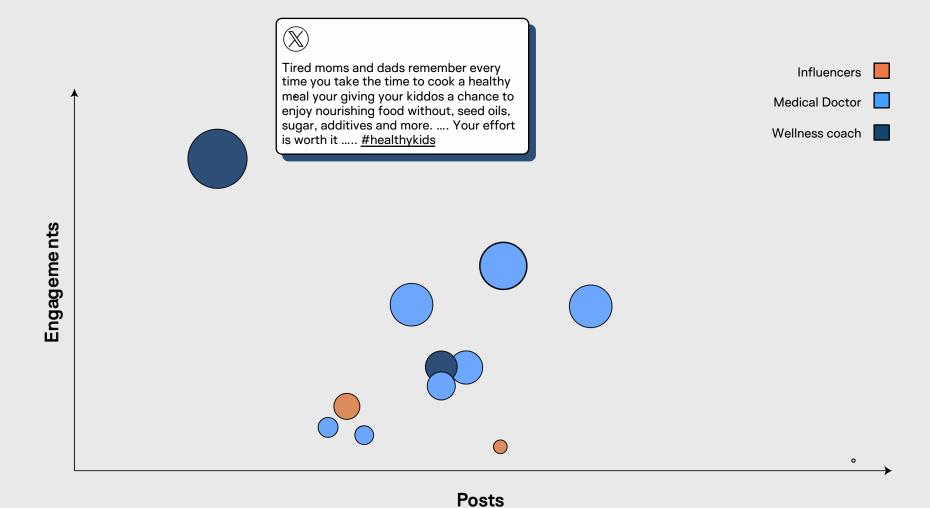
Here, we look to establish how many posts they have contributed and plot this against total engagements. The larger the bubble, the greater the level of engagement.

This tells us that doctors are consistently contributing to the conversation and hold authority within this space. While influencers are more prevalent in this social media space, they aren't posting as regularly or consistently as medical professionals.

Noticeably, wellness coaches with a more niche focus in content (like appealing to parents), receive reasonable attention from audiences.

Whither nutritionists? In short, there are none who generate the kind of engagement that would see them show up on this chart, suggesting that this same information is often better received when communicated by others.

Comparing the mentions and engagements of the top 12 influencers, by engagement, in the sugar and health conversation, Apr– Dec 2023. Source: Pulsar TRAC.



## Health concerns associated with sugar intake

The intertwining dynamics of people's relationship with sugar, and food in a broader sense, exert a bidirectional influence on both their physical and mental health.

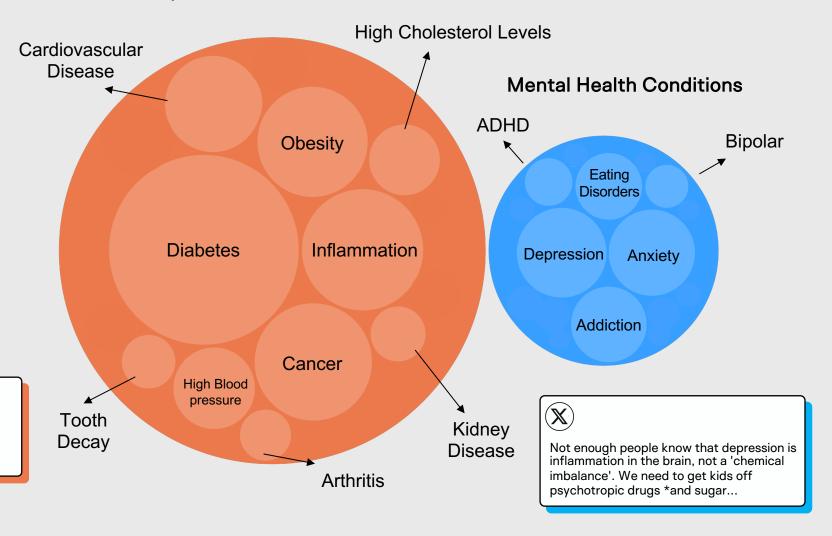
Physical or mental conditions can drive a change in consumption behaviour, particular to address chronic conditions such as diabetes. At the same time, there is also an acknowledgement that pre-existing patterns of consumption can lead to increased risk.

Sometimes this refers to established science, as with obesity or tooth decay. Sometimes it blends with pseudoscience, as with cancer. And sometimes the focus sits more squarely on mental conditions, with mood swings and longstanding issues often referred to as being exacerbated by high sugar diets.



Just got the bad news, I have diabetes, wondering if a vegan diet would help me keep a healthy lifestyle and blood sugar.

### **Physical Health Conditions**

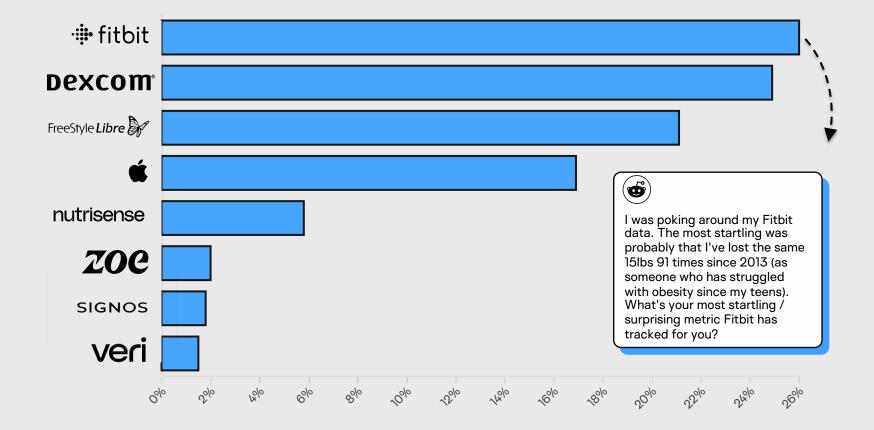


# Trends in health management Personalized nutrition – a way to reduce sugar intake or increase health paranoia?

In the age of digital empowerment, an increasing number of individuals are embracing the proactive monitoring of their health through smart devices, wearables, and Continuous Glucose Monitoring (CGM) technology.

These tools serve as personalized health companions, allowing users to gain real-time insights into various aspects of their well-being. Whether it's tracking daily steps, monitoring sleep patterns, or observing glucose levels, the integration of smart technology empowers users to make informed lifestyle choices. This trend reflects a broader cultural shift towards preventative healthcare, where individuals, regardless of medical conditions, actively engage with technology to optimize their overall health and well-being.

The Most Discussed Brands Dealing in Wearables, CGM Tech & Health Monitoring



Mentions of the most popular health apps, CGM tech/wearables across social media (Facebook, Instagram, Pinterest, Reddit, TikTok, Twitch, X, YouTube, Tumblr, Forums) April 2023 – Dec 2023. Source: Pulsar TRAC.

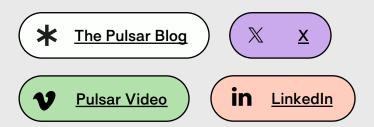


### **About Pulsar**

Pulsar is the world's leading audience intelligence platform—harnessing rich data sets, Al and human minds – so our clients can access nuanced and actionable insights that get straight to what matters most to their customers, their businesses and to society.

### Learn more

Get more audience-first insights wherever you like to get your content



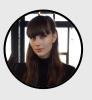
### Authors



Loren Botica Marketing Executive, Pulsar LinkedIn



Alex Bryson
Head of Content, Pulsar
alex.bryson@pulsarplatform.com
LinkedIn



Gina Gilpin Research Consultant, Pulsar LinkedIn

# \* PULSAR