Healthy eating beliefs and the meaning of food in populations with a low socioeconomic position: A scoping review

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ABSTRACT

Profound understanding of healthy eating beliefs in populations with a low socioeconomic position (SEP) can benefit attempts to improve diet quality in this population, but literature on this subject is fragmented. The purpose of this scoping review was to systematically map healthy eating beliefs and the meaning of food and eating in populations with a low SEP. Systematic search of electronic databases yielded 35 relevant publications that were included in a qualitative synthesis. Populations with a low SEP perceived healthy eating as important, although they expressed various meanings of ‘healthy’ and ‘good’ eating. Lack of time and money posed perceived barriers to healthy eating, as well as social influences, and desired identities that can be expressed by specific foods. Traditions were important influences on food and eating practices. Eating behavior was perceived as one’s own responsibility and desirably within one’s own control. Parents expressed the role of food to regulate children’s (eating) behavior. In conclusion, perceived limited control over what is eaten due to various barriers as described by populations with a low SEP, may also be viewed as competing values. Deeper understanding of reasons and thoughts underlying healthy eating beliefs and what it means to eat ‘well’ is largely lacking in this domain. The findings call for an in-depth exploration of the origin and construction of beliefs regarding ‘healthy’ and ‘good’ eating in populations with a low SEP.

1. Introduction

The prevalence of overweight and obesity continues to increase, as does its associated disease burden (GBD 2015 Obesity Collaborators, 2017). It is well-documented that diet quality is patterned by socioeconomic position (SEP). Populations with a lower SEP usually consume poorer diets, displayed in e.g. lower intake of fruits, vegetables and fibres and higher intake of energy-dense foods, as compared to populations with a higher SEP (Giskes, Avendano, Brug, & Kunst, 2010; Kontinen, Sarlio-Lahdenkorva, Silventoinen, Mannisto, & Haukkala, 2013).

Lifestyle interventions may contribute to improving diet quality; however, populations with a low SEP are often less well reached by lifestyle interventions than populations with a higher SEP (Beauchamp, Backholder, Magliano, & Peeters, 2014). The complexity of the everyday lives of people with a low SEP can interfere with their engagement in lifestyle interventions and lifestyle change, and can pose a barrier to healthy eating (Bouwman, Te Molder, Koelen, & Van Woerkum, 2009; Bukman et al., 2014). For example, people with a low SEP encounter poverty, and physical and mental health problems more often than their higher SEP counterparts (Dalstra et al., 2005; Reiss, 2013).

In addition, healthy lifestyle perceptions of populations with a low SEP, e.g., what it means to them to eat healthily, may differ from the definition of a healthy lifestyle according to science (Bukman et al., 2014). For example, low-income women in the study of Dibsdall, Lambert, and Frewer (2002) perceived health as the extent to which a normal daily life could be continued, and in spite of not following the guidelines regarding fruit and vegetable intake, some women believed they were eating healthily and consumed enough fruits and vegetables because they ate them whenever they felt like doing so. A better understanding of beliefs and perceptions regarding healthy eating in populations with a low SEP is important for developing lifestyle interventions that better fit with their everyday life, potentially increasing interventions’ effectiveness (Bukman et al., 2014).

Literature provides valuable information about beliefs and perceptions towards food and healthy eating in populations with a low SEP,

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and shows that these cannot simply be extrapolated from beliefs in populations with a higher SEP. To illustrate, a recent study showed how parents with either a low or a high SEP attach meaning to providing food to children (Fielding-Singh, 2017). For parents with a lower SEP, food can function as a counteractant against other areas of scarcity (Fielding-Singh, 2017). Whereas limited financial resources restrict parents’ options to provide material matters to their children, “food can be an important exception: low-SES parents can often oblige adolescents’ expensive food requests… thereby emotionally satisfying adolescents and bolstering parents’ own sense of worth as responsible caregivers” (Fielding-Singh, 2017, p. 425). In contrast, for parents with a high SEP, the symbolic value of food is in its meaning as a tool to teach adolescents restraint and delayed gratification. In a context of plenty, parents with a high SEP regularly reject children’s calls for specific foods, because “high-SES parents find a sense of worth as caregivers in curtailing adolescents’ dietary wishes that parents deem unhealthy” and parents are “cultivating adolescents’ palettes for the ‘right’ foods and signaling to themselves and to others that they are transmitting the ‘right’ values” (ibid., p. 425).

However, literature is fragmented and a clear overview of how populations with a low SEP attach meaning to food and eating is lacking. The multidimensionality and complexity of what healthy eating means to populations with a low SEP may contribute to a fragmented body of literature on this subject. To illustrate, Stronks et al. (2018) explained that “health” can be viewed as a multidimensional concept, with descriptive and evaluative components such as norms and values. Similar to “health”, “healthy eating” can be approached as a multidimensional concept, and beliefs may exist in a descriptive dimension (e.g. materialistic factors: nutrients in a food), and an evaluative dimension including norms (normative beliefs such as to what extent, and under which circumstances, is it socially acceptable to eat e.g. deep-fried foods?), and values (e.g. how important is it to adhere to nutritional guidelines?), that can vary across populations with different SEPs. While some studies focus primarily on the descriptive dimension of healthy eating beliefs, e.g., Calnan (1986), others go beyond descriptive and focus on the evaluative dimension, paying more attention to how meaning is attached to food and eating, e.g. Teuscher et al. (2015).

A scoping review was conducted to systematically map healthy eating beliefs and unravel how meaning is attached to food and eating in populations with a low SEP. The scoping review included articles studying healthy eating beliefs in the descriptive as well as the evaluative dimension. Additionally, the scoping review allows for the identification of possible knowledge gaps in this area, and for clarification of how the concepts of eating- and food-related beliefs are defined and understood in current literature (Munn et al., 2018).

2. Methods

2.1. Protocol

The PRISMA extension for scoping reviews (PRISMA-ScR) (Tricco et al., 2018) was used to guide the search and selection process, and to structure the review.

2.2. Eligibility criteria

English peer-reviewed journal articles that met the following criteria were eligible for inclusion in the scoping review: (a) primary focus on how people attach meaning to food (as product) and/or eating (as activity); (b) study conducted in a population with a low SEP; (c) in western context; (d) primary analysis of empirical work.

Studies on specific patient populations were not included, since illness-related food beliefs were not considered representative for general food beliefs. Studies in non-western populations were not included, due to major differences in eating cultures and practices compared to western populations (e.g. Cunha, Cabral, Moura, & de Almeida, 2018). The focus of this review is primarily on eating as activity and/or food as product. Articles on food-related behaviors such as preparation, purchasing or child feeding styles were therefore not included.

2.3. Selection process, data charting and analysis

The databases Scopus, PubMed, MEDLINE, Web of Science, APA PsycInfo and SociNDEX were searched to identify potentially relevant sources of information. The search was conducted in February 2020. The search strategy was set up by analyzing terms used in relevant literature, discussion among the authors, and consultation of an experienced librarian. The search identified articles that held words related to ‘socioeconomic’ in the title, and additionally held words related to beliefs, meaning, food and eating in the abstract and/or keywords. The full search strategy for one of the databases (Scopus) can be viewed in Additional file 1. The search results of all databases were exported to EndNote X9 and duplicates were removed with guidance of an experienced librarian.

The titles and abstracts of the initial search results were screened on relevance and eligibility criteria by AH. Publications that potentially met the eligibility criteria were kept and the exclusions were checked by BM. Remaining publications were screened full text by AH and BM on eligibility. Any disagreements were solved by consensus. Publications that met the eligibility criteria were included in the scoping review.

AH and BM jointly developed a form to extract relevant data from the included publications, and independently charted the data. Data were extracted on publication characteristics (author(s), year, country, study aim, conceptual foundation, methodology, participant characteristics, results and conclusion) and on results that were relevant for the research question related to the scoping review (beliefs attached to food and eating, used concepts and descriptions, and assessment of SEP). The Critical Appraisal Skills Programme (CASP) qualitative checklist was used to provide an assessment of the quality of the included publications (Critical Appraisal Skills Programme, 2018), with the exception of two quantitative articles. The CASP checklist consists of ten items that can be answered with ‘yes’, ‘no’ or ‘can’t tell’, where a higher number of questions answered with ‘yes’ indicates a higher quality of the study.

The quality of included studies was assessed to evaluate the overall quality of literature on this subject, but did not influence the data synthesis. Results of the data extraction and critical appraisal were discussed and any discrepancies were solved through consensus.

Analysis of the results entailed an iterative process of identification and categorization of recurring themes in the literature that contribute to understanding how people with a low SEP attach meaning to food and eating and related beliefs that they hold. The results were synthesized and are presented in a thematic, narrative format.

3. Results

3.1. Selection of sources of evidence

The initial database search yielded 8767 publications, of which 3547 were left after duplicates were removed. Title and abstract screening led to the exclusion of 3483 records. The remaining 64 publications were reviewed full-text, resulting in 35 publications that were included in the scoping review. Fig. 1 displays the PRISMA flow diagram (Moher, Liberati, Tetzlaff, Altman, & Group, 2009) of the study selection process.

3.2. Overview of included studies

Table 1 provides an overview of study characteristics and the results of the critical appraisal. Specific characteristics of each study are described in Additional file 2. Full references of all studies are included in the reference list.

The majority of studies was conducted in the USA (n = 16), various countries in Europe (n = 14), and Australia (n = 5). Most studies were
published in the most recent ten years (n = 25), with fifteen studies published between 2016 and 2020 and ten studies between 2011 and 2015. Qualitative methodology was most frequently used (n = 32), of which interviews (n = 15) and focus groups (n = 9) were the most common. Parents and caregivers were the most frequently studied population (n = 11), followed by women (n = 7), a combination of parents and children or adolescents (n = 6), only adolescents (n = 5), general adults (n = 5), and only one study targeted men. It is notable that in the studies on parents and caregivers, and on parents in combination with children or adolescents, mothers were overrepresented compared to fathers. Low SEP was most often assessed by the SEP of the neighborhood, community or area (n = 11) and by low income (n = 16), which was determined by whether participants received government support (n = 6), a combination of low income and education level (n = 5), solely assessing income (n = 4), and recruiting participants in low-income housing (n = 1).

For the majority of studies (n = 30) at least eight out of ten CASP items were answered with ‘yes’. Considering this high and consistent quality, all studies were regarded as equally important for the data synthesis.

3.3. Synthesis of results

Synthesis of the results yielded seven major recurring themes in the literature: (1) notions of ‘healthy’ and ‘good’ eating; (2) time and monetary constraints to healthy eating and associations with behavior and moral value; (3) social influences on eating and food practices; (4) expressing identities through food and eating; (5) importance of upbringing and tradition in food and eating practices; (6) perceived responsibility for and desired control over eating behavior; (7) role of food in regulating children’s (eating) behavior.

3.3.1. Notions of ‘healthy’ and ‘good’ eating

The importance of healthy eating was acknowledged by participants in the majority of studies, and participants perceived healthy eating as desirable (Lucan, Barg, Karasz, Palmer, & Long, 2012a, 2012b; Backett-Milburn, Wills, Gregory, & Lawton, 2006; Baumann, Szabo, & Johnston, 2019; Boshoff, Dollman, & Magarey, 2007; Calnan, 1986; Dalma et al., 2016; Dibsdall et al., 2002; Dressler & Smith, 2013; Dye & Cason, 2005; Eikenberry & Smith, 2004; Engler-Stringer, 2010; Fielding-Singh, 2019, 2017; Fielding-Singh & Wang, 2017; Herman,
Table 1
Study characteristics and critical appraisal results.

| Characteristic              | Number of studies (n = 35) |
|-----------------------------|-----------------------------|
| Study location              |                             |
| USA                         | 16                          |
| Australia                   | 5                           |
| UK                          | 4                           |
| The Netherlands             | 4                           |
| Canada                      | 2                           |
| The Netherlands, Belgium    | 1                           |
| Germany                     |                             |
| Eastern Scotland            | 1                           |
| Greece                      | 1                           |
| Sweden                      | 1                           |
| Year of publication         |                             |
| 2016–2020                   | 15                          |
| 2011–2015                   | 10                          |
| 2006–2010                   | 3                           |
| 2001–2005                   | 5                           |
| 2000 or before              | 2                           |
| Methodology                 |                             |
| Interviews                  | 15                          |
| Focus groups                | 9                           |
| Participatory Action Research, interviews and co-creation sessions | 3 |
| Interviews and ethnographic observation | 1 |
| Focus groups, interviews and introspections | 2 |
| Focus groups and questionnaire(s) | 2 |
| Quantitative surveys        | 2                           |
| Qualitative surveys, interviews and focus groups | 1 |
| Study population            |                             |
| Parents/caregivers          | 11                          |
| of which were studies specifically on mothers | 7 |
| of which the majority of participants were mothers | 4 |
| Parents and children/adults | 6                           |
| of which were studies specifically on mothers | 1 |
| of which the majority of participants were mothers | 4 |
| Women                       | 7                           |
| of which were studies specifically on older women | 1 |
| of which were studies specifically on younger women | 1 |
| Adolescents                 | 5                           |
| of which were studies specifically on boys | 1 |
| of which were studies specifically on girls | 1 |
| Adults (both women and men) | 5                           |
| of which were studies specifically on older adults | 1 |
| Men                         | 1                           |
| Number of participants*     |                             |
| 1–20                        | 4                           |
| 21–40                       | 13                          |
| 41–60                       | 5                           |
| 61–80                       | 3                           |
| 81–100                      | 4                           |
| 101–260                     | 4                           |
| 781–860                     | 2                           |
| Assessment of SEP           |                             |
| Low neighborhood/area SEP   | 11                          |
| Receiving government support (indicating low income/poverty) | 6 |
| Low income + education level | 5                           |
| Low income                  | 4                           |
| Low neighborhood/community/area SEP + education level | 3 |
| Education level             | 3                           |

Table 1 (continued)

| Characteristic                                      | Number of studies (n = 35) |
|-----------------------------------------------------|-----------------------------|
| Occupation + education level + receiving government  | 1                           |
| support                                             |                             |
| Occupation                                           | 1                           |
| Low-income housing                                   | 1                           |
| Five items answered with ‘yes’                       | 1                           |
| Six items answered with ‘yes’                        | 0                           |
| Seven items answered with ‘yes’                      | 2                           |
| Eight items answered with ‘yes’                      | 9                           |
| Nine items answered with ‘yes’                       | 18                          |
| Ten items answered with ‘yes’                        | 3                           |

Note.

*Total number of individual participants, e.g. 30 parents and 30 children in a study is considered 60 participants; five focus groups of each five participants is considered 25 participants in total.

b This checklist was designed for qualitative research; therefore, two quantitative studies were not assessed and the total number of studies in this row is 33.

Malhotra, Wright, Fisher, & Whitaker, 2012; Hupkens, Knibbe, & Drop, 2000; Inglis & Crawford, 2005; Jung, Shin, Kim, Hermann, & Bice, 2017; Porter, Shriner, & Ramsay, 2016; Stephens et al., 2018; Teuschler et al., 2015; Trofholz, Schulte, & Berge, 2018). Healthy foods were even considered morally superior as compared to unhealthy foods, in studies among adolescents (Fielding-Singh, 2019) and working age men (Stephens et al., 2019).

Studies showed, however, that there are various ways how participants interpreted what ‘healthy’ or ‘good’ eating means. Regarding (un)healthy food products, participants frequently described fruits and vegetables as healthful foods (Backett-Milburn et al., 2006; Boshoff et al., 2007; Calnan, 1986; Dibsdall et al., 2002; Dressler & Smith, 2013; Dye & Cason, 2005; Eikenberry & Smith, 2004; Engler-Stringer, 2010; Fielding-Singh, 2017; Fielding-Singh & Wang, 2017; Hardcastle & Blake, 2016; Jonsson, Larsson, Berg, Korp, & Lindgren, 2017; Lucan, Barg, Karasz, Palmer, & Long, 2012h, 2012a; O’Neill, Rebane, & Lester, 2004; Pescud, Pettigrew, & Henley, 2014; Porter et al., 2016; Trofholz et al., 2018). ‘Fresh’ and ‘organic’ foods were also regularly mentioned as healthy (Baumann et al., 2019; Calnan, 1986; Dibsdall et al., 2002; Fielding-Singh, 2017, 2019), as well as fresh meat and fish (Calnan, 1986; Eikenberry & Smith, 2004; Engler-Stringer, 2010; Fielding-Singh, 2017; Lucan et al., 2012a; O’Neill et al., 2004; Pescud et al., 2014; Porter et al., 2016). However, there was some ambiguity regarding the healthiness of red meat (Dibsdall et al., 2002; Lucan et al., 2012a). For example, some participants in a study among low-income African Americans believed that saturated fat was unhealthy, but that beef (red meat that contains a lot of saturated fat) was healthy (Lucan et al., 2012a). In addition, some types of meat were considered healthy while others were not, as displayed by mothers in the study of Porter et al. (2016), who described chicken as healthy and pork as unhealthy. Unhealthy foods were described by study participants as junk foods (including chips, soda, candy and fast food (Fielding-Singh, 2017, 2019; Fielding-Singh & Wang, 2017; Hupkens et al., 2000; Jonsson et al., 2017; Pescud et al., 2014), fatty products (Dye & Cason, 2005; Lucan et al., 2012a; O’Neill et al., 2004; Porter et al., 2016), white bread, sweet sandwich fillings, dessert and sweet yoghurt drinks (Hupkens et al., 2000), large portions of meat (Lems, Hilverda, Broerse, & Dedding, 2019), and foods advertised on TV (Lucan et al., 2012a).
Participants described a ‘good diet’ as consuming substantial, regular meals consisting of fresh foods (Calnan, 1986), traditional food (Dibsdall et al., 2002; Engler-Stringer, 2010) or a Mediterranean diet, which was also described by the Greek study participants as ‘our diet’ that passed on from generation to generation (Dalma et al., 2016). A ‘good meal’ should include meat, starch and a vegetable (Calnan, 1986; Lucan et al., 2012b; Porter et al., 2016), also described as ‘balanced’ (Calnan, 1986; Engler-Stringer, 2010). It should be home cooked and served at home (Backett-Milburn et al., 2006; Fielding-Singh, 2017; Porter et al., 2016). Participants described desirable dishes as huge and big, showing a preference for abundance in terms of quantity and variety (Baumann et al., 2019). ‘Good food’ should be filling and satisfying (Oye & Cason, 2005; Hardcastle & Blake, 2016; Lems et al., 2019; Lucan et al., 2012b; Stephens et al., 2018).

Children were considered as ‘good eaters’ by parents when they finished all the served foods without complaining, regardless of what was actually eaten (Backett-Milburn et al., 2006). ‘Good eaters’ were described as opposed to ‘fussy eaters’, where the evaluation of ‘good’ depended on the easiness with which the child could be catered, rather than the quality of the foods eaten (Backett-Milburn et al., 2006).

Thus, the importance of healthy eating was acknowledged by the majority of study participants and healthy eating was mainly expressed as consuming fresh fruits and vegetables, and — although accompanied by ambiguity and ambivalence — meat. However, along with notions of what is ‘healthy’ and ‘unhealthy’, there were additional meanings of what constitutes a ‘good’ meal or ‘good’ food, which may complement as well as oppose the perceived (un)healthiness of food.

3.3.2. Time and monetary constraints to healthy eating and associations with behavior and moral value

Although considered important, other life demands and responsibilities pose a barrier to healthy eating. These induce time constraints, perceived or real, with the result that healthy eating is not a top concern (Bukman et al., 2014; Dalma et al., 2016; Dibsdall et al., 2002; Eikenberry & Smith, 2004; Fielding-Singh & Wang, 2017; Inglis & Crawford, 2005; O’Neill et al., 2004). Beside time, the (perceived or real) expensiveness of healthy foods while having a limited budget, is another frequent barrier to buy (more) of it (Backett-Milburn et al., 2006; Baumann et al., 2019; Bukman et al., 2014; Dalma et al., 2016; Dibsdall et al., 2002; Dressler & Smith, 2013; Eikenberry & Smith, 2004; Engler-Stringer, 2010; Fielding-Singh, 2017, 2019; Fielding-Singh & Wang, 2017; Hardcastle & Blake, 2016; Hupkens et al., 2000; Inglis & Crawford, 2005; Jung et al., 2017; Lucan et al., 2012b; Stephens et al., 2018).

Especially in relation to the costs, when making food choices on a limited budget, satisfying, ‘filling’ foods are preferred over nutritious foods that are perceived to be not satisfying (Dye & Cason, 2005; Hardcastle & Blake, 2016; Lems et al., 2019; Lucan et al., 2012b; Stephens et al., 2018). Preferring high-caloric, filling foods over less satisfying and more expensive nutritious foods thus poses a barrier to healthy eating.

Since healthy foods are considered morally superior, not being financially able to eat healthily may negatively impact people’s sense of moral worth (Fielding-Singh, 2019). Some adolescents felt embarrassed about their families’ diets and envied the diets of more financially privileged peers (Fielding-Singh, 2019). In a study among young low-income women, healthy foods were considered (too) expensive but eating unhealthily raised feelings of guilt because of the perceived inability to buy healthier options (Engler-Stringer, 2010).

In sum, the (perceived) ability to eat healthily is limited by time and cost constraints due to other demands and responsibilities. In this context, healthy eating is not a top priority. Within the budgetary space that is left, people prefer high-caloric filling foods to make sure to be satisfied, rather than nutritious foods that are perceived to be less satisfying. However, eating unhealthily may negatively impact people’s sense of moral worth.

3.3.3. Social influences on eating and food practices

A variety of social influences on food and eating practices is discussed in the literature. First, many study participants perceived adhering to others’ food likings and requests as important, and found it difficult to deny food requests (Dye & Cason, 2005; Engler-Stringer, 2010; Fielding-Singh, 2017; Hardcastle & Blake, 2016; Herman et al., 2012; Hupkens et al., 2000; Inglis & Crawford, 2005; Teuscher et al., 2015). This was primarily the case in studies on parents, who wanted to adhere to children’s food requests, but also among women who wanted to adhere to requests of, e.g., partners and relatives. Identity may play a role, e.g., wanting to be a good parent, partner, relative or friend by satisfying food requests (see paragraph 3.3.4). A study by Teuscher et al. (2015) among women of Dutch, Turkish and Moroccan origin in the Netherlands illustrated how feeling the need to indulge food requests limits perceived control over what is eaten. Study participants highlighted the importance of the family relationship and pleasing all family members’ food likings was a way to cherish this relationship. This family well-being was considered more important than women’s individual goals, such as healthy eating. So even when healthy eating is perceived as important, it may be subordinate to other, competing values such as cherishing relationships (Teuscher et al., 2015).

Social influence on eating and food practices was also displayed by studies showing the meaning of eating as a social event for bonding and building relationships, among family members as well as among friends, although eating together during family meals is sometimes prioritized secondary after other life demands and responsibilities (Blaine et al., 2016; Jarrett, Bahr, & Kersh, 2016; Lems et al., 2020; Malhotra et al., 2013; Teuscher et al., 2015). Thus, eating with others can enhance bonding, but feeling the need to adhere to family members’ food likings and requests can pose a barrier to healthy eating, especially if those food requests entail unhealthy foods. However, eating alone can also be a barrier to healthy eating, especially with regard to cooking only for oneself (Dibsdall et al., 2002; Dye & Cason, 2005; Eikenberry & Smith, 2004; Engler-Stringer, 2010; Jung et al., 2017; Lucan et al., 2012b; O’Neill et al., 2004).

3.3.4. Expressing identities through food and eating

The literature also showed that food and eating play a role in expressing identities. The desire to be a ‘good parent’, was regularly expressed (Dalma et al., 2016; Eikenberry & Smith, 2004; Fielding-Singh, 2017; Herman et al., 2012; Lucan et al., 2012b; Pescud & Pettigrew, 2014; Porter et al., 2016; Stephens et al., 2018; Trosholz et al., 2018). For example, parents articulated that they wanted to be a good role model for children by promoting a healthy diet (e.g. Dalma et al., 2016), or that they wanted to do better than their own parents (Porter et al., 2016). Parents also used food as tool to show love and affection, which makes both parents and children feel good (Pescud & Pettigrew, 2014). For parents with a low SEP, indulging children’s food requests was a way of compromising for (material) deprivation in other areas (Fielding-Singh, 2017; Pescud et al., 2014; Pescud & Pettigrew, 2014). This gave parents a sense of being a competent caregiver (Fielding-Singh, 2017).

Another expressed identity was being a good, moral person by eating healthily, while not being able to eat healthily due to, e.g., financial limitations, may have an opposite effect (see paragraph 3.3.2) (Fielding-Singh, 2019). Eating healthily was also — and more recently — believed to enhance masculinity, as articulated by men in the study of Stephens et al. (2018), although adolescent boys believed that eating meat and junk food boosted masculinity and independence, while eating healthy food could damage their identity (Lems et al., 2019). Women of various ages in a disadvantaged community in the UK considered healthy eating as something for ‘other people’; thus, apparently not consistent with their own identity. They described those ‘other people’
as people with more time and people who were not mums with young children (O’Neill et al., 2004).

Depending on what identity is associated with which type of diet, and the desirability of that identity, identity can either enhance or hinder healthy eating, or both. For example, as a role model, a ‘good parent’ may provide healthy foods to children, but on the other hand, a ‘good parent’ may indulge children’s (unhealthy) food requests.

3.3.7. Role of food in regulating children of autonomy, in the sense of desired control over what is eaten, and regulating children sometimes perceived as difficult (Boshoff et al., 2007; Dalma et al., 2016; Inglis & Crawford, 2005; Jung et al., 2017; Lucan et al., 2012b; Malhotra et al., 2013). To illustrate, eating practices of low-income women were influenced by childhood experiences, such that they considered a healthful diet as a “traditional fare, such as what their mother used to cook” and noted for example that “my mother’s teachings are more important than the government or the scientists, to me anyway” (Dibsdall et al., 2002, p. 303). Women interviewed by Inglis and Crawford (2005) also held beliefs and values they were taught in childhood regarding their food-related practices, such as finishing everything on the plate, and seemed hesitant to change their diet and try something new (Inglis & Crawford, 2005). Mothers in the study of Malhotra et al. (2013) described that warm as well as painful memories of family meals in their childhood influenced current mealtime practices with their own children.

Endorsing childhood beliefs and values into current food and eating practices, may increase a sense of control over eating and/or cooking healthily, by holding on to something people grew up with themselves; thus, a perceived ‘recipe for success’ for how to eat well.

3.3.6. Perceived responsibility for and desired control over eating behavior

Participants acknowledged the importance of individual tastes, perceiving eating behavior to be one’s own responsibility, and desired control over what is eaten (Backett-Milburn et al., 2006; Dibsdall et al., 2002; Dye & Cason, 2005; Herman et al., 2012; Lems et al., 2019; Stephens et al., 2018). To illustrate, a study on adolescent boys showed that they believed that it was one’s own responsibility whether they became overweight or not, in addition to blaming the environment (Lems et al., 2019). Men interviewed by Stephens et al. (2018, p. 7) believed that “no one influenced their eating behaviors”, although the men also mentioned circumstances such as a limited budget and mobile worksites, and consequently eating whatever is available at those sites, as barriers to healthy eating (Stephens et al., 2018). Low-income women in a study by Dibsdall et al. (2002) expressed that they wanted to be in control over what they ate, and resented experts who told them what they should eat. These examples indicate that there is a tension between a desired sense of autonomy, in the sense of desired control over what is eaten, and perceived limitations in that control due to various circumstances.

3.3.7. Role of food in regulating children’s (eating) behavior

Although parents tended to indulge children’s food requests, as elaborated upon in paragraph 3.3.3, various parents also reported aiming to regulate their children’s food intake, although this was sometimes perceived as difficult (Boshoff et al., 2007; Dalma et al., 2016; Fisher et al., 2015; Hardcastle & Blake, 2016; Herman et al., 2012; Hubbard et al., 2000; Troseth et al., 2018). Expressions for regulating children’s food intake were related to costs, health but also to life lessons. For example, restricting food options teaches children that they cannot always get what they desire (Herman et al., 2012). However, sometimes simultaneously, parents acknowledged their child’s individual taste preference and wanted to adhere to that. That resulted in shifting responsibility, giving children control over their own food choices, completely or by providing them with limited choices regarding what and how much is eaten (Backett-Milburn et al., 2006; Boshoff et al., 2007; P.; Fielding-Singh & Wang, 2017; Hardcastle & Blake, 2016; Herman et al., 2012; Pescud et al., 2014). This aligns with the idea that being in control over what is eaten is desirable (see paragraph 3.3.6); possibly, parents find it important to grant their children such a sense of autonomy.

In addition, parents used food as a tool to handle children’s behavior. For example, by providing snacks to children to occupy them or to calm them, or to reward good behavior (Blaine et al., 2016; Fisher et al., 2015; Pescud et al., 2014; Pescud & Pettigrew, 2014).

In sum, parents aimed to regulate their children’s food intake for various reasons, although occasionally parents placed the responsibility for what and how much is eaten with the children, or used food to handle children’s behavior.

4. Discussion

4.1. Summary of evidence

The aim of this scoping review was to provide an overview of healthy eating beliefs and to unravel how meaning is attached to food and eating in populations with a low SEP, as displayed in current literature. Qualitative synthesis of 35 included studies revealed seven themes that were regularly expressed by study participants: notions of ‘healthy’ and ‘good’ eating; time and monetary constraints to healthy eating; social influences on food and eating practices; expressing identities through food and eating; the importance of upbringing and tradition in food and eating practices; perceived responsibility and desired control over eating behavior; and regulating children’s (eating) behavior. Beyond these thematic results, it is notable that the majority of studies was conducted in the most recent ten years, which shows a recent increased interest in this subject. This may be due to the increasing prevalence of overweight and obesity (GBD 2015 Obesity Collaborators, 2017). In addition, it is notable that the majority of studies included mainly women, often in their role as mothers, as study population. This implies that the identified themes are primarily discussed by, and perceived as important by, women/mothers, and it cannot be assumed that these beliefs are equally relevant and/or perceived as important for other gender and age groups.

Critical appraisal of the included studies, based on the CASP qualitative checklist (Critical Appraisal Skills Programme, 2018), indicated that overall, the studies were of good quality.

4.2. Interpretation

A recurring, however implicit, topic that bridges the identified themes, is the perception of limited control over what is eaten. As identified in the review, study participants viewed eating behavior as their own responsibility, and ‘healthy’ and ‘good’ eating, in the ways that this was understood by the study participants, were perceived as important and desirable. However, people were (or perceived to be) only partially in control to do so because of time and money constraints, social influences, measuring up to desired identities, and desiring to keep up traditions, that influenced eating behavior.

Experienced limitations to be fully in control over what is being eaten, for example to eat healthily when desired, may be induced by competing values that people hold. As also noted by Teuscher et al. (2015), cherishing family relationships (by indulging family members’ food requests) is a value that can compete with the value to eat healthily. Healthy eating appears to be valued in populations with a low SEP, as displayed by the acknowledged importance of healthy eating (as understood by the study participants) by the vast majority of study participants included in this review. Identified themes in this review provide indications of what additional values competing with a desire to eat healthily might be. These include feeling responsible for other tasks and responsibilities (as indicated by perceived time and monetary constraints), valuing to express a desired identity (e.g., to express being masculine, which may be enhanced by eating junk food), and valuing to...
keep up traditions, even if these may be unhealthy. However, study participants did not express influences on eating behavior in terms of ‘competing values’, and it is plausible that the process of prioritizing values and subsequent influence on eating behavior happens partly unconsciously, as do other food-related and moral decision-making processes (Ham & van den Bos, 2016; Raghunathan, Naylor, & Hoyer, 2006).

A consideration that should be taken into account when interpreting the results of this review, is that although some included articles described results of participants with both a low and higher SEP (Bauermann et al., 2019; Bukman et al., 2014; Calnan, 1986; Fielding-Singh, 2017, 2019; Fielding-Singh & Wang, 2017; Hupkens et al., 2000; Inglis & Crawford, 2005), the study population of the majority of studies consisted only of participants with a low SEP. This implies that the identified themes in this review are applicable to populations with a low SEP, but this does not imply that these themes are applicable exclusively to populations with a low SEP, or that they pose a contrast to beliefs, norms and values among populations with a higher SEP.

Based on literature in the field, some comparisons between healthy eating beliefs among populations with a low and higher SEP can be made. Beliefs that appear to be prevalent mainly among populations with a low SEP, entail financial considerations. This can be derived from the observation that participants with a high SEP did not mention financial considerations at all in a study on perceptions of healthy eating (Mete, Shield, Murray, Bacon, & Kellet, 2019), and from the few studies that compared beliefs among participants with a low and higher SEP, that found financial considerations to be mostly described by populations with a low SEP (Bukman et al., 2014; Fielding-Singh & Wang, 2017; Inglis & Crawford, 2005). Valuing tradition also seems more exclusively reserved for populations with a low SEP (Inglis & Crawford, 2005).

However, there are also overlapping themes of beliefs among populations with a low and higher SEP. A literature review on perceptions on healthy eating in a ‘general’ population (not specifically low SEP), focusing on the Canadian context, showed that fruits, vegetables and fresh foods were most often considered as important part of a healthy diet, and meals that consisted of fresh foods and were home cooked and consumed at home were considered healthier than foods eaten elsewhere (Paquette, 2005). However, this review did not provide information on evaluative dimensions of food and eating beliefs. A qualitative study on the meaning of healthy eating among Australian adults, of which the majority held a bachelor’s or postgraduate degree and could thus be viewed as high SEP, showed that healthy eating was considered important but was not prioritized in daily life due to a lack of time induced by work and family commitments, which resulted in reduced energy levels at the end of the day (Mete et al., 2019). This is similar to findings in our review among populations with a low SEP. In addition, and not found among populations with a low SEP, participants in this study described popular diets (e.g. Weight Watchers) and social media as part of their attempts to improve healthy eating (Mete et al., 2019). Similar to Mete et al. (2019), a study of Inglis and Crawford (2005) showed that not only women with a low, but also women with a middle and high SEP perceived time constraints as barrier to healthy eating.

Although time constraints are a perceived limitation to healthy eating in both low and higher SEP populations, the reasons and thoughts underlying this theme are different. Women with a low and middle SEP experienced time constraints due to work commitments, while many women with a high SEP were not involved in paid work and lacked time because of household and family commitments (Inglis & Crawford, 2005). Moreover, although the high SEP participants in the study by Mete et al. (2019) described that having enough time to eat healthily was a luxury, they also described that prioritizing healthy eating was something that _should be chosen_; that within the limited time of day, prioritizing healthy eating is a _choice that could be made_. This shows, first, the perceived moral superiority of healthy eating, which is similar to the current review’s findings among populations with a low SEP. Second, the high SEP participants in this study seem to view time as a space within which deliberate choices can be made, such as to eat healthily or not. This seems contrasting to the views of populations with a low SEP, since our review indicated that populations with a low SEP viewed a lack of time to eat healthily as out of their control rather than a choice they made by deliberately prioritizing other demands. This may indicate that populations with a high SEP are more aware of competing values that can deliberately be prioritized than populations with a low SEP.

Multiple conclusions can be drawn, with subsequent identification of knowledge gaps. First, the current review showed that populations with a low SEP perceived healthy eating as important and desirable; however, they perceived to be only partially in control to do so due to various barriers they described. These barriers to healthy eating as described by study participants may also be viewed in terms of (consciously or unconsciously) competing values. Second, the perceived importance of healthy eating seems to apply to ‘healthy eating’ in the sense of consuming fresh fruit, vegetables and meat, which were defined as the main ‘healthy foods’ by populations with a low SEP. However, the review showed that there were also various definitions of what ‘good’ eating meant to populations with a low SEP, and these were not always in accordance with what was perceived as ‘healthy’. Current literature provides very limited information on what it means for populations with a low SEP to eat ‘well’, and the relative importance of eating ‘well’ as compared to eating ‘healthy’. Possibly, eating ‘well’ may pose another value competing with eating ‘healthy’. Third, reasons and thoughts underlying healthy eating beliefs and meaning attached to food and eating appears to be different for populations with a low and higher SEP, even when they concern the same belief (such as time constraints as a barrier to healthy eating). Although current literature provides some indications of what the underlying reasons and thoughts of healthy eating beliefs are, profound insights are very limited.

### 4.3. Implications for research and practice

Since current literature provides only limited information on the reasons and thoughts underlying healthy eating beliefs, in-depth exploration of the origin and construction of healthy eating beliefs should be conducted, as well as on what it means to eat ‘well’. Specific food-related values of populations with a low SEP should be explored and it should be considered, e.g., how and to what extent values relate to (compete with) each other, and how and to what extent they influence ‘healthy’ and ‘good’ eating. In addition, such studies should also be conducted in populations with higher SEPs, to investigate whether and to what extent findings are applicable exclusively to populations with a low SEP, or across populations with different SEPs.

Insights in the origins of ‘healthy’ and ‘good’ eating beliefs and how they fit in the everyday life of populations with a low SEP, can contribute to attempts, e.g., interventions, to improve diet quality in populations with a low SEP, in a way that makes sense to them. Mutual understanding of what it means to eat ‘healthy’ and ‘well’ and what underlying reasons and thoughts are, may also provide opportunity to successfully engage the low SEP target group in the co-creation of interventions, in a way that fits their daily reality.

### 4.4. Strengths and limitations

This scoping review adds to the current literature by providing a clear overview of healthy eating beliefs and how meaning is attached to food and eating in populations with a low SEP as displayed in current literature, and provides a starting point for future in-depth research on healthy eating beliefs and the meaning of food.

Beliefs identified in this review do not necessarily provide a clear contrast with beliefs among populations with a higher SEP, which may be considered as a limitation of the review. Because a review of beliefs
among populations with a higher SEP is beyond the scope of the present review, we highlighted differences in beliefs between populations with a low and higher SEP that were found in publications included in the present review, compared our findings to a previous review, and compared our findings to a recent qualitative study on beliefs among populations with a higher SEP.

Finally, due to the very large number of articles that resulted from the initial search query, the search query was adapted to show only results that contained words related to ‘socioeconomic’ in the title, rather than in the title and/or other fields (in addition to the search terms related to ‘beliefs’ and ‘eating’, that were also searched for in other fields). Induced by this measure, it is possible that some potentially relevant articles may have been overlooked and are therefore not included in this review.

Author contributions
AH, BM, GJ and HM designed the study. AH and BM conducted the systematic literature search, collection of the literature and synthesis of the data. AH drafted the manuscript. All authors approved the final article.

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Ethical statement
This article reviewed existing literature. This article did not involve human or non-human (animal) participants, human or animal material, nor human or animal data. Therefore, obtaining ethical approval was not required for this article.

Declaration of competing interest
None.

Appendix A. Supplementary data
Supplementary data to this article can be found online at https://doi.org/10.1016/j.appet.2021.105135.

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