

Preferences, perceptions and use of online nutrition content among young Australian adults: a qualitative study

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Preferences, perceptions and use of online nutrition content among young Australian adults: a qualitative study

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Abstract

Background: Nutrition misinformation is pervasive on frequently accessed online sources such as social media platforms and websites. Young adults are at a high risk of viewing or engaging with this content due to their high Internet and social media usage.

Objective: This study aimed to understand young adults' preferences, perceptions and use of online nutrition content.

Methods: Twenty young Australian adults (aged 18-25 years) were interviewed individually via video calling (Zoom). The interviewer followed a semi-structured format and questions were guided using a piloted template. Reflexive thematic analysis was conducted using NVivo.

Results: Most of the participants used social media (n=19) and Internet websites (n=16) to access nutrition content. While content from these sources was perceived as easy to use and accessible, perceived reliability varied. Short-form content was not considered reliable, despite its engaging nature. Additionally, content containing sponsorships or product endorsements were met with scepticism. In contrast, participants were more likely to trust content created by health professionals, but it was unknown whether they were accessing verified professionals. The oversaturation of content demotivated participants from evaluating the reliability of content. When asked about preferences, participants valued both short- and longform content, and evidence-based content such as statistics and references. They also preferred casual and entertaining content that incorporated modern and high audiovisual qualities such as voiceovers.

Conclusions: The study identified the online nutrition content sources and topics young Australian adults access and the key factors that influence their perceptions and preferences. Although young Australian adults recognise unreliable nutrition content is not exclusive to certain platforms, findings suggest that the accessibility and engagement of content and the ambiguity of professional 'credentials' may lead them to trust information that is potentially of low quality and accuracy. Findings also show that there needs to be a balance between engaging formats and presenting evidence-based information when designing online nutrition content. Future research should explore how these factors impact usage of online nutrition content and dietary behaviours among young Australian adults. Further consultation with this cohort can inform tailored interventions that aim to enhance their food and nutrition literacy and diet quality.

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Original Manuscript

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Keywords: Online nutrition content; young adults; social media; Internet; qualitative

Introduction

The pervasiveness and hyper-accessibility of online health and nutrition content worldwide enables the proliferation of misinformation on growing online environments. Research indicates that the majority of health and nutrition information on the Internet and social media are of poor quality and accuracy. [1-3] The quality of online nutrition content is evaluated against a number of criteria [4] such as accuracy, defined as the factual correctness of information indicated from scientific literature and/ or published guidelines, [1] and credibility which includes disclosure of sponsorships and references. Considering the growing use of the Internet [5] and the volume of content accessible, there is concern regarding the negative impact of misinformation on population health. [6]

The use of online nutrition content in Australia has increased significantly throughout past years, [7] in line with the growing amount of nutrition-related content posted online. Online nutrition content

in the Australian context refers to any material, e.g. text, image, video, or audio, discussing food and nutrition related topics that is shared online. Evidence shows that the Internet is currently the most frequently used source for nutrition information, compared to traditional, e.g. magazines and television, and professional sources, e.g. dietitians and nutritionists. [8] Although professional sources are regarded as reliable and effective by consumers, the ease, inexpensiveness and immediacy of online sources are strong influences to use online sources over nutrition professionals. [9, 10] Coupled with the growing prevalence of misinformation online [6] about health and nutrition, accessing nutrition content online may lead to harmful effects on the health, well-being and economic status of individuals. [2, 11, 12]

In particular, online nutrition content can have a large impact on young adults' (18-25 years old) dietary choices and diet quality as they characterise a large proportion of consumers who access the Internet and social media [13, 14] and are more likely to engage with this content compared to middle-aged and older adults. [7, 10, 15] Research indicates that young adults also have the poorest diet quality compared to other age groups, which may put them at risk of nutrient deficiencies or overnutrition. [16] Therefore, there is a need to identify the online sources young adults use for nutrition content and how they perceive these. In addition to identifying use and perceptions, exploring young adults' preferences of nutrition content is also needed. Specifically, exploring how young adults use the Internet for nutrition content, what topics they engage with, their perceptions of the reliability (trustworthiness) and quality of online sources, and their preferences of the format and features of content, can identify reasons why young adults choose to engage with specific sources and content. However, there is a scarcity of literature that investigates these. [17, 18] Therefore, using a qualitative approach, the current study aimed to characterise the use of online nutrition content among young Australian adults, explore how they perceive the content, and identify their preferred characteristics of content.

Methods

Study Design

Qualitative interview methods were used to explore young Australian adults' use, preferences, and perceptions of online nutrition content. The consolidated criteria for reporting qualitative research checklist [19] was used as a guideline for the conduct and reporting of this paper (Multimedia Appendix 1). The Faculty of Health Human Ethics Advisory Group at Deakin University granted ethics approval for the present study (HEAG-H 148_2023). All participants provided informed verbal consent.

Participants and Recruitment

Eligible participants included young adults (18-25 years old) residing in Australia. Exclusion criteria included an inability to verbally communicate in English, or a lack of engagement with nutrition information or content online.

Participants were recruited between December 2023 and February 2024 via convenience sampling using social media advertisements (Facebook). The link on the advertisements took the participants to a Qualtrics survey to confirm their eligibility. If the participant was eligible, they were asked to provide their availabilities and an email address. This information was used to contact the participant on the study and to schedule an interview via email.

The study aimed to recruit between 20-25 participants. This was set as theoretical data saturation in similar studies was reached at 21-22 interviews. [20, 21] Interviews stopped when the interviewer declared data saturation was reached i.e. no new valuable codes extracted at last interview, which was confirmed during data analysis.

Data Collection

Interviews were conducted using a semi-structured format. Open-ended questions with additional probing questions were developed to elicit information on the use of online nutrition content, perceptions of content, and preferred characteristics of content. The questions were pilot tested in a sample (n=3) of young adults and minor changes to the wording and structure of questions were made for clarity.

Interviews were conducted by one interviewer (BTL) via the digital video calling platform Zoom. No other parties besides the participant and interviewer were present in the interview. The audio from the interviews were recorded on Zoom and transcribed using Otter.ai. Transcripts were edited for correctness by the interviewer (BTL) and no participants requested to read, correct or provide feedback on their transcript.

An online demographics survey, with seven questions, was completed by participants after the interview.

Researcher Reflexivity

The interviewer (BTL) was a male PhD candidate and qualified dietitian (MNutrDiet) with experience in conducting interviews from previous university studies. The interviewer declares no conflict of interests or bias that may affect the collection or reporting of results.

No relationships were established prior to the commencement of the study. Information about the researcher was not provided to the participants.

Data Analysis

Sample characteristics were reported using descriptive statistics. Sources used for online nutrition content and nutrition topics accessed were reported narratively. Reflexive thematic analysis using the Braun & Clarke approach [22, 23] was performed with NVivo 14 to identify patterns and construct themes that explored perceptions and preferences of online nutrition content. An inductive approach was used to build an in-depth understanding of the topic and identify minor themes that may be missed in quantitative studies. [24] Multimedia Appendix 2 describes how the six phases of reflexive thematic analysis were applied.

Results

Participants

These are only examples of possible headings. Please feel free to use different headings to best describe your results. Data saturation occurred at the twentieth interview and as such, 20 participants were involved in the study. A total of 24 participants were initially recruited however, two did not respond to the interview request, one was excluded because they did not meet the inclusion criteria, and one withdrew from the study due to a loss of interest before booking an interview. No repeat interviews were conducted. Interviews lasted between 19 minutes and 42 minutes (mean: 30 mins 10 secs).

The mean age of the participants was 23 years (range: 18-25 years). Seven participants identified as male and 13 identified as female. Of the 17 participants who completed the demographic survey, all but one had or was studying towards a tertiary qualification. Only one participant had a tertiary qualification in nutrition. Participant attributes are summarised in Table 1.

Table 1. Sample Characteristics (n=20)

| Characteristic | n (%) |
|----------------|-------|
|----------------|-------|

| | |
|-----------------------------------|----------|
| Gender | |
| - Male | 7 (35%) |
| - Female | 13 (65%) |
| Continent of birth | |
| - Australia | 10 (59%) |
| - Asia | 5 (29%) |
| - Europe (including Russia) | 2 (12%) |
| - <i>Missing</i> | 3 |
| State of residence | |
| - New South Wales | 10 (59%) |
| - Victoria | 6 (35%) |
| - Western Australia | 1 (6%) |
| - <i>Missing</i> | 3 |
| Living arrangement | |
| - Living with parents/ guardians | 8 (47%) |
| - Living with partner | 5 (29%) |
| - Living with housemates/ friends | 2 (12%) |
| - Living alone | 2 (12%) |
| - <i>Missing</i> | 3 |
| Education | |
| - Completed secondary school | 7 (41%) |
| - Completed undergraduate degree | 8 (47%) |
| - Completed postgraduate degree | 2 (12%) |
| - <i>Missing</i> | 3 |
| Student status | |
| - Studying undergraduate degree | 6 (35%) |
| - Studying postgraduate degree | 5 (29%) |
| - Not studying | 6 (35%) |
| - <i>Missing</i> | 3 |
| Employment status | |
| - Employed full-time | 5 (29%) |
| - Employed part-time/ casual | 10 (59%) |
| - Not employed | 2 (12%) |
| - <i>Missing</i> | 3 |
| Diet | |
| - Non-restricted (omnivore) | 13 (65%) |
| - Vegetarian | 3 (15%) |
| - No dairy | 2 (10%) |
| - No red meat | 1 (5%) |
| - Low-carb | 1 (5%) |

Online Nutrition Content Use

The majority of participants viewed or sourced their online nutrition content from social media (n=19) and/or websites (n=16). Other sources for online nutrition content that participants used included a generative AI model (i.e. ChatGPT) (n=1), apps (n=1), eBooks (n=1), email newsletters (n=1) and podcasts (n=1).

Social media was the most popular online source used to view or engage with nutrition content. Instagram was used by most participants (n=16), while YouTube (n=9), TikTok (n=7), Facebook (n=6) and Reddit (n=2) were used by some participants. Most males used or viewed nutrition content on YouTube (n=6 of 7) whereas females mainly engaged with Instagram (n=13 of 13).

The main nutrition topic that young adults viewed on social media involved specific foods and diets. High protein, low carbohydrate diets was the most popular diet viewed by participants, while paleo, vegan, Mediterranean, keto, intermittent fasting and other diets (e.g. fruitarian and carnivore) were also viewed. Participants described engaging with content that explained the health benefits of these diets and strategies on how to follow them e.g. what specific foods or meal plans to incorporate. Particular foods, such as tofu and soy, were also discussed in terms of health benefits or consequences and ways to incorporate these foods into meals. Participants also reported viewing recipes, meal preparation or meal plan ideas, and lifestyle related content e.g. 'What I eat in a day' videos, on social media. Other topics accessed by participants were curated towards their specific interests or goals. This included weight loss tips, gut health, nutrition for sports performance and supplement use.

Internet websites were also used for nutrition content by the majority of female participants (n=9 of 13) and all male participants (n=7). Internet search engines used to access websites included Google (n=15) and Bing (n=1). Participants mainly reported accessing health-related websites such as WebMD and HealthLine for nutrition content. Other websites that were accessed included news (e.g. ABC), blogs, recipes (e.g. HelloFresh), and academic websites (e.g. Harvard Medical School).

Nutrition topics accessed on Internet websites varied and depended on the participants' specific interests or health/ nutrition goals. Topics included gut health, protein intake, sports nutrition, and supplement use. Participants also searched about the healthiness of particular foods and ingredients that they came across (e.g. whey protein), and accessed recipes, meal plans and meal preparation ideas for healthier food ideas. Internet search engines and ChatGPT were used as a tool to cross-check information from other sources such as social media or word of mouth.

"I've also [searched] ChatGPT to see if the information that is given or delivered [on] social media platforms are correct." (P02 25-year-old female)

Thematic Analysis Coding Tree

Five themes were extracted to explore perceptions of online nutrition content, and four were extracted to identify preferred characteristics of content. The themes are summarised in Figure 1 and are described in detail below.

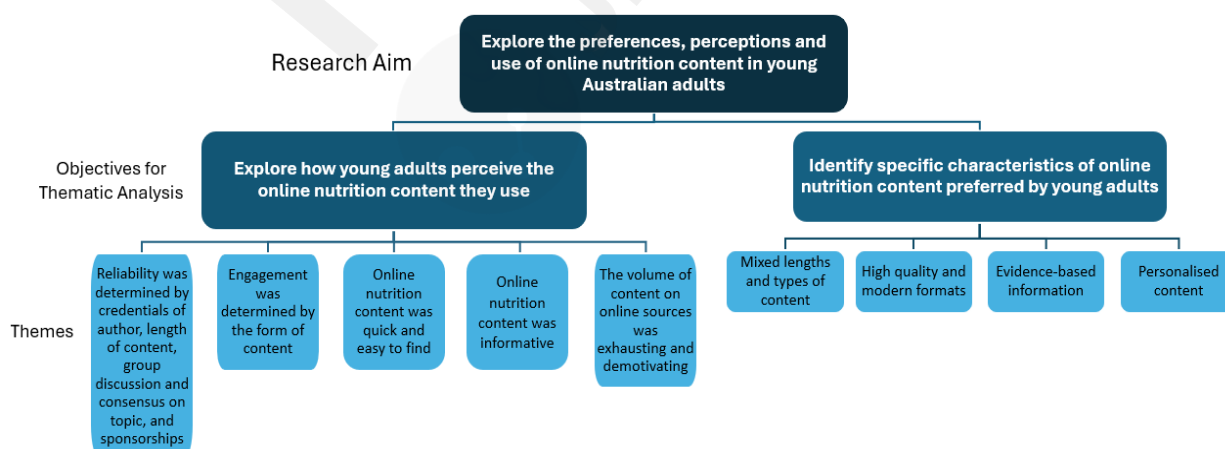


Figure 1. Coding Tree

Perceptions of Online Nutrition Content

Theme 1: Reliability was determined by credentials of author, length of content, group discussion and consensus on topic, and sponsorships

Authors with professional credentials were considered reliable

Participants stated that the credentials of content creators are a main factor in determining the reliability of content. For example, those who regarded social media as reliable stated that it was because they were following or accessing nutritionists or dietitians for their nutrition content, whereas participants who regarded it as mixed or unreliable did not specifically follow health professionals and conveyed confusion in identifying and evaluating the accuracy of these credentials.

“I sometimes feel that over social media, it's hard to guess if the content you're consuming [is of] high quality, [and] if the person actually knows about nutrition, or if it's just an influencer [who is] quoting what other people are saying and not based on evidence.” (P05 25-year-old female)

“I think [a] majority of [websites are reliable] because I think [a] majority come from a specific nutrition website. If it's another website, like, for example, ABC News, giving some nutritional advice, I don't. Probably 50/50.” (P16 20-year-old female)

Short-form content was considered less reliable than long-form content, and vice versa

Participants thought that short-form content was less reliable and less trustworthy compared to long-form content.

“Oftentimes that immediate [answer] can be at the detriment to the legitimacy and quality of information you get.” (P07 24-year-old female)

“Sometimes when it's too colourful, or too simple, I think of it as like, not reliable. So I generally go for the posts that have more information or allow me to go further to do my own research.” (P04 24-year-old female)

“I think it's just my kind of perception [that] short form stuff being more easily [...] fake.” (P01 23-year-old male)

Similarly, participants agreed that longer-form sources such as websites, were more reliable than short-form content found on social media.

“I think [websites are] definitely more reliable [than social media], even though it takes longer to do that type of searching [...] [and] even though it's less visually entertaining. You get information through more clear and credible sources.” (P20 18-year-old male)

Discussion and group consensus on topics led to high perceived reliability

Participants were inclined to consider content reliable if there was an existing discussion on the topic, and if there was a consensus among those involved.

“I think Reddit would be more reliable in my opinion just because there's a whole discussion of real people.” (P15 24-year-old male)

“I think because if so many websites are saying the same thing. Then it's like, this is agreed upon.” (P20 18-year-old male)

Sponsorships and advertisements led to low perceived reliability

Participants questioned the validity of content sourced from online sources as they were suspicious of funding, sponsorships and advertisements that aimed to promote specific foods, diets or nutritional advice.

“Some podcasts that I listened to, they would specifically tell me at first: ‘this podcast is sponsored by this product or this service’. So I would keep in mind that there is some sort of influence behind it.” (P04 24-year-old female)

Theme 2: Engagement was determined by the form of content

There was consensus between participants regarding the engagement of social media for accessing nutrition content. Participants credited the format of social media posts, e.g. short videos and posts with captions, as key factors that led to high engagement.

“It's in a visually engaging format [for] me [to] watch them through. The process that takes 30 minutes is down to a reel that lasts like 20 seconds.” (P11 25-year-old female)

Participants agreed that long-form content such as website articles were not an engaging source for nutrition content. They expressed a lack of interest in or need to engage with sources containing long-form content such as websites and books, which was considered visually unappealing and provided information which was hard to understand.

“A lot of [website] content is just words on a page and quite descriptive, so it's not very engaging.” (P17 24-year-old male)

“The thing is, I don't really enjoy reading. Like, I only really read if I have to. And since I'm on social media, on a daily basis, it's more accessible for me. I don't have to like search through stuff and look at [books]. [I'd] rather go on social media [...] or I just search on Google.” (P20 18-year-old male)

Theme 3: Online nutrition content was quick and easy to find

Algorithms delivered targeted content

Participants credited algorithms on social media platforms for delivering content they were interested in and were more likely to engage with.

“And obviously, with the algorithm, once you start looking at a few of those reels, then all your feed is about those right? So then [content] is easy to find.” (P11 25-year-old female)

Search bars provided quick answers

Participants agreed that using Internet search engines for obtaining nutrition content was easy to use and accessible. They reported that they were able to obtain quick answers by typing a question into a search bar.

“You just have to put something into the search bar, click search, and a whole bunch of something comes out.” (P10 23-year-old female)

Theme 4: Online nutrition content was informative

Short-form formats summarised complex information

Despite concerns about the reliability of short-form nutrition content, participants regarded content as informative, helpful and a source of inspiration (e.g. recipes for meals). Additionally, participants thought that content presented in an engaging manner was able to convey complex nutrition information concisely and in an easy-to-understand way.

“[The short-form content I access] is very short and informative and then they tell you all the benefits of all the solutions that they're presenting.” (P07 24-year-old female)

Long-form formats provided detailed information

Although participants did not consider long-form content engaging, they thought that it was detailed and useful for explaining nutrition concepts.

“I think most [online articles] are pretty long. Because they are long, I am not really super interested in it. So I wouldn't find myself really reading a lot. Maybe sometimes I would, but usually not. But yeah, most articles are pretty long and detailed I'd say which is good. [...] I say it's good because I feel like most people would be looking for that kind of information.” (P14 24-year-old male)

Theme 5: The volume of content on online sources was exhausting and demotivating

Conflicting information, such as discussions on different diets, added to participants' confusion. Additionally, the oversaturation of content on online sources made it difficult for participants to obtain the information they needed. Some participants raised concerns regarding the pervasiveness of nutrition content and certain nutrition topics that appeared on their feed, e.g. weight loss, and described the experience of using social media as exhausting and demotivating.

“But I guess in the end, you just get over it. Now I just pass those videos [and] I don't give a crap. Like good on you, you lost the weight.” (P09 21-year-old female)

“Yeah, it's a bit annoying doom-scrolling. Sometimes it takes me a whole day and I only find one [good recipe] and I'm like: ‘Well, I'm just buying fast food. It's a lot easier.’” (P06 25-year-old female)

“I try to actively avoid social media [when I want nutritional information]. But obviously, as you're scrolling, sometimes you're just inevitably given the information involuntarily” (P15 24-year-old male)

Participants thought that the online nutrition content they accessed was overwhelming and conflicting which demotivated them from evaluating and obtaining accurate information.

“In this day and age, things are so easy to access. But then the flip side of that is people don't maintain the same value in expert information.” (P07 24-year-old female)

“People, including myself, don't really check whether it's true or not. We're just scrolling through and nobody's really trying to think too much.” (P20 18-year-old male)

“So, when you go on the web, you have multiple information, right? Some people say eating veggies are good. But some people say it's bad. And some people say eating meat is good. And some people say it's not. So, it's highly subjective.” (P02 25-year-old female)

Preferences for Online Nutrition Content

Theme 1: Short-form content was preferred

Participants provided suggestions on the format of online nutrition content to better engage and provide accurate information to young adults. Most participants desired short form content such as Instagram reels, TikTok videos, and static image posts supported with captions. Content that contained quick and 'to the point' strategies was preferred.

"I think [for] a video, I'd watch more, [compared to] reading an article or something like that." (P18 18-year-old female)

"I prefer like, simpler content, which is maybe more to the point or easy." (P05 25-year-old female)

Theme 2: High audiovisual quality and modern formats were preferred

Participants preferred content that included high quality audiovisual features, i.e. voiceovers, text on screen, pictures/ diagrams, and modern designs. Additionally, a focus on casual and entertaining content, rather than purely educational information, was favoured.

"[The content creators I engage with] are trying to make it entertaining instead of purely education[al]. Because [...] when I'm personally watching these videos, I'm more unwinding as opposed to actively trying to learn" (P13 25-year-old male)

"I think when [content creators] do voiceovers, it really helps. [...] Also using text on the screen helps" (P06 25-year-old female)

Theme 3: Evidence-based information was preferred

Participants preferred content to be delivered by a health professional such as a nutritionist or dietitian. Additionally, a combination of statistics and references included in nutrition content was desired.

"If they give proper references, and if they give the visual statistics in front of your eyes [...] it could be an easy graph, or easy bar chart or something like that, or even an equation or a number that actually puts my head through a position where I can understand it. That's more convincing for me" (P02 25-year-old female)

Theme 4: Personalised content was preferred

There was a preference for content that was personalised to young adults. Topics of interest include high protein and bodybuilding, sports nutrition, eating for wellbeing, e.g. gut, mental and hormonal health. Participants also desired content that was relatable or addressed why it is important to them.

"[The content I access] is very targeted. It's like: 'Oh, if you want this physique, this is how you can get it.' And of course, I want that physique" (P20 18-year-old male)

"It should be informative [...] and practical. Why should [I] do it? It should define the reasons and what it [means] for me." (P19 20-year-old male)

Discussion

Principal Results

This study characterised the use of online nutrition content among young Australian adults, and explored how they perceived the online sources of nutrition content they viewed or engaged with, and what preferences they had that may lead to engagement and trust. The findings suggest that young Australian adults mainly used social media, websites and Internet search engines to obtain information about nutrition, however, topics accessed differed between sources. Reported nutrition topics viewed on social media ranged considerably, whereas topics viewed from search engines and other less frequently used sources such as eBooks, were catered towards the individuals' interests and goals. When asked about perceptions and preferences, the interviews gravitated towards reliability and engagement of content. The young Australian adults in the study discussed the factors such as engagement, accessibility, credentials of author, sponsorships, that influenced their trust in nutrition content. Preferences for content were also described, i.e. short formats, evidence-based information, modern features and personalised content.

Perceived Reliability of Online Nutrition Content

Participants in the current study stated that short-form content was less likely to be reliable compared to long-form content. On the other hand, short-form content was considered to be engaging. Short-form videos are dominant on social media due to their digestible lengths and ability to accelerate information dissemination. [25] They are highly addictive and cater to users with time constraints and shorter attention spans. [26] Although research suggests that online nutrition content on social media, particularly Instagram, is of poor accuracy and quality, [27] inaccurate information is not exclusive to this platform. [1] Other frequently used sources like commercial websites, blogs, Wikipedia, and trusted sources like government websites, may also contain inaccurate and suboptimal nutrition information. [1] In addition, previous research substantiates the fact that young adults struggle to determine if information is evidence-based. [10] As such, there is a need to educate young Australian adults on evaluating the accuracy of online nutrition content on all online sources they access. This ensures they can use accurate information that may lead to positive changes to their diets and lifestyle.

Additionally, the oversaturation and hyper-accessibility of content found on social media and the Internet demotivates consumers from evaluating the accuracy of information accessed. Unfortunately, the accuracy of information presented online cannot be guaranteed as misleading content can overshadow the prominence of evidence-based public health messages. [1] This is of particular concern in young Australian adults as results indicate that they were more likely to trust content if multiple sources or authors were in agreement with each other, regardless of the content's accuracy. Moreover, the current study, as well as other research [28] shows that the large volume of conflicting information accessed online can also lead to confusion and cognitive exhaustion. Over time, this can cause users to create an illusion of truth from the source, [29] avoid quality information seeking, [30] or become more reliant on less informed sources such as close friends and family. [31]

Additionally, participants who regarded Internet websites or social media as reliable generally accessed content that was created by a health professional. This is consistent with previous studies which found that consumers are more likely to trust content if it was sourced from a health website [17] or written by specific authors such as nutrition scientists and health professionals. [9, 17, 18] However, there is limited evidence examining if young Australian adults actually access content created by nutrition professionals. Although dietitians are nutrition professionals regulated by law in

Australia, other nutrition-related credentials, which are not regulated, can be misleading to lay consumers. [32] For example, degree qualifications are not required in Australia to classify oneself as a 'nutritionist', and so the credibility of content created by these authors may be varied and conflicting. [33] Therefore, differences may exist for young Australian adults in terms of perceived and actual reliability of online nutrition content.

Another characteristic of online nutrition content that determined young Australian adults' perceived reliability is external funding or sponsorships and the advertising of nutrition-related services or products. Participants expressed suspicion that content including these were less likely to be reliable. This is consistent with a similar qualitative study in young Australian women (18-35 years old; n=10), whereby participants agreed that the selling or endorsement of products led them to question the authenticity of content. [34] While this does not inherently define a piece of content to be unreliable or of low quality, provided that is transparent and not based on testimonials, [35] it ultimately leads to lower trust and engagement in consumers.

Overall, perceived reliability of online nutrition sources used by participants was mixed as a result of the aforementioned factors. This aligns with the actual quality and accuracy of most online sources for nutrition content which has also been found to be mixed. [1] However, the factors that determine reliability among participants may contribute to differences in perceived and actual reliability for nutrition content. Previous research substantiates the current findings as trust or confidence in nutrition content from social media and Internet searches were low or mixed amongst adults [17] and university students in other countries. [10, 18] A similar study in the United States also found that young adults (18-25 years old; n=34) thought social media posts could be misleading, or a source of inspiration, depending on the context. [36] On the other hand, young adults living in Ghana (18-25 years old; n=192) considered online resources as very reliable. [37] Differences may be attributed to relatively greater advancements of telecommunication infrastructure in low-income countries in recent years [37], which may lead to more positive reception of online sources.

Preferences for Online Nutrition Content

Participants preferred short-form content that incorporated high quality and modern characteristics that lead to high engagement. This finding is consistent with a study which investigated preferences for nutrition information on Instagram in young Australian adults via an online survey (18-30 years old; n=108). [38] By ranking mock Instagram posts, participants rated short video posts as more engaging and informative than posts with only text/icons or images. They also preferred the visual style of this format and found them more likely to motivate change and present relevant information. However, in the current study, participants also stated that they were less likely to trust short-form content, and perceived long formats as more reliable. Therefore, it is imperative to find a balance between short, engaging formats and more detailed formats when designing online nutrition content to maintain engagement and trust with this population group. This may involve experimenting with short formats that have links or references to more detailed and evidence-based information.

Evidence-based information was also desired by participants in the current study. This included the use of references and statistics in content to summarise a nutrition problem or recommendation in an easy-to-understand manner. Interestingly, this finding has not been identified previously, though it affects the quality of content. [4] A pilot audit tool found that 44% of dietitian posts on social media failed to provide references, links or other supporting evidence. [35] As such, there is a need for health professionals to outline where information was sourced to improve the quality of content online and enable consumers to verify information.

Participants from the current study also preferred casual and entertaining content which aligns with previous research that found young adults preferred content creators who were deemed as 'authentic' and 'relatable'. [10, 34] These studies reported that young adults were more likely to trust and

engage with creators who have these qualities.

Strengths and Limitations

A significant strength of the current study was the ability to capture detailed information on young Australian adults' use, preferences, and perceptions of online nutrition content. A qualitative approach allowed participants to openly respond to prompts, enabling a rich dataset that best captured the influences and reasons for their use of online nutrition content. In particular, the study investigated sources and nutrition topics accessed, the reasons why they use specific sources, and why they regard them as high or low quality and/ or accuracy. It also captured preferences from multiple digital modes and sources for nutrition content, and their characteristics e.g. length of text, captions, use of icons and images, and links to scientific sources, that may influence their use and perceptions of particular sources.

On the other hand, sampling bias may affect the generalisability of results. The study included a highly educated sample which is not representative of the young Australian adult population. [39] Highly educated individuals may be more likely to check and critique the content they access [40] and correctly identify factual information. Moreover, a higher proportion of females than males participated in this study. Females are generally more likely to engage in protective health behaviours. [41] Additionally, information on the time spent on sources and engagement of content, i.e. view from scrolling or accessed from searching, was not collected. Some participants in the study may have minimal engagement with online nutrition content, which may have skewed the findings.

Conclusions

The current study characterised the use and identified factors that influence preferences and perceptions of online nutrition content in young Australian adults. The results can be used by health professionals in creating tailored nutrition content for this population group. Although young Australian adults recognise unreliable nutrition content is not exclusive to certain platforms, findings suggest that the accessibility and engagement of content and the ambiguity of professional 'credentials' may lead them to trust online nutrition content that is potentially of low quality and accuracy, and furthermore, disregard high quality information. Findings also show that there needs to be a balance between short, engaging formats and presenting detailed evidence-based information when designing online nutrition content for young adults. Future research in this area is needed to explore how these factors impact usage of online nutrition content and dietary behaviours, and to trial nutrition content for young adults that is both engaging and evidence-based. Further consultation with this cohort using co-design principles can help design targeted interventions in improving their food and nutrition literacy and dietary intakes.

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Conflicts of Interest

None declared

Abbreviations

ABC: Australian Broadcasting Corporation

Multimedia Appendix 1

| | Item | Guide questions/description | Page No. |
|--|--|--|----------|
| Domain 1: Research team and reflexivity | | | |
| Personal Characteristics | | | |
| | Interviewer/facilitator | Which author/s conducted the interview or focus group? | 5 |
| | Credentials | What were the researcher's credentials? <i>E.g. PhD, MD</i> | 6 |
| | Occupation | What was their occupation at the time of the study? | 6 |
| | Gender | Was the researcher male or female? | 6 |
| | Experience and training | What experience or training did the researcher have? | 6 |
| Relationship with participants | | | |
| | Relationship established | Was a relationship established prior to study commencement? | 6 |
| | Participant knowledge of the interviewer | What did the participants know about the researcher? <i>e.g. personal goals, reasons for doing the research</i> | 6 |
| | Interviewer characteristics | What characteristics were reported about the interviewer/facilitator? <i>e.g. Bias, assumptions, reasons and interests in the research topic</i> | 6 |
| Domain 2: study design | | | |
| Theoretical framework | | | |

| | | | |
|------------------------------|---------------------------------------|---|-----|
| | Methodological orientation and Theory | What methodological orientation was stated to underpin the study? <i>e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis</i> | 6 |
| Participant selection | | | |
| | Sampling | How were participants selected? <i>e.g. purposive, convenience, consecutive, snowball</i> | 5 |
| | Method of approach | How were participants approached? <i>e.g. face-to-face, telephone, mail, email</i> | 5 |
| | Sample size | How many participants were in the study? | 5 |
| | Non-participation | How many people refused to participate or dropped out? Reasons? | 6 |
| Setting | | | |
| | Setting of data collection | Where was the data collected? <i>e.g. home, clinic, workplace</i> | 5 |
| | Presence of non-participants | Was anyone else present besides the participants and researchers? | 5 |
| | Description of sample | What are the important characteristics of the sample? <i>e.g. demographic data, date</i> | 6-8 |
| Data collection | | | |
| | Interview guide | Were questions, prompts, guides provided by the authors? Was it pilot tested? | 5 |
| | Repeat interviews | Were repeat interviews carried out? If yes, how many? | 6 |

| | | | |
|--|--------------------------------|--|------|
| | Audio/visual recording | Did the research use audio or visual recording to collect the data? | 5 |
| | Field notes | Were field notes made during and/or after the interview or focus group? | 28 |
| | Duration | What was the duration of the interviews or focus group? | 6 |
| | Data saturation | Was data saturation discussed? | 5; 6 |
| | Transcripts returned | Were transcripts returned to participants for comment and/or correction? | 5 |
| Domain 3: analysis and findings | | | |
| Data analysis | | | |
| | Number of data coders | How many data coders coded the data? | 28 |
| | Description of the coding tree | Did authors provide a description of the coding tree? | 9 |
| | Derivation of themes | Were themes identified in advance or derived from the data? | 6 |
| | Software | What software, if applicable, was used to manage the data? | 6 |
| | Participant checking | Did participants provide feedback on the findings? | 5 |
| Reporting | | | |
| | Quotations presented | Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. <i>participant number</i> | 9-16 |
| | Data and findings consistent | Was there consistency between the data presented and the findings? | 9-16 |

| | | | |
|--|-------------------------|--|-------|
| | Clarity of major themes | Were major themes clearly presented in the findings? | 9-16 |
| | Clarity of minor themes | Is there a description of diverse cases or discussion of minor themes? | 16-20 |

Multimedia Appendix 2

| Reflexive Thematic Analysis Phase | Application |
|-----------------------------------|---|
| 1: Familiarisation with the data | An initial reading of the transcripts generated by Otter.ai was conducted. After, the transcripts were re-read while listening to the corresponding audio file to gain a better contextual understanding of the data. Transcripts were edited for correctness and contextual information e.g. [sarcasm], [...], [laughter], were added to the transcripts. No notes or other functions that identified or discussed data were used. |
| 2: Generating codes | Any data that addressed each of the research objectives were coded by one coder (BTL). Two separate analyses were conducted, one for each objective. The codes were constantly reviewed during repeated iterations and further familiarisation of the data. Upon review, some codes were subsumed under similar pre-existing codes if the original code had no other data items. Additionally, some codes were edited for specificity in addressing the objectives. |
| 3: Generating themes | Codes were grouped into initial themes, according to their similarity in meaning. |
| 4: Reviewing potential themes | The themes were reviewed by the research team for quality (i.e. addresses the research objectives), correctness and coherence. |
| 5: Defining and naming themes | A coding tree of the final themes were developed. Each individual theme was narratively summarised. Data items i.e. quotes, were |

| | |
|-------------------------|--|
| | extracted from the data to convey the diverse meanings of each theme. |
| 6: Producing the report | The write up of the analysis is provided in the analysis section. Some changes were made for correctness and clarity. At least one quote was added for each theme and/ or sub-theme to support the narrative analysis. The order of reporting for the themes was also established. |

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Supplementary Files

Multimedia Appendixes

Consolidated criteria for reporting qualitative studies checklist.

URL: <http://asset.jmir.pub/assets/c382cd22aca981ca3f233f8e59c4899a.docx>

Application of the six stages of reflexive thematic analysis.

URL: <http://asset.jmir.pub/assets/56799df6ef2877d73347dcf1cf7596a1.docx>