Healthy Food, As Told by TikTok:

A Thematic Analysis of the Most Liked #healthyrecipes on TikTok

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Abstract

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Purpose

As a growing video-sharing platform with massive reach, TikTok is shaping food culture through the popular hashtag #healthyrecipes. TikTok videos have the ability to influence health attitudes and behaviors, yet little is known about what characterizes the healthy food landscape on TikTok. This study describes the healthy food landscape on TikTok by addressing the research question: How do the most popular healthy recipe videos on TikTok portray healthy food?

Methods

A multi-phase thematic analysis was conducted among the most liked videos on TikTok containing the hashtag #healthyrecipes using inductive coding methods. The top 150 videos were cataloged and downloaded over 3 consecutive days in early November 2021. An initial review excluded 40 videos, which were non-English language, presented technical issues, or shared

identical messages from the same creator. Video visuals, audio, captions, and hashtags were included in the final dataset (n=110). The code frame was iteratively developed by a collaborative team of researchers, and each video was independently coded by two researchers employing Dedoose software. Codes were consolidated into themes and sub-themes to address the primary research question.

Results

The healthy food landscape on TikTok converged around three central themes and one sub-theme: (1) Practical Skills, (2) Performative Wellness, (2a) Sensory and Exciting, and (3) Weight Normative. This analysis reveals that the most popular TikTok creators characterize healthy food as some combination of utilizing practical skills to maintain a home cooking routine, incorporating functional or plant-based foods, delivering on exciting sensory experiences, and permissible based on specific health parameters.

Conclusion

TikTok provides a platform for examining broader perceptions of health and healthy food. The themes uncovered present an opportunity for nutrition educators to take a critical approach in understanding how social media platforms amplify polarizing ideals of wellness and shape health messaging. Given the highly individualized nature of the TikTok algorithm and its unique ability to disseminate ideas in rapid fashion, further research is needed to understand the role of nutrition educators on social media and potential public health implications of popular nutrition messaging, particularly among pediatric populations.

Introduction

Social media platforms are actively shaping the beliefs, attitudes, and behaviors of their users, and TikTok is no exception. This leading mobile video platform popularized viral dance videos at the height of the COVID-19 pandemic in 2020, and has since grown to more than 3 billion downloads worldwide.[1] TikTok reported 1.2 billion monthly active users in the fourth quarter of 2021 and is projected to capture 1.8 billion monthly active users by the end of 2022.[1] TikTok's unique interest-based algorithm considers the most subtle behaviors of engagement to learn a user's specific interests, assign the user to specific affinity groups, and serve up new content accordingly.[2]

The abundance of health and nutrition-related information on social media is contributing to the digitalization of the food environment.[3] Social media has given rise to countless cultural food phenomena, from elaborate food photography and aesthetic smoothie bowls to recipes for homemade chlorophyll water and "keto watermelon". While sprinkling stevia on cucumber and calling it watermelon may not have mass appeal in practice, these health trends have the potential to reach millions of users in a matter of days, opening the door to internet subcultures and movements.[3]

The rapid spread of ideas across social media platforms has increased exposure to nutrition-related messaging, which impacts health attitudes and consumption behaviors.[3] A systematic review found a significant relationship between exposure to or engagement with food-related content on social media and changes in food choices and consumption.[4] This study indicated that food-related social media content also has the ability to influence satiety, supporting the idea that social media has the power to not only shape our attitudes but our behaviors as well.

Despite the strong influence of social media, little is known about what characterizes nutrition-related content. A hashtag analysis concluded that healthy food content on Instagram, defined by the hashtag #healthyfood, is most associated with weight loss, veganism, and clean eating.[5] This study also found that choosing healthy food is perceived to be a lifestyle, underlining the power of the healthy food category to shape an individual's identity and therefore the broader culture.[5]

Literature surrounding TikTok is even more limited. A 2021 review article concluded that while TikTok has successfully reached a mass audience, empirical evidence for the psychological implications of TikTok use is extremely limited.[6] The authors call for researchers to invest time in exploring the questions of why, how, and to what effect users are engaging with TikTok.[6] Given its rapid rise and mass influence, there has been a call for public health officials to engage in research to examine the ways in which TikTok is influencing health.[7]

This study aims to serve as a first step in understanding the healthy food landscape on TikTok. Before we can understand the impacts of nutrition-related messaging on user attitudes and behavior, we must have a clear picture of what that messaging entails. The primary objective of this study is to describe the healthy food landscape on TikTok by answering the question: How do the most popular healthy recipe videos on TikTok define healthy food?

Description of Framework

Thematic analysis was applied to answer the research question. While qualitative research conducted on TikTok is limited, thematic analysis is a common framework in social media research that aims to both describe data and interpret meaning through the analysis of codes. Thematic analysis provides a systematic framework for coding and identifying patterns to answer a research question.[8] Primary strengths of thematic analysis include its ability to offer

both flexibility and rigor. Thematic analysis provides a rigorous toolkit for robust qualitative analysis, and at the same time, allows the researcher to decide how and at what level the observed patterns are interpreted.[8] Additional details regarding the techniques used to ensure rigor are discussed in the Methods and Analysis Techniques sections.

Methods

Data Framing

Prior to data collection, specific parameters were discussed and agreed upon by the research team in order to define the dataset. The healthy food landscape on TikTok is vast and was first narrowed down to the healthy recipes category in order to frame the research. According to a 2020 TikTok trends report, cooking was the 8th most popular content category with a 57% increase in engagement between January and November, possibly driven by the COVID-19 pandemic.[9] More specifically, #healthyrecipes is the second most popular hashtag containing the word "healthy," with more than 7 billion views as of June 2022.

Hashtags were the chosen method for identifying healthy recipe videos and are a common tool for aggregating data in social media research. Hashtags are the most efficient way of identifying specific content categories on TikTok and other social media platforms. However, an important limitation of utilizing hashtags is that they are subjectively decided by the video creator. Several hashtags were considered for this analysis, including #healthyrecipes, #healthyrecipe, and #healthyfood. The hashtag #healthyrecipes was selected for the basis of this research given it garnered the most views (3.2 billion views as of August 2021, the time of selection). Based on growth data provided by TikTok, users are more likely to seek out nutrition

information via cooking and recipes content rather than more general content, supporting an exploration of #healthyrecipes over #healthyfood.[9]

Data Collection

Data was collected between November 5-7, 2021 using a multistep process that is visualized in Appendix A. TikTok videos were filtered using the hashtag #healthyrecipes and sorted by "Most Liked" using the sorting feature in the Discover tab. Rather than take a random sample of videos, data from the most liked videos with the hashtag #healthyrecipes were collected. Likes are considered an indicator of engagement, and the TikTok algorithm will promote the reach of highly engaging videos to users who fall into similar affinity groups.[2]

The 150 most-liked videos that contained the hashtag #healthyrecipes were downloaded and saved to a password-protected laptop. Video visuals, audio, captions, and hashtags were included in the dataset. Basic information was captured and cataloged for each video including account handle, date posted, date saved, video length, number of likes, number of comments, and number of shares. Captions and hashtags were transcribed in the data file using a simple copy/paste function. Categorical variables were created for date posted, video length, number of likes, number of comments, and number of shares in order to be analyzed using Dedoose software.

All 150 videos were included in the initial dataset. Videos were excluded if they contained the same themes from the same creator (termed "duplicates"), contained predominantly non-English language that would prevent the team from capturing the full meaning of the video, were unable to be downloaded, or did not contain content related to healthy recipes. A total of 40 videos were excluded and 110 videos were included in the final dataset.

Analysis Techniques

Codebook Development

Codebook development was modeled from a framework proposed by Roberts et al and continually evolved over the course of analysis.[10] See Appendix B for a visual representation of the codebook development process. This study primarily used inductive coding methods to allow for the observed content to drive the analysis rather than narrowing findings to a specific lens from the literature. However, deductive coding was also employed in the development of certain child codes, in order to manage the level of detail beneath a given parent code. As such, code sources were driven by the identification of initial themes and were refined over time by a collaborative team of researchers.

An initial round of coding was first conducted among the top 30 videos to establish the basis of the code frame. This preliminary coding round was conducted independently by two researchers using a combination of Dedoose software, pen and paper methods, and Miro, an online visualization software.[11,12] Multiple methods of coding were intentionally used to facilitate interaction between the researchers and the data. A combination of digital tools, visual mapping, and pen and paper methods allows for complementary forms of cognition in order to facilitate a more rigorous analysis process.[13] Once the initial codebook was established, a researcher not involved in the project tested the codebook and further refinements were made to the code definitions.

Intercoder Reliability

Rigor was established through continual interactions with the data and discussions among the research team over multiple months. During the coding process, intercoder reliability was

assessed using a framework proposed by O'Connor et al, which is visualized in Appendix C.[14] While summary statistics are commonly used to report on intercoder reliability, Dedoose software does not provide a kappa statistic when coding video files. Instead, intercoder reliability was used as an iterative method for facilitating discussion among the research team to refine and further develop the codebook. The final codebook included 29 parent codes and 10 child codes.

Data Analysis

After the initial round of coding, all remaining videos were coded independently by two researchers using Dedoose software. Each researcher took multiple passes to apply the codebook. Codes were compared across researchers and final updates were made collaboratively after discussing any differences. Themes were derived from the data using Miro online visualization software to facilitate multiple discussions among the research team. Initial themes were identified early on and further developed over the course of data analysis. Thematic saturation was discussed among the research team throughout the analysis. In assessing saturation beyond the 110 videos included in the final dataset, it was determined that no new codes would be expected and thus additional videos were not included in the analysis.

Results

Description of the Sample

A total of n=110 TikTok videos were analyzed using inductive coding methods and thematic analysis. The final sample included videos from 78 unique content creators. Most videos (n=85) were posted in 2021, with the majority (n=32) posted in the first quarter (January through March). The average video length was 29 seconds, with 73 videos lasting 30 seconds or

less, and 37 videos between 31-60 seconds. All videos had at least 100,000 likes, with the top 38 videos grossing more than 500,000 likes each. The top 14 videos had more than 1 million likes, and the most-liked video had more than 5 million likes at the time of data collection. Most videos (n=69) had between 1,000 and less than 5,000 comments, while 9 videos had more than 10,000 comments, and the video with the most comments had more than 26,000. Most videos (n=50) were shared less than 10,000 times, while 13 videos were shared more than 50,000 times and the most-shared video was shared more than 269,000 times. The most-liked video was not synonymous with the most comments or the most shares.

Reliability and Validity of the Analysis Methods

Reliability of the analysis was supported by continual alignment of the coders via bimonthly meetings to facilitate meaningful interactions between researchers and the data. Continual alignment between researchers created an avenue for refinement of the code frame and thematic development. Prolonged engagement with the data by two independent coders supported the credibility of the findings.[10] Lastly, multiple rounds of code frame development using both digital tools and more transitional methods allowed for increased depth of interaction with the data, yielding a stronger code frame and analysis.[10]

Thematic Results

The healthy food landscape on TikTok converged around three central themes and one sub-theme:

1. Practical Skills

    Many of the #healthyrecipes videos on TikTok shared practical skills with the intention of addressing barriers to home cooking and teaching others how to cook in a

way that sustains health. Content creators often demonstrated cooking skills including chopping and knife skills, walking through the steps for cooking a recipe, and showing various ways a recipe could be adapted. Videos showing practical skills typically promoted ease of cooking through methods for meal prepping or “hacking” a recipe by using an innovative technique for making food preparation easier, faster, or tastier. Common barriers to home cooking that were addressed through the use of practical skills were not having enough time, knowledge, experience, money, or motivation. Ultimately, sharing practical skills was for the purpose of building confidence in the kitchen.

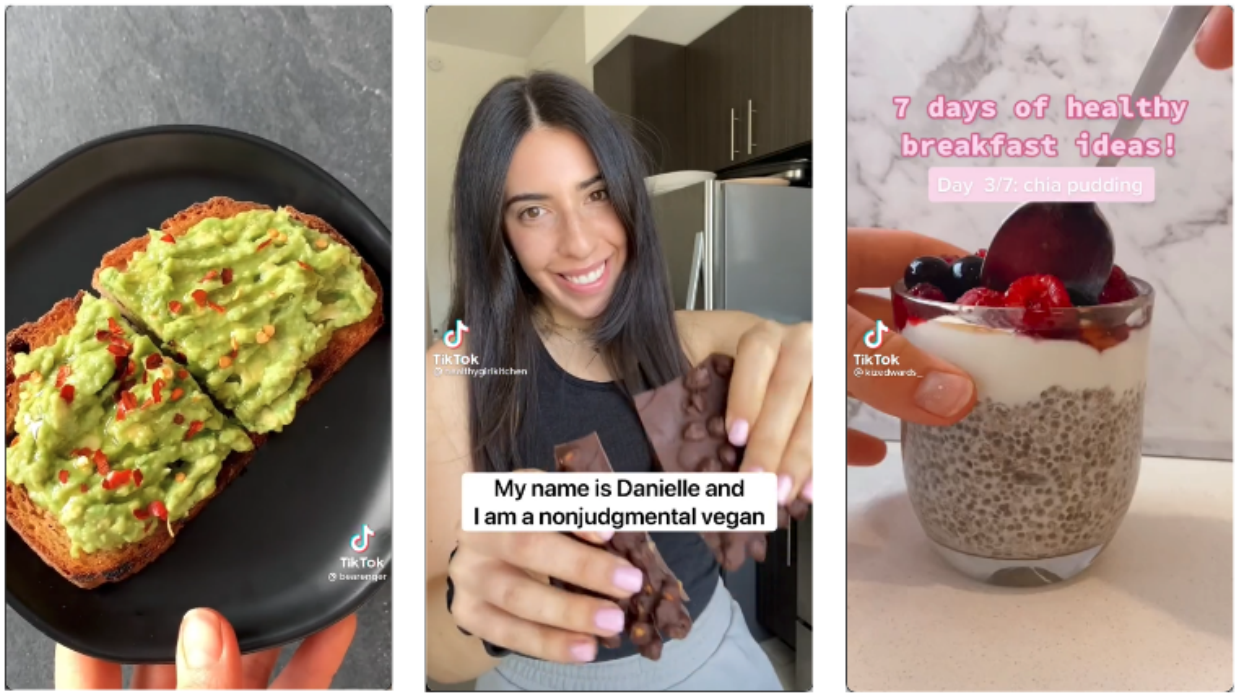
Figure 1: Examples of Practical Skills

The theme Practical Skills included meal preparation, step-by-step recipes, cooking skills, and time-saving tips.

2. Performative Wellness

The signaling of health through wellness trends is prevalent among the healthy food landscape on TikTok. SPINS food industry data includes categories such as ancient grains, vegan, and allergen-free in the top health and wellness attribute trends for 2022.[15] Many recipes included ingredients that fall into these trending wellness categories, such as avocado, oats, chia seeds, and dairy alternatives. Vegan and plant-based foods were included in this theme, as many content creators would claim to transform traditionally indulgent foods into healthier alternatives through the use of plant-based ingredients. Functional foods with purported benefits were also used to signal health, including high-protein recipes and ingredients. The videos included in this theme relied on the presence of trending foods and traits in the health and wellness category in order to signal health.[15] The air of these videos was often paternalistic or superior, using phrases such as "I got you" and "Let me show you" to signal the sharing of health knowledge from seemingly "more informed" content creators to "less informed" users.

Figure 2: Examples of Performative Wellness



The theme Performative Wellness included ingredient-based wellness trends, vegan recipes, and functional foods.

a. Sensory & Exciting

An important sub-theme within Performative Wellness was identified as Sensory & Exiting, to describe the many sensory elements and experimental methods incorporated into #healthyrecipes videos. These sensory elements were often incorporated to support the signaling of health. For example, smoothie recipes typically included bright colors, and colors are a well-known sign of "healthy" foods.[16] Apart from bright colors, health and excitement were signaled through upbeat music, appealing textures, and explicitly stating that a recipe was fun or not boring. While these sensory elements may be inherent to the TikTok platform, they are also setting a new standard for how "healthy" food is expected

to be presented in redefining the purportedly boring health foods of the 90's and early 2000's.

Figure 3: Examples of Sensory & Exciting

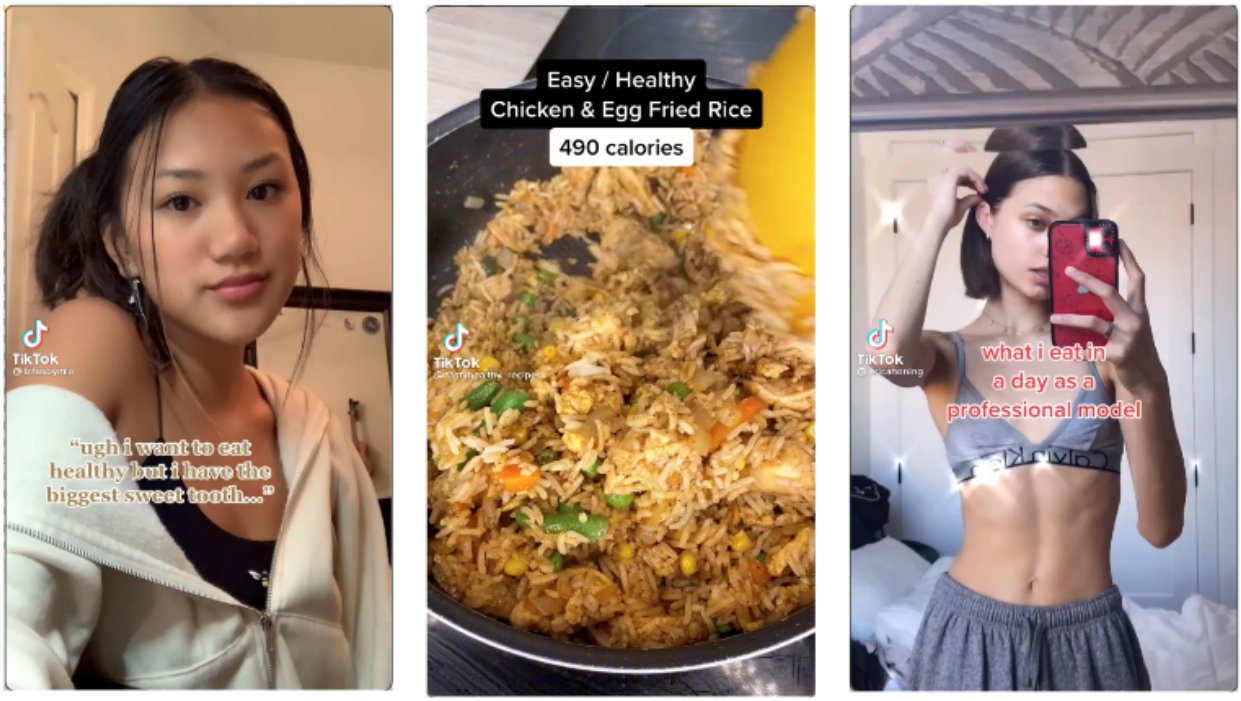
The theme Sensory & Exciting included animated expressions, colorful ingredients, indulgent textures, and messaging to reinforce the idea that healthy food doesn't have to be boring.

3. Weight Normative

Though wellness trends have seemingly moved beyond weight loss to broader ideas of health, explicit and implicit statements related to weight persisted in the #healthrecipes space on TikTok.[15] Many recipes highlighted an assumed association between weight loss and improved health, referencing the number of calories, explicitly showing an "ideal" body by Western beauty standards,[17] or providing permission to indulge in traditionally decadent recipes through the use of ketogenic or low-carb

ingredients. Weight normative recipes that did not include metrics such as the number of calories were focused on reducing guilt through ingredient substitutions.

Figure 4: Examples of Weight Normative



The theme Weight Normative included explicitly showing an "ideal" body as defined by Western beauty standards, guilt reduction, calorie counts, and eating for weight loss.

Discussion

This study aimed to describe the healthy food landscape on TikTok by investigating how the most popular healthy recipe videos on TikTok define healthy food. A thematic analysis of the 150 most-liked videos containing the hashtag #healthyrecipes uncovered three overarching themes and one sub-theme, with most videos including more than one theme: (1) Practical Skills, (2) Performative Wellness, (2a) Sensory and Exciting, and (3) Weight Normative. This analysis revealed that the most popular TikTok creators characterize healthy food as some combination of utilizing practical skills to maintain a home cooking routine, incorporating functional or plant-

based ingredients, delivering on exciting sensory experiences, and providing permission to eat certain foods based on specific health parameters. As this was an analysis of the themes presented by content creators, we cannot assume the internalization or interpretation of these themes by TikTok users in the #healthyrecipes space.

The healthy food landscape described by this study aligns with reported trends in consumer and retail data but does not strongly align with current evidence-based guidelines that place importance on holistic dietary patterns over individual ingredients.[15,18] Reported trends in consumer and retail data indicate that natural and wellness product categories are leading food industry growth.[19] Consumer spending data also points to increased purchasing of foods that support home cooking and products that tout wellness claims including plant-based and functional health benefits.[19] The prevalence of ingredient-based wellness trends as demonstrated by consumer spending data and this research may suggest the presence of the health halo effect on TikTok. The health halo effect has been largely studied in food marketing and menu messaging, referring to the assumption that the entirety of a dish is healthy based on a single trait or claim.[20] The results of this study indicate that the health halo effect may be extrapolated to include ingredient-based wellness trends and dietary patterns, where the use of a single ingredient or ascribing to a singular dietary pattern (e.g., vegan, low-carbohydrate diet, etc.) is a social signal of health. This reductionist approach contradicts a shift in nutrition literature from assessing the presence of singular nutrients to understanding a person's holistic dietary pattern in order to predict health outcomes.[18,21] Future research should investigate social media's role in promoting specific dietary patterns and the impacts of social media on individual behaviors.

Considerations for Nutrition Educators

Study findings indicated a notable lack of nutrition expertise among creators of #healthyrecipes on TikTok. Deductive codebook development revealed expertise as an area of exploration and the code for expertise was intentionally given a broad definition that was not bound to an indication of nutrition-related credentials. Despite this broad definition, indications of expertise were rare among the most-liked healthy recipe videos on TikTok. This study supports other findings that caution against the use of TikTok as a reliable health information source. A study investigating the quality and content of diabetes-related TikTok videos found a range of acceptability in the quality of diabetes content and advised viewers to use caution when utilizing TikTok as a health information source for diabetes-related content.[22]

Video content analyses have been used to understand how images can communicate stereotypes, attitudes, and biases towards various health topics, including smoking, diabetes, and vaccines.[5] According to a content analysis of online news videos, viewers accept visual images as reality while being unaware of the overall context of how images are framed.[23] The lack of expertise in the healthy food landscape on TikTok creates a high risk of misinformation and misunderstanding of context, and users are likely to mistake food trends for legitimate nutrition advice from a credentialed expert.[24]

While the interpretation and utilization of health-related messaging on TikTok remains largely unknown, awareness of health and nutrition-related content on TikTok may play an important role in assessing a patient's or client's existing food beliefs, particularly among pediatric populations. More research is needed to understand the impact of social media messaging on nutrition-related beliefs, the perception of expertise, and the role of nutrition educators on social media. Further investigation is needed to understand where evidence-based

nutrition education is best-received and which social media platforms are most effective for nutrition education.

Public Health and Policy Implications

The foundation of TikTok rests on its highly individualized algorithm and ability to rapidly disseminate new and engaging ideas. A study examining TikTok's use as a knowledge mobilization tool for public health uses concluded that its unique algorithm and video editing features set TikTok apart from other platforms when it comes to the dissemination of knowledge, indicating that TikTok has the potential to be leveraged for public health messaging.[25]

At the same time, TikTok's focus on knowledge sharing inherently reinforces the dominant ideology that nutrition problems are an individual's responsibility, driven by a lack of knowledge or willingness to change.[26] This focus on individualism undermines justice-oriented approaches to nutrition that focus on upstream inequalities and social determinants of health.[26] As such, there is a need for a more nuanced approach to healthful eating on TikTok. An opportunity exists for increased public health-oriented messaging on TikTok that moves away from putting the onus on the individual and instead provides a deeper context for nutrition's role in overall health. Additional research is needed to understand the prevalence of social justice-oriented approaches to health and nutrition on TikTok relative to content that emphasizes individual responsibility.

The digitalization of the food environment points to an increased need to examine food and nutrition-related policies on social media platforms.[16] Awareness of health trends on TikTok is particularly critical for understanding health implications in pediatric populations.[27] While social media posts from branded food products are subject to regulations from the Food and Drug Administration, user-generated content that spreads harmful concepts or misinformation

goes largely unchecked unless reported by other users. More research is needed to understand the impacts of specific nutrition messaging on TikTok, particularly how social media engagement may shape cognition and behavior among younger users.

TikTok demonstrated its willingness to adjust advertising policies to protect its users in 2020 when the platform banned advertisements for fasting apps and weight loss supplements.[28] During this time, TikTok also placed tighter restrictions on weight-related advertisements that could be shown to users under age 18 in an effort to combat their known negative effects on body image.[28] Existing literature points to a relationship between social media, body image, and disordered eating behaviors.[29] At the same time, enforcement of community guidelines varies across social media platforms and TikTok is known for less stringent enforcement.[30] Future research should focus on understanding the effects of weight normative messages on social media with the purpose of protecting users, particularly young users, in cases where certain messaging is deemed to have harmful effects.

Study Strengths and Limitations

The study design has several strengths, as well as some notable limitations. The methodological design accounted for many aspects of analytic rigor, including continual interaction with the data, multiple coders, multiple methods for facilitating discussion among the research team, and a fluid process for thematic analysis.[13] The study also provides a template for future thematic analysis of short-form video content using Dedoose software. Lastly, the final sample of 110 videos is relatively large compared to other social media analyses, particularly given the breadth of data analyzed in each video.

In considering the study limitations, it is important to note that utilizing the most-liked videos containing the hashtag #healthyrecipes is not reflective of TikTok's individualized user

experience. As such, we cannot assume that the findings are reflective of a user's exposure to healthy food messaging on TikTok. We also cannot assume the extent to which a user's understanding of healthy food and nutrition aligns with or is shaped by the themes uncovered in this research. Additionally, the analysis of the hashtag #healthyrecipes does not reflect the entirety of the healthy food landscape on TikTok, as the use of hashtags is subjective to the content creator. An analysis of other related hashtags may uncover additional themes. Lastly, qualitative research is subjective in nature, and while individual biases of the researchers were well-understood, these biases have the potential to shape the study results.

Conclusion

TikTok provides a platform for examining broader perceptions of health and nutrition. TikTok videos have the ability to influence health attitudes and behaviors, yet little is known about what characterizes the healthy food landscape on TikTok. This study employed thematic analysis to lay a foundation for understanding the portrayal of healthy food on TikTok through an investigation of the hashtag #healthyrecipes. The themes uncovered by this research present an opportunity for nutrition educators to take a critical approach in understanding how social media platforms amplify polarizing ideals of wellness and shape health messaging. Given the highly individualized nature of the TikTok algorithm and its unique ability to disseminate ideas in rapid fashion, further research is needed to understand the role of nutrition educators on social media and potential public health implications of popular nutrition messaging, particularly among pediatric populations.

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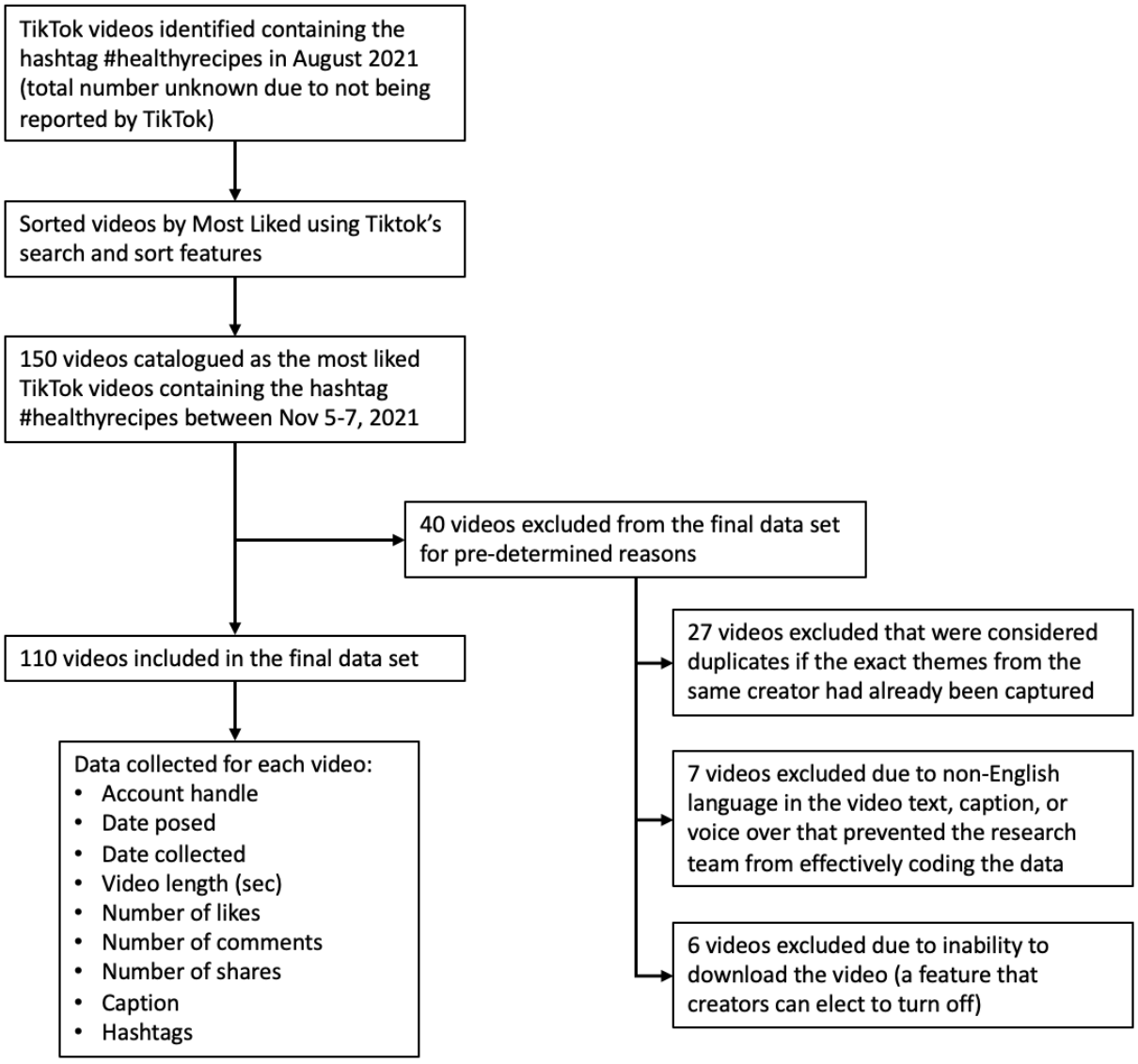
Appendices

Appendix A: Data Collection and Inclusion Flow Chart



Appendix B: Thematic Analysis Framework by Roberts et al (2019)[10]

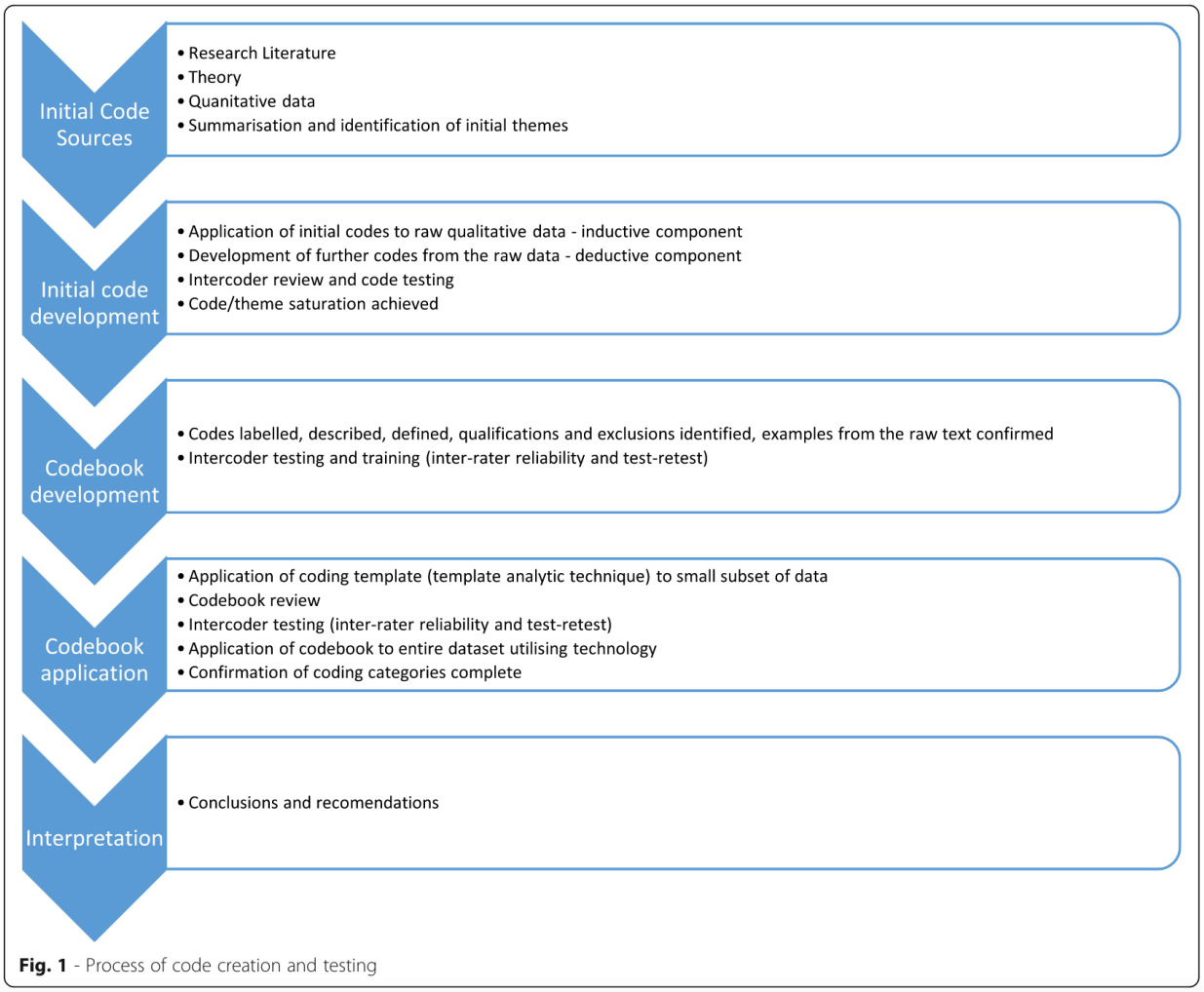


Fig. 1 - Process of code creation and testing

Appendix C: Procedure for Assessing Intercoder Reliability by O'Connor et al (2020)[14]

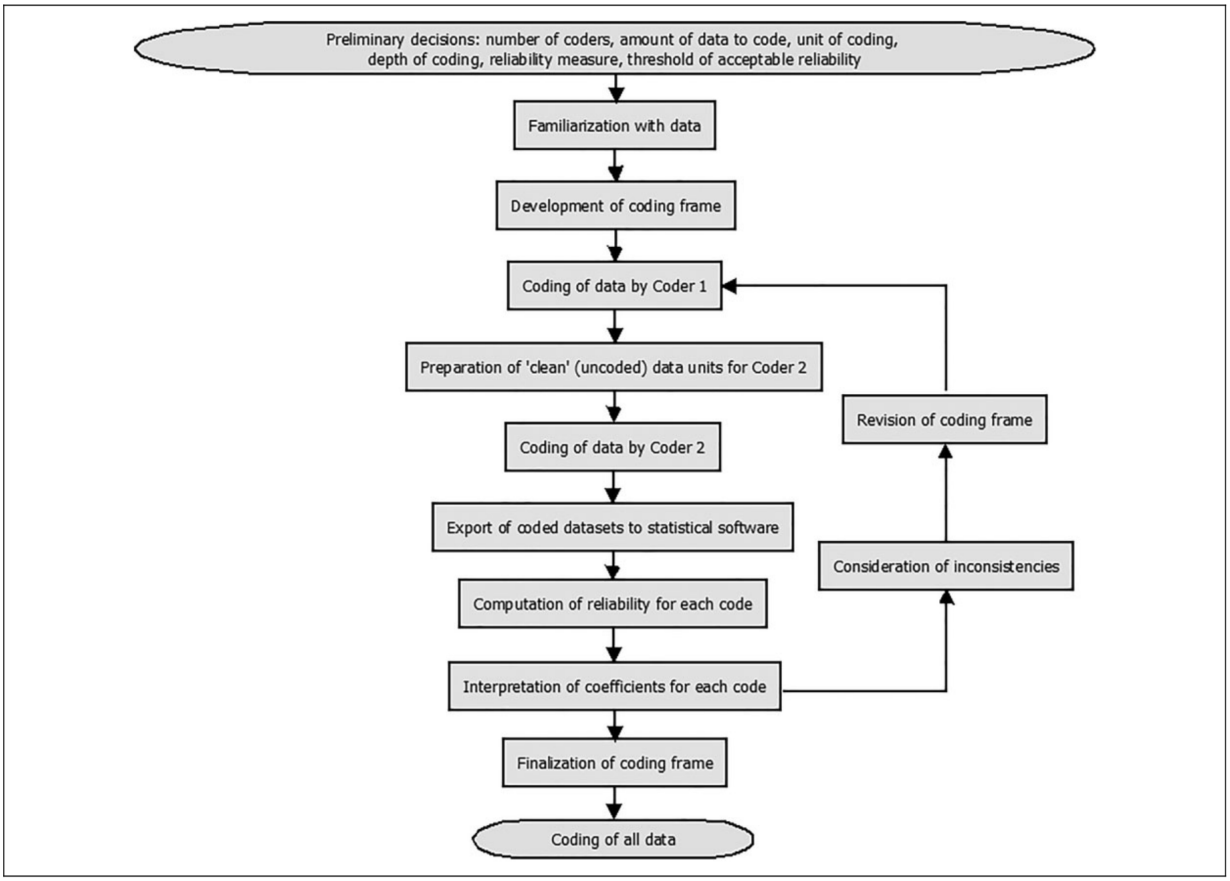


Figure 3. Suggested procedure for intercoder reliability assessment.

Appendix D: Codebook

Note: Categories and sub-headers listed below are not fully reflective of the final thematic analysis presented in the manuscript but were an important tool for organizing the codebook and informed initial iterations of the thematic analysis.

	Code Name	Definition	Includes	Does NOT Include	Notes
Category: Making Health Approachable & Fun					
Learning to cook					
Parent	Cooking skills	Demonstrating or explaining cooking techniques, or highlighting the actions/skills it takes to make a meal or recipe	Chopping, knife skills, highlighting the steps of cooking in an aerial view; doesn't just pertain to meals, but can also apply to step-by-step smoothie recipes	Recipes that show some cooking, but aren't highlighting the steps in an explicit way	Should be reserved for videos that intentionally show cooking steps
Parent	Cultural foodways / Family tradition	Recreating a recipe or using ingredients that are from childhood or learned from a family or community member that taps into the cultural traditions and foodways of their family or community	Recreating a recipe from childhood, a family member, or community member; using culturally-relevant ingredients and spices; also includes cultural dishes where there is some indication of the creator's connection to that culture (e.g., username that	Someone cooking a recipe with a unique/specific cultural origin without any reference to their connection to it; Don't use this code if the connection isn't explicit enough to be determined	Simply cooking or eating a recipe with a unique origin doesn't make it "cultural" -- it's about the person cooking it and their own history and connection to the food

			suggests being a part of a specific culture/community)		
Parent	Expertise	Explicit statement or visual that indicates or implies that the creator is beyond "lay" or expected average based on their profession or experience	Use of professional credentials, phrases such as "people ask me...", "I'm going to teach you how to..." and "I can help with that", or indicators of professional experience that would require some perceived expertise around "health" (e.g., I'm a model and here's what I eat,)		Expertise is not necessarily based on credentials, but rather an explicit statement or action that implies that they would be a good source of information
Parent	Non-standard / expensive equipment	Using a tool or piece of equipment that would not be found in a standard kitchen	Vitamix or advanced blending equipment, food processor, air fryer, or other specialty cooking equipment Food processor	Knives, as we cannot infer the cost or accessibility	It's less about cost, and more about accessibility/having something that's not standard, but we don't want to lose the fact that cost is a part of it
Promoting accessibility					

Parent	Building habits	A recipe that can/"should" be done habitually for health, or making a recipe as part of a healthy eating challenge that happens over multiple days	Smoothie or shake videos that state or imply they are made habitually, someone participating in a "challenge" that lasts for multiple days, stating that something should be done habitually, stating that eating recipes "like this" (implying that if done habitually) has resulted in some functional benefit or weight loss		
Child	Meal prep	Preparing meals beforehand and packaging them for later consumption, or eating a meal that was prepared, batched, and packaged beforehand	Prepping batched meals or elements of meals (e.g., overnight oats, eggs in muffin tins) ahead of time, stating that it could be made in batches, or pre-packed meals that are implied to be part of a batched meal (e.g., eating pre-batched and packed lunch	Meal preparation for a single meal or side dish, or recipes that don't explicitly say they could be batched or aren't shown being batched	Usually shown in the context of healthy eating throughout the week or managing time on a busy schedule

			from a reusable container)		
Parent	Easy / Quick / Fast	Recipes that can be done with minimal cooking experience and are quick/fast to produce; Explicit statement that includes easy/quick/fast or a synonym	Easy, fast, quick, for busy people, for beginners, showing a recipe idea that is perceived as easy		
Parent	Food hacks	Incorporating/Repurposing an ingredient or cooking technique in a way that is unfamiliar to the average person, not typically used, or not typically seen in the healthy eating space. Used for the purpose of making food preparation tasks easier, faster, or tastier.	Cooking/making a meal in a unique or surprising way (e.g., using Jello mix to add flavoring to overnight oats, cooking watermelon rinds that would typically be thrown out), TikTok food trends that are technique-based (e.g., TikTok tortilla hack, microwave mug cakes, mason jar salads)	Does not include food trends solely based on ingredients (e.g., TikTok feta pasta, Nature's cereal)	
Parent	Recipe adaptability	The ability to make small changes to a recipe that account for	Phrases such as "whatever works for you", "use whatever toppings you		This code is more about veiled adaptability -- highlighting the

		personal preference	like", "you can use a dairy-free milk here"		idea that swapping out small ingredients for personal preferences or dietary needs doesn't change the fact that these ways of healthy eating are not inherently flexible
Redefining the parameters of health					
Parent	Family approved	Mentioning or implying the approval of another family member	Phrases such as "my husband loves this", "I'm making this for my partner/family", or a child eating the same thing as a parent		The implicit meaning of this code is that if someone else in the family will eat it and enjoy it, then it must taste good (AND be healthy at the same time)
Parent	Limiting food waste	Methods for using food that is often discarded, shown with the intention of limiting food waste	Recipes for food scraps that are often discarded (e.g., watermelon rinds), or creative ways to use up food ingredients		

Parent	Permissible indulgence	Altering a food or recipe that is traditionally perceived to be unhealthy in order to make it healthier, or providing permission to indulge in something that could be seen as unhealthy by others	Desserts that have been altered to be perceived as healthier; modifying a traditionally indulgent recipe to be perceived as healthier (e.g., indulgent plant-based foods like fried cauliflower or mac n cheese); also includes phrases such as "guilt-free" and "you can have a sweet tooth and be healthy"	Vegetable dishes (that wouldn't be traditionally perceived as indulgent), single-ingredient food swaps, or foods known to be healthy (i.e. smoothies) that are shown in an indulgent way (e.g., smoothie that is scooped like ice cream -- unless it is being specifically called out as "nice-cream" or "vegan ice cream")	The primary idea behind this code is that it makes certain foods, typically desserts, "acceptable" within the bounds of a healthy diet -- so the foods coded as permissible indulgence are still indulgent/satisfying, but they've been modified just enough to be perceived as healthy or healthier than an alternative; OR someone perceived as healthy is giving viewers permission to eat something that is seen as unhealthy by others
Parent	Liberalizing health	Messages that evade diet culture beliefs about what is classified as healthy	Messaging that implies current diet culture beliefs are faulty (e.g., just drink the coffee, overweight people are healthy, etc.)		

Parent	Sensory / Fun / Exciting	Visually or audibly highlighting fun and exciting aspects of food or cooking	The excitement of the content creator, appealing sounds or textures, bright colors, and phrases such as "fun" and "not boring"	Videos where the sensory, fun, or exciting aspects aren't a core part of the video; only code if taking away an element of the video that is sensory, fun, or exciting would alter the meaning or appeal of the video	Most videos are not coded with this parent code, but rather with one of the child codes below
Child	Colorful	Displaying bright colors or using multiple colors in an intentional way that is elemental to the video	Bright smoothie bowls, using an assortment of colorful produce, highlight reels of various kinds of foods made with colorful produce	Videos that have a variety of colors but that aren't a critical part of the video	
Child	Fun / Not boring	Demonstrating that healthy cooking can be fun and exciting, whether through explicit statements, animated expressions, humor, or movement that creates excitement	Phrases such as "fun", "exciting/excited", and "not boring"; the use of exciting visuals or movements; animated expressions from the creator; or use of humor to make a point		In reference to vegan cooking, usually showcasing that food does not need to be "bland" and can still taste good.

Child	Texture	Highlighting a food's texture in an appealing way	Anything that explicitly highlights texture in an appealing way, including the blending of smoothies, a spoon moving through a thick smoothie bowl, and phrases such as "thick", "creamy", and "nice crunch"		
Child	Upbeat music	Intentionally using music with a faster, heavier, or catchy tempo that results in a more engaging video or recipe	Videos where music is a core component and the meaning or appeal would be altered if it weren't included; also includes videos that use well-known pop songs in the background		
Category: Nutrition / Health Morality					
Polarizing emotions					
Parent	Anti-shaming / Non-judgmental	Making fun or disapproving of shaming someone for a specific behavior or view point; typically seen as counter-culture	Making fun of dogmatic approaches to nutrition and health; expressing compassion or non-judgment for holding certain beliefs or		

			behaviors		
Parent	Shaming	Making someone to feel inadequate or categorizing a behavior, person, or thing as blatantly bad	Someone being shamed for what they are eating or doing, either in the video or in voice-over audio		Includes messages that promote both sides of diet culture and anti-diet culture
Child	Shaming fatness / fat bodies	Shaming, but specifically in the context of fatness or fat bodies	People being told they're "getting fat" in a way that implies fat is bad, or implying that fat bodies are less desirable	Videos that discuss weight-loss in a way that is not tied to a specific person	
Parent	Paternalistic / Superior	Containing an air of superiority or condescension	Phrases such as "I got you", "let me take care of you", "I can help with that", "follow along", "you'll be getting more veggies than most people in a day"		Intention behind the video does not have to be negative -- may have a good intention but just comes off as superior
What health is not					
Parent	Demonizing food / food groups	Portraying one food or food category as inherently bad, or implying consumption of a given food will have negative implications for	Stating or implying that eating a certain food or food category will result in health consequences either at the individual,	Recipes that include "free from" ingredients (e.g., using sugar-free or gluten-free ingredients)	

		either individual health or environmental health	industry, or environmental level		
Child	Demonizing fast food	Specifically portraying or stating that fast food is bad, or that eating it will have negative consequences on individual or environmental health	Statements such as "decaying meat burger," "you have to stop spending money on fast food every day", or that eating fast food is putting "junk" in ones body; also includes swapping fast food ingredients with something perceived to be more healthy		Depicting fast food in a negative manner. Often uses dramatic effects to showcase the perceived detriments of fast food. Associated with health detriments as well as discouraging spending money on fast food.
Category: Nutrition Domination / Appropriation					
Clean eating					
Parent	Food swaps	Replacing ingredients in a recipe so that the recipe is perceived to be healthier, driven by higher nutrient or energy density	Low-carb ingredient swaps including cruciferous veg for potato, zucchini noodles instead of spaghetti, low-carb tortilla for pizza crust, or cauliflower instead of rice; also includes explicitly stating the use of a	Recipes that use sugar-free, gluten-free, or dairy-free ingredients that aren't explicitly stated	

			"free-from" item or alternative such as dairy-free milk instead of the traditional ingredient		
Parent	Functional foods	Stated functional health benefits connected to specific foods or recipes	Statements that connect foods with functional benefits, such as improved immunity, better sleep, muscle building, constipation relief, gut health, brain boosting, etc.		
Child	High protein	Explicitly showing or highlighting the use of protein or high-protein foods	Recipes for protein shakes, the addition of protein powder, or recipes that are primarily protein-based or call out adding more protein	Recipes that include a high-protein ingredient (e.g., chicken, tofu, beans) but don't highlight the high-protein aspect of the food	
Parent	Homemade ingredients	Explicitly stating or showing that certain ingredients are homemade, when they are typically bought at the store	Homemade nut butters, condiments, or sauces		The underlying message here is related to avoiding "additives" or unknown ingredients

Parent	Ingredient-based wellness trends	Recipes that highlight specific ingredient-based wellness trends	Ingredient-based wellness trends include avocado toast, chia seeds or chia pudding, overnight oats/oat bowls, dairy-free products, gluten-free products, and table sugar alternatives (e.g., honey, maple syrup, sugar-free products). Recipes that use dairy-free or gluten-free products should explicitly call that out.	Opt for child code if includes "exotic" fruits or "superfoods"	Goal here is to call out recipes that are perceived to be healthier because they include a specific ingredient or ingredients that are held up as incredibly healthy, but are usually a food trend
Child	Exotic fruits	The use of "exotic" fruits	Phrases such as "exotic fruits", or the use of fruits not typically found in the US (e.g., dragonfruit, lychee, jackfruit, passion fruit, star fruit, guava, etc.)		
Child	Superfoods	The use of the phrase "superfoods"	Explicit use of the phrase "superfood"	Recipes that include ingredients that may be categorized as "superfoods" but it is not	Because this definition is broad and subjective, we're only coding for the use of the word

				explicitly stated as such	"superfood"
Parent	Simple ingredients	Recipes that only use a few (mostly) familiar ingredients	May or may not call out the number of ingredients; all ingredients should be familiar or considered to be whole foods; also includes videos that call out "simple ingredients" or "only X ingredients"	Someone eating singular ingredients; a recipe that includes an ingredient that would be considered processed or unsure of what exactly is in it (e.g., premade spice mix, jello flavoring)	This code is more about "clean" eating and only using a few ingredients vs. accessibility; No need to count number of ingredients; it's more about videos that highlight each whole ingredient or contain few ingredients for simplicity and perceived healthfulness
Parent	Smoothies and shakes	Showing or making smoothies, shakes, and smoothie bowls	Smoothies, smoothie bowls, acai bowls, protein shakes	Sauces, juices, or other blended products	
Parent	Vegan / Plant-based / Veg forward	Explicitly calling out "vegan" or "plant-based", only showing foods that would be included in a vegan or plant-based diet, or a recipe that is veg forward (primary ingredient is plant-based)	Recipes or foods that would fall under a vegan or fully-plant-based diet and emphasize plant-based foods; broccoli mash (where creator added parmesan but recipe is otherwise plant-based and creator gave	Recipes that contain meat, dairy, eggs, or other animal-based products (ok if creator references them as options)	

			vegan-friendly options)		
Diet culture					
Parent	Explicitly showing "ideal" body	Intentionally showing a person in an "ideal" body type (e.g., thin, fit, muscular) or someone whose body has changed (e.g., lost weight/gained muscle) to fit in with the "ideal"	Showing a thin woman, muscular man, or fit-looking person in a way that would alter the meaning, perceived appeal, or impact of the video if the person was not shown; includes videos that have a panning camera angle that shows a body	Videos where a person is present but not used in a way that explicitly "shows off" their body	
Parent	Keto / Low carb	Recipe that is considered keto or explicitly stated as being "low carb"	Phrases such as "keto", "high-fat", "low carb" or recipes that are very evidently keto (i.e., high fat content, low carb content)	Any ambiguous recipes that may or may not be keto	This is typically called out explicitly
Parent	Low calorie	The mention of calories in a way that highlights a recipe or food as being low in calories, or explicitly using a low-calorie food	Phrases such as "low calorie", "X calories" and "only X calories"	Recipes that include low calorie foods but that don't specifically highlight the number of calories or low	

		option in place of another ingredient		calorie nature of the foods	
Parent	Weight loss	Explicit messaging and images related to weight loss	Phrases such as "weight loss", #weightloss, "I lost X lbs", "foods I ate to lose weight", "hot girl summer" (used in a weight-loss context), "new year, let's get it", etc. Hashtags that imply weight loss (e.g., #hotgirlsummer, #21dayfix)		
Parent	What I eat in a day	Videos that show foods and drinks consumed over the course of a day for an individual	Videos with the phrase "what I eat in a day" or that show a person's intake over the course of a day	Recipe highlight reels that don't explicitly state that someone at those foods over the course of a day	Often implies "eat like me to look like me"