

Food Literacy

Subjects: Nutrition & Dietetics

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Food literacy is the scaffolding that empowers individuals, households, communities or nations to protect diet quality through change and strengthen dietary resilience over time. It is composed of a collection of inter-related knowledge, skills and behaviours required to plan, manage, select, prepare and eat food to meet needs and determine intake.

The term 'food literacy' has gained momentum globally; however, a lack of clarity around its definition has resulted in inconsistencies in use of the term. Therefore, the objective was to conduct a systematic scoping review to describe the use, reach, application and definitions of the term 'food literacy' over time. (2) Methods: A search was conducted using the PRISMA-ScR guidelines in seven research databases without any date limitations up to 31 December 2019, searching simply for use of the term 'food literacy'. (3) Results: Five hundred and forty-nine studies were included. The term 'food literacy' was used once in 243 articles (44%) and mentioned by researchers working in 41 countries. Original research was the most common article type (n= 429, 78%). Food literacy was published across 72 In Cites disciplines, with 456 (83%) articles from the last 5 years. In articles about food literacy (n= 82, 15%), review articles were twice as prevalent compared to the total number of articles (n= 10, 12% vs. n= 32, 6%). Fifty-one different definitions of food literacy were cited. (4) Conclusions: 'Food literacy' has been used frequently and broadly across differing article types and disciplines in academic literature internationally. However, agreement on a standardised definition of food literacy endorsed by a peak international agency is needed in order to progress the field.

Keywords: food literacy ; systematic scoping review ; definition ; concepts ; application

1. Introduction

While many aspects of the food system, such as availability, accessibility, price and affordability, have been explored and evaluated, there is a limited understanding of the relationship between these factors and people's food acquisition and consumption. The term 'food literacy' emerged in contemporary nutrition policies and plans as early as 1990 and in published literature from 2001 as the everyday skills, behaviour and knowledge needed by individuals to navigate the food environment and meet their nutrition and health needs ^{[1][2][3]}.

The term 'food literacy' has been used by industry, public health nutrition organisations and policy-makers to encompass anything from food preparation to cooking skills, food science, household food production, food safety and food marketing ^[4]. There are also numerous frameworks and models proposing relationships between food literacy and various food-related outcomes such as diet quality, nutrition behaviours, social connectedness and food security ^{[5][6]}. Despite food literacy having relevance across a broad range of countries and contexts, a lack of clarity around its definition, conceptualisation and operationalisation has resulted in inconsistencies in food literacy research. This lack of shared understanding of food literacy inhibits the synthesis of findings and limits the potential for leveraging food literacy to improve dietary intake and food security.

Therefore, the present research goes beyond the existing works by looking broadly at the use of the term 'food literacy' throughout the whole peer-reviewed literature, regardless of context, to better understand its reach and application. Additionally, this article aimed to determine if 'food literacy' is a widely used and understood term to explore the potential for an internationally endorsed definition of food literacy. The objectives were to conduct a systematic scoping review to (1) describe frequency of the use and reach of the term 'food literacy', (2) identify changes in the use of the term over time and (3) describe how the term has been applied and defined within the literature.

2. Research Progress

The purpose of this study was to better understand the reach and application of the term 'food literacy' in order to progress the field. This study found that, while the term 'food literacy' has been used frequently and broadly throughout academic literature, there are inconsistencies in its application and definition.

The term 'food literacy' is widely used and has been described in a variety of different research disciplines and plethora of contexts. This is not limited to just 'food', usually discussed in the context of nutrition and dietetics or public health, but also covers the 'literacy' aspect of the construct, within disciplines such as education, communication, literature, language and linguistics. Begley and Vidgen ^[3] indicated that this may reflect attempts by a range of food-related sectors to describe the totality of food and eating as opposed to focusing on the singular issue of maximising dietary quality for good health. The term has clearly resonated with researchers with a very wide range of interests, indicating some level of consensus that translates to interventional value.

A substantial number of food literacy articles in the latter five years of our data collection period align with the emergence of key articles defining (2014–2017) ^{[4][6][15][16]}, conceptualising (2016) In 2016, Begley and Vidgen proposed that the interest in food literacy was driven by the increasing prevalence of diet-related disease and a recognition that contemporary nutrition science needs to look beyond the biological determinants ^[3]. While this is still the case, food literacy is now also discussed more broadly in the context of food environments and food security ^{[17][15][18][19][20]}. While the first few articles on food literacy were original research articles, subsequent initial articles were perspectives articles, and most reviews were published in the last six years.

The term 'food literacy' has been used in both national and international contexts, in both English and non-English-speaking countries of differing income statuses, highlighting the broad reach of the term. However, while the term appears to be used frequently throughout the literature, just under half of the articles included in this review cited the term 'food literacy' only once in the manuscript. Given that majority of articles used the term so infrequently and, in some cases, just as a keyword suggests that it is often used as an indicator of a general topic area rather than a point of particular depth. This can make navigating food literacy literature particularly difficult and inefficient.

Twenty-four articles 'about' food literacy developed definitions or reviewed existing definitions of the construct, while 51 different definitions of food literacy were cited in the 82 articles 'about' food literacy.

While the Vidgen and Gallegos ^[6] definition was the most commonly cited, new definitions of food literacy are constantly emerging, encompassing broader conceptualisations of the term. These definitions are usually developed as a result of scoping or systematic reviews of the existing literature and expert consensus that tend to differ from the definitions developed in consultations with the general public. The literature-based definitions tend to be broader in scope, encompassing constructs such as food security and food environments. This requires the general public to meet higher levels of knowledge, skills or behaviours and have a more critical and active understanding of the food system in order to be considered 'food-literate', placing a higher onus on the individual ^[21].

In an international consensus study, Fingland et al. ^[21] found that, while some international researchers believe food literacy should extend beyond what is proposed in the Vidgen and Gallegos ^[6] model, few disagree with the core domains and components of this conceptualisation (Figure A2). This provides a starting point for the development of international indicators of food literacy previously limited by inconsistent definitions and understandings of the construct across contexts.

We found no articles using the term 'food literacy' published by first authors based in low-income countries, which has been attributed to limited research budgets, low salaries, poor infrastructure and facilities and political instability ^[22]. However, since our search was conducted, articles from Ethiopia ^[23] and Uganda ^[24] have been published, further highlighting the relevance of the term.

Additionally, the recent COVID-19 pandemic further highlighted the relevance of food literacy and the role it plays in: (i) planning, selecting and preparing healthy meals ^{[25][26]}; (ii) empowering individuals, households, communities or nations to navigate the complex food environments and protect diet quality through change ^{[27][28]} and (iii) manage the planning and preparation of food even when financial circumstances change, which may alleviate food insecurity ^[29].

Overall, this review found the term 'food literacy' widely used and understood, and there is agreement on a core conceptualisation. Therefore, international scholars across all income levels that have engaged in food literacy research, identified by Fingland et al.'s ^[21] work and the present review, could provide valuable insight into developing indicators of food literacy. The development of a definition and international indicators endorsed by a peak international agency would be integral in significantly advancing and progressing the field of food literacy. Further to this, food systems monitoring by the Food and Agriculture Organisation of the United Nations (FAO) ^[30] has identified consumer behaviours as a driver of the food system; however, there have been no measures reported for assessing food acquisition, preparation, meal practices and storage: all key components of food literacy.

The limitations include that this review was conducted up to 2019 and, therefore, did not describe the trajectory of food literacy during or post-COVID-19; however, a section was included to highlight relevant publications that have emerged since. The country of affiliation of the first author was not always the country where the research took place; this was a pragmatic decision due to the volume of articles coded but may particularly underrepresent countries where research is more often collaborative ^[22]. The article type was determined based on the journal's classification of the article; as a result, there may be misclassifications of some article types; however, this was for pragmatic reasons. Therefore, a more robust discipline or area of study categorisation is needed.

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