Co-designing a community-wide approach to encouraging healthier food choices

Authors: Julia Carins [a] [b] and Svetlana Bogomolova [c]

[a] Social Marketing @ Griffith, Griffith Business School, Griffith University. 170 Kessels Road, Nathan, QLD, 4111 Australia. j.carins@griffith.edu.au
[b] Food & Nutrition Group, Defence Science & Technology, 74 George St, Scottsdale TAS 7260 Australia.

[c] Ehrenberg-Bass Institute for Marketing Science, UniSA Business, University of South Australia, GPO Box 2471, Adelaide, 5001 Australia. Svetlana.Bogomolova@unisa.edu.au

Abstract: This research offers a novel perspective on encouraging healthier food choices through a community-wide approach. Using five co-design workshops with consumers and supermarket staff, and the abductive synthesis of qualitative data, this study uncovered the role of community in encouraging greater food well-being and allied behaviours. The results reveal rather critical consumer views on past paternalistic health promotion campaigns and offer alternative strategies for designing more balanced and holistic programs. Such a holistic approach can ensure more sustained programs, as they aim to achieve broader social, mental and physical health, and economic benefits, not just nutrition outcomes. The research offers practical recommendations on modifying retail marketing space, and the broader community setting, to create an environment where consumers find it easier, convenient, more socially desirable and pleasurable to make healthier choices.

Co-designing a community-wide approach to encouraging healthier food choices

1   Introduction

Food consumption is an essential part of daily life. It provides sustenance to allow physical functioning but also supports the body to achieve health. Yet it also fulfils many other human needs including pleasure and social connection, and is enacted within familiar or enticing rituals, practices and locations (Addis & Holbrook, 2019; Bublitz, et al., 2013; Pettigrew, 2016; Ratcliffe, Baxter, & Martin, 2019). Recent thinking has conceptualised the need for food well-being as '*a positive psychological, physical, emotional, and social relationship with food at both the individual and societal levels*' (Block, et al., 2011, p. 6). However, a similar shift in the way programs or strategies are designed or implemented in communities is yet to occur.

This research offers a novel perspective on encouraging healthier food choices through a community-wide approach, co-designed together *with* consumers and retail staff, rather than *for* them. Recently, co-design methods have emerged as a way to encourage participants to contribute their knowledge and skills as experts of their unique experiences (Dietrich, Trischler, Schuster, & Rundle-Thiele, 2017). Co-design is a significant advancement on more traditional paternalistic approaches to behaviour change (Kass, 2001), which tend to impose programs and ideas onto participants to increase healthier food choices.

1.1   *Food well-being*

The global burdens of hunger in developing nations, and non-communicable diseases (NCDs) in developed countries, have cultivated a reductionist view of food as bundles of nutrients that should be consumed in sufficient or limited amounts to avoid disease (Mozaffarian, Rosenberg, & Uauy, 2018). Food well-being moves away from this narrow view, shifting the focus from food as 'nutrients for health' requiring discipline and self-regulation to 'get it right' to a more holistic view focussed on people and how food can play a positive role in daily life (Block, et al., 2011; Scott & Vallen, 2019). This holistic view introduces breadth along two critical dimensions. The first acknowledges that food provides psychological, emotional, and social benefits—in addition to physical health benefits. The second recognises the contribution of multiple actors to food well-being, rather than focussing on individualistic notions of responsibility. There are five primary domains of food well-being: food socialization, food literacy, food marketing, food availability, and food policy; and the role of both individuals and society in each domain have been described (Block, et al., 2011). Others have extended the

concept of food well-being to include functional, symbolic and hedonic goals (Bublitz, et al., 2013). And further still, the eudaimonic aspects of food well-being—the active and dynamic pursuit of 'flourishing' or 'thriving' rather than articulating a fixed point at which well-being is achieved (Mugel, Gurviez, & Decrop, 2019). Studies have explored consumers' perceptions of food well-being (Ares, De Saldamando, Giménez, & Deliza, 2014), the experiential nature of food well-being (Mugel, et al., 2019), the contribution of local food culture to food well-being (Wiseman, Murphy, & Hewitt-Taylor, 2018) and the interaction of alternative food production and food well-being (Neulinger, et al., 2020; O'Kane, 2016). Recent studies have looked into consumer perceptions of food well-being in a food retail setting, however they have been limited to children and youth (Hémar-Nicolas & Ezan, 2019; Marshall, 2018). Therefore, investigations of consumer and retailer interpretations of food well-being, and the preferences for food well-being initiatives of many other community members, still needs to be explored.

1.2 Supermarkets as food retailers

Food retailers determine which items are offered for sale, and although they respond to consumer demand, they also shape consumer food choice and preferences (Dawson, 2013). In developed countries, over 70% of food comes from supermarkets; therefore, they are an ideal location to involve in efforts to improve food well-being (Cohen & Babey, 2012; Houghtaling, et al., 2019). To date, most interventions in grocery stores have taken a health-based approach, most commonly through information provision and education, sometimes combined with the increased availability of products such as fruits and vegetables, and less frequently, with price interventions (Adam & Jensen, 2016; Mah, Luongo, Hasdell, Taylor, & Lo, 2019). The information or education is founded on dietary guidance or nutrient information, promoting 'nutrients for health' rather than broader food well-being notions. Systematic reviews indicate that supermarket interventions generally positively affect sales of healthy products, with some mixed results (Escaron, Meinen, Nitzke, & Martinez-Donate, 2013; Liberato, Bailie, & Brimblecombe, 2014; van't Riet, 2013). Furthermore, single strategies were less effective than those combining multiple strategies (Adam & Jensen, 2016; Mah, et al., 2019) pointing to the need for integrated and multifaceted programs (Hawkes, et al., 2015; Houghtaling, et al., 2019). Food well-being programs will likely need to adopt a multifaceted structure and have a focus broader than just health to ensure their success and increase their acceptability. Of particular note is that the vast majority of past health promotion studies in supermarkets have had a strong paternalistic or expert-driven perspective, directing consumers on what they should or should not buy/eat. For example, past campaigns have led with slogans such as '*Eat Smart*' or '*Eat*

3

Right: Live Well' suggesting there are 'correct' foods to buy and desired behaviours to follow, such as identifying foods with labels such as low sodium, low fat, and calcium-rich (Milliron, Woolf, & Appelhans, 2012; Surkan, Tabrizi, Lee, Palmer, & Frick, 2016). Furthermore, retailers have also expressed a preference for top-down decision-making in health promotion programs (Toft, et al., 2018). Whilst supermarket health promotion, by design, is underpinned by nutrition guidelines; food choices, unlike illicit drugs or smoking, allow for a greater range of acceptable choices, and the potential to find a balance between pure nutrition benefits and other consumer benefits (for example, social, emotional). For example, the social and mental health benefits from an occasional happy family gathering around a pile of home-made pancakes could outweigh the pure nutrition benefit of eating boiled kale at home alone. To date, such a balanced view of healthy food promotions has been lacking; we aim to address this gap with this research.

1.3 Social marketing

The development of programs to increase food well-being requires a broad perspective that aims to enable people to function and thrive, rather than simply alleviate health problems and associated burdens on society. This broad perspective necessitates an inclusive interpretation of who should be involved in the development solutions, beyond an approach that relies on experts (either supermarket management or health advocates) to generate strategies for individuals other than themselves.

Social marketing aims to change behaviour to bring about individual and societal benefit. Although this aim is shared with many other behaviour change approaches, the strength that social marketing brings to this space comes from the marketing lens—the focus on delivering solutions that are valued by people (French & Russell-Bennett, 2015). Widely accepted principles of social marketing emphasise the need for audience research to gain a deep understanding of a consumer's needs, aspirations, values and everyday lives to develop mutually beneficial and balanced value propositions (French & Russell-Bennett, 2015; Grier & Bryant, 2005). Social marketing has increasingly adopted a stance where solutions are created with consumers rather than for them, striving to co-create value (Domegan, Collins, Stead, McHugh, & Hughes, 2013).

1.4 Co-design

Co-creation is a concept that encourages a shift from paternalistic approaches that develop programs 'for' people, to a collaborative process of development 'with' people that engages

4

and empowers (Galvagno & Dalli, 2014). Several processes are involved in co-creation. These include value co-discovery (exploring what is valued by consumers and other stakeholders), value co-design (developing, experiencing and responding to new program or service elements) and value co-delivery (combining efforts to bring program or service ideas to life) (Domegan, et al., 2013). These processes encourage and enable consumers and other groups to contribute to program development as experts of their unique experiences (Dietrich, et al., 2017). Programs and services developed through co-design are effective (David, et al., 2019; Dietrich, Rundle-Thiele, Schuster, & Connor, 2016; Steen, Manschot, & De Koning, 2011). In the context of this study, co-discovery provides the opportunity to understand food well-being through the eyes of consumers and staff from a retail setting, and co-design enables stakeholders to contribute to the formation of new programs or program elements that they consider valuable or appealing. Including other stakeholders in addition to consumers (such as staff) provides valuable insight into how value may be co-delivered when programs are implemented. These insights can be pursued using a method such as the one employed for this study—a co-design framework that involved several stages to stimulate discussion and creative ideation of program elements (David, et al., 2019; Trischler, Dietrich, & Rundle-Thiele, 2019).

Given a substantial proportion of food is acquired through supermarkets, they remain a setting where food well-being can be better understood and supported. This study sought to use a comprehensive co-design process to understand the concept of food well-being. This involved consumers and retail staff to explore their perspective of how previous programs contribute to food well-being, and to identify new opportunities to improve food well-being in a retail context. The particular focus was the role of the whole community in creating an environment that supports food well-being for all.

2   Methods

This study was conducted with consumers and staff from an Australian consumer retail co-operative. The objective of this research was to specifically explore interactions between food wellbeing and community dimensions. For this purpose, the researchers selected a setting that was most prone to having active community engagement. A member-owned retail co-operative was chosen as the retail partner, which operated several retail outlets, food outlets and a shopping centre. Consumer retail co-operatives are wholly member-owned and aim to provide both a retail function and a contribution to the community (Kennedy, 2016). The community ownership of the co-operative ensured that community members were well-aware of the retail setting and are accustomed to taking active interest and role in its governance. The location was

5

also chosen to be within a rural food-producing region (food and wine), with vibrant and long-standing traditions of local agriculture and a sense of pride for locally grown and produced foods. In recent years the region has been associated with a well-known tourism food and wine destination. In the workshops, participants were encouraged to think about well-being in their community. This included reflecting on how the retail co-operative may contribute to well-being; examining existing or past well-being programs to consider which aspects they liked and disliked and generating ideas for future programs for the retail co-operative. Participants were invited through social media and the local newspaper to attend the co-design workshops. Five 90-minute sessions were held in March 2019, four groups were held with consumers, and one group involved retail staff from many of the co-operative's stores. Participants were reimbursed for their time with $20 vouchers and staff attended during paid work hours (no additional incentive was offered). The project received ethical clearance from the University of South Australia for the project [Protocol 200833].

The workshops followed a staged co-design process (Trischler, et al., 2019) and incorporated techniques used in other co-design workshops (David, et al., 2019). The process aims to sensitise participants to the topic, then facilitate creativity and ideation to focus on new ideas. The first two activities were a word association task (prompter words: *region, food, well-being, local, healthy choices, supermarket, being active, healthy habits, exercise, convenient, and fresh*) and a sentence completion task (example sentences: *For me, a good day is when I…; I am happiest when…; "Healthy living for me is… To eat healthily I…; What stops me from being healthy is….).* These two activities aimed to sensitise participants to the broad concept of food well-being, within the context at hand and were completed individually, with responses recorded in an individual workbook. A brief discussion was held immediately afterwards and allowed participants to share some responses to sensitise the group and develop rapport with each other. In the next task, participants gave feedback on 28 health-based strategies found in previous programs (described in their workbook using short descriptive sentences and pictures of examples); ranging from labelling and signage to displays and demonstrations, and rewards and sponsorship (participants indicating *like, dislike* or *neutral* for each). Participants initially recorded their responses individually on scorecards. Afterwards, they shared their responses in small groups, making notes of their shared discussion on large sheets of paper (see Appendix for examples). This third task engaged participants in thinking about program strategies to prepare them to create and design new programs ideas. Fourth, participants in those small groups were asked to generate new program ideas indicating how the retail co-operative could contribute to improving consumer well-being. These were created collaboratively by members

within each small group on large sheets of paper, and involved words, diagrams, and images cut from magazines to form a textual and visual collection of their ideas. These ideas included essential features such as the name, logo, strategies, processes, materials and important interactions between consumers and the program. Finally, a spokesperson from each small group presented their ideas to the entire group, and questions or feedback was welcomed. The communication of ideas to the whole group allowed for elaboration or explanation of any diagrams, pictures or notes included on the page of ideas. Verbalising the program ideas also provided a secondary form of data that captured new ideas. The workshops were audio-recorded, workbooks collected, and photos taken of all the note sheets.

The activities described above were selected to achieve the required sensitisation and facilitation processes within co-design (Trischler, et al., 2019) which were aligned to design thinking processes of inspiration (what is), ideation (what if), and implementation (what matters and works) (Brown & Wyatt, 2010). Word association and sentence completion tasks contribute to sensitisation by activating the retrieval of related concepts and imagery (De Deyne & Storms, 2008). Facilitation moves participants through the stages of inspiration and ideation. The task involving examination, evaluation, rating and discussion of existing program components was included to elicit inspiration, and the creation and capture of new ideas using flexible and tactile creative materials was designed to prompt ideation (Dietrich, et al., 2017). The presentation of ideas to the group, and the checking and questioning that occurred initiates the reflecting and building for change processes—these continue after the conclusion of the co-design workshops when programs ideas are translated into program elements with stakeholders and those involved in implementation (Trischler, et al., 2019).

Thematic analysis was used to understand and synthesise the meaning participants ascribed to well-being and improving well-being in this community setting. The data was coded and synthesised based on the approach described by Braun and Clark (2006). This method is a theoretically flexible research method suited to a range of epistemologies. In this study, an abductive approach was taken, which pursues new insights that reframe empirical findings in contrast to existing theory (Timmermans & Tavory, 2012). This involved generating themes to capture the perceptions of the participants and exploring the data within a food well-being framework (Block, et al., 2011). This was achieved through data familiarisation (reviewing all textual data, photographs and audio recordings); deriving a coding framework representing the five domains of food well-being, whilst simultaneously remaining open to allowing additional codes to be discovered in the data. Both investigators agreed on the initial coding framework, the first author performed the coding of the data, and then both investigators reviewed, refined

7

and synthesised the themes. Review and discussion during synthesis continued until there was an agreement on how themes were situated into the broader food well-being theoretical framework. Any differences in interpretation were mutually compatible rather than mutually exclusive (Belk, Wallendorf, & Sherry, 1989). This systematic analysis of the data against each theme and across the entire data set generated a thematic representation of the participants' interpretations of well-being and how marketing and other strategies may be used to improve well-being in a community retail setting.

2.1   *Participants*

The participant sample comprised of 24 consumers and eight staff. The consumer group was broadly representative of the adult shopping population for the region, ranging in age, gender, family status, household size (Australian Bureau of Statistics, 2019), being predominately female (78%), majority aged 36 to 65 years (69%). Participants readily engaged in each task, producing 32 completed workbooks, 16 large sheets capturing shared perceptions of previous programs, 15 large sheets capturing new program ideas, and 29 hours 35 minutes of audio data (small groups within each 90-minute workshop were recorded separately). These audio recordings, the workbooks, and photographs of the large sheets of notes on previous campaigns and new ideas formed the data for analysis. The analysis focussed on the rich data obtained during the co-design process—examining perceptions of health and food well-being; how it is currently supported, or not, in the community; how participants viewed previous efforts to improve food well-being; and how they considered it could be improved in future.

3   Results

The food well-being domains proposed by Block et al. (2011) were evident during analysis, along with other themes. After the initial theme identification and extraction, the researchers compared and contrasted existing and emergent themes, and structured the themes under three main domains:

- individual factors (striving for food well-being and food literacy),
- marketing system (food availability, promotion activities, and policy),
- a balanced view of food (resisting paternalistic activities, seeking balance in food consumption, and the social nature of food)

These domains were linked to a community-wide view—the need and desire to involve the whole of the community in food well-being efforts). Existing and emergent themes are shown in Figure 1, and the synthesis of themes is depicted visually to show how these important

8

domains of food well-being in community arose. Each domain and its specific themes are now discussed in detail with examples from participants.

<< **Figure 1 about here** >>

3.1 *Individual factors: Striving for food well-being*

Participants envisaged food well-being in broad terms, as touching many parts of their lives. Well-being incorporated a longing for a 'healthy' mind, body and spirit, and was not considered in isolation of social elements, such as family, friends, belonging and community. Food was recognised as providing more than sustenance; it also provided pleasure and social connection. The positive attributes of food included health but extended to quality or distinctiveness such as natural, wholesome, or gourmet. Fresh and local foods were also valued. Participants held a collectivist view of their location—expressing support and pride in the region's produce and appreciating community spirit and closeness. Participants articulated this comprehensive view of food well-being in the written tasks, and group discussions, reflecting on them when discussing past programs and extending them during the creative idea generation. Also, participants discussed food well-being as a dynamic process of striving for betterment— for themselves and others, over a lifetime.

> *I need to make healthier choices because…I want to feel fit and strong and have energy for me and the kids* [Individual 12; sentence completion]

Participants felt that most people know what they 'should' be doing to eat healthfully, which was a goal for some, but the holistic nature of food well-being, and connection to general well-being, was also emphasised in many discussions. Participants felt that eating healthfully sometimes came to the fore when other goals were being pursued (such as exercise goals), or when others were involved (children or grandchildren) or when developing new hobbies, skills or practices. Therefore, any positive contributions to food well-being could be considered to be aligned with additional benefits, and not necessarily the driving force for actions that created food well-being improvements.

> *To grow your own fruit and veg which is what I want to start do, because it gives you something to be proud about…if I had my own herb garden, I would be so proud of myself. It's something else outside your workday.* [Group 5.3]

9

That whole cycle of what food is about, and how that is healthy, of going to pick that tomato that's in the garden…and you've grown that. [Group 5.1]

Suggestions for new programs or initiatives that incorporated this perspective included ideas that promoted 'in-season' produce and rewarded healthier purchases with discounts and access to healthy lifestyle, exercise or gym programs. Other suggestions included a campaign focusing on a different topic each week—healthy food for children, tips for eating out, healthy food demonstrations and discounts, even tips for relaxation and exercise. In another campaign idea, healthy food purchases were rewarded with discounts from other business that support well-being—discounts on more nutritious foods, exercise programs or relaxation activities.

3.2   Individual factors: Food literacy

Some participants demonstrated they had developed food literacy skills through descriptions of their existing practices. Some reported reliance on declarative knowledge, regularly reading labels on products, particularly if a family member had experienced a health issue. However, many considered engagement with this level of detail to be complex and time-consuming, and that engaging with information should be as easy as possible, because most people will not take the time to read and interpret complex and detailed information.

You need real information... Because of that [my sister's illness] I started reading everything. It is an interesting thing until you start reading the percentages you don't realise how high the salt is, the sugar is in those things. [Group 4.1]

Despite this, almost all participants acknowledged that food literacy should be supported by information provision, in some form, and supported by skill development. They noted information provision could be achieved through retailer or community activities, and ideally through integrated or linked initiatives to maximise impact or benefit. Suggestions included: highlighting healthier options within a section of the store or in a group of products; signs that act as a 'silent salesperson' directing people towards healthy produce; and creating 'visual education' or 'quick reference' materials would be preferable to text-heavy or comprehensive presentations of information that many considered challenging to apply to their food consumption practices.

Others described procedural knowledge that guided their efforts to increase the healthfulness of their shopping purchases or cooking practices within the home. Motivation to apply these forms of knowledge was evident; however, many described difficulties in

10

maintaining motivation, or consistently applying positive behaviours or practices. Some participants reported shopping with a list, planning or preparing meals or snacks ahead of time and considered these practices helpful. Others were actively developing their procedural knowledge.

> *We keep cooking the same thing because we know how to cook it, so we are trying to change that… My brother and I use meal kits—all the items you need and a recipe card. No wastage - everything you need, and portion-controlled.* [Group 1.3]

Suggestions for supporting the development of procedural elements of food literacy included demonstrations of how to use healthy products, workshops, and showing people what they actually need (guiding knowledge of portion sizes rather than just what is healthy and what is not). Further suggestions included bringing together a combination of products, a recipe, a demonstration and a tasting to move people from knowledge of what they could do, to how they could do it, to support healthier food consumption.

3.3 Marketing system: Food availability

Most participants viewed the availability of food positively, with the co-operative considered to be a 'big store' offering a wide range of choices. Participants valued fresh, local foods, and these were deemed to be readily available. Participants considered some specialist or niche ingredients to be less available, which required travel to the city. Beyond the retailers, some participants increased food availability by growing produce or taking advantage of social or community networks to acquire home-grown produce. Even when they did so, they expressed confidence that these foods could be purchased within the supermarket should it be something they are not growing at a particular point in time. Organic foods were preferred by some and were available, but many felt they were expensive, and offered no advantage over non-organic foods. Some felt that eating healthfully can be costly, whilst others considered it to be no more expensive than less healthy options. Although physical availability of healthful products was not limited, and the price was not a limiting factor for most people in the groups, for individual products, participants expressed a desire for strategies that would make items more mentally available.

> *Displays - anything to bring it to the forefront. Sometimes the good food is hidden amongst the other things.* [Group 4.1]

11

Furthermore, initiatives that made healthy meals more accessible or convenient were desired to reduce the impact of busy lives. This was considered important for those who are time-poor, shopping with children, or less able to walk up and down all of the aisles (for example, elderly shoppers). Solutions that bring healthy products together, and attractively showcase or indicate healthy food preparation methods were viewed favourably, saving mental or physical time and effort.

> *Displays of healthier food. Would make you look. Beneficial for people who are time-poor. Reminder when you go in for tea. Putting all things together with a recipe card.* [Group 2.1]

3.4 Marketing system: Promotion activities

Participants were familiar with many of the marketing or promotional activities that have been used in food retail. They considered some to support their aspirations for health or well-being, and others to be ineffective or untrustworthy. Price discounts were deemed attractive and increased the value received for the money paid—although many stated they were just a bonus as they planned to buy those foods anyway.

> *I like discounts. Just to save money. I would probably buy the food anyway, but a discount would save me money.* [Group 1.1]

Interestingly, competitions and rewards (which are common in modern marketing) were considered by many to be a nuisance or annoyance. Competitions were seen as an empty promise (the chances of winning were low) and rewards were considered to provide small items that were not valuable and were often thrown away. On the other hand, food or cooking demonstrations were viewed as positive opportunities to learn something new—when individuals had the time to stop and watch. There was a preference for these types of experiences, as it made customers feel valued and involved interaction, reassurance, personal experience and education. Recipe cards were considered more helpful for time-poor customers. Participants saw usefulness in that banners assist people when identifying and locating products within the store. These were desired not just for healthy products, but also for highlighting local, regional and Australian products. Sponsorship of local community groups was viewed favourably, reflecting the region's community-oriented nature, as consistently reported by participants.

However, they also recognised that excessive marketing collateral, like posters and advertising, can become overwhelming and lead to confusion or a tendency to ignore the

content. Of particular note was participants' expressed scepticism about some marketing promotional claims. Furthermore, some felt retailers would not commit to supporting health-related activities as they were perceived to be in opposition to the profit-related business objectives.

Healthier by whose standards? [Group 4.1]

Labels - as long as it is genuine [Group 4.2]

It's business. They just want people to pick what they have got; not to be selective.

I like the idea but...well that's not going to happen. They won't go to that extent. It's bad for business. [Group 3.1]

3.5 Marketing system: Policy

Although it was not widespread across the workshops, some participants saw a role for policy to improve health and well-being. Few policy opportunities were discussed related to the commercial activity of the supermarket, beyond those concerning children. Participants felt children needed protection from marketing tactics such as placing confectionery in prominent easy to reach places. Removing or banning lollies in the checkout area was included as part of suggestions for two new programs. However, policy initiatives were suggested for community events that involved the co-operative.

They've been doing the family fun days, and they have juice boxes, and I'm...nup...get rid of that, bring out the fresh fruit, bring out the water. The activities are great, but if it is going to be a Co-op event... all healthy food. So, like a healthy food policy [Group 1.2]

These ideas extended to include structural modifications to the wider retail complex to support healthy beverage consumption and general health and well-being. Suggestions included greater access to water fountains to promote water consumption instead of sugar-sweetened beverages, and improved bike and footpaths to encourage active travel to the supermarket and associated stores. In some instances, policy was thought to restrict businesses' ability to provide the foods they wanted. In particular, food safety requirements that required a level of shelf stability and food-safe packaging converted fresh, simple, wholesome foods, similar to home-made or homecooked foods to a less desirable category—processed foods. Furthermore, packaging was considered to limit the ability to judge the characteristics of the food, and there was a desire to see the food, not just decorative packaging.

I mean I know there are rules and regulations, but as close to home-made as possible. That means it has to be fresh cause it won't last. [Group 4.1]

3.6 A balanced view of food: Resisting paternalism

Interestingly, and despite some suggesting a need for overarching healthy food policy, many others expressed a distaste for actions that were perceived as paternalistic, which echoed throughout many of the small group discussions. Participants felt they knew what they should be doing, and indeed believed most others did as well. Messages encouraging avoidance of foods; restriction in the amount of food; and those indicating what should be chosen in a café or dining situation (businesses operating within the Co-op retail complex) were perceived as paternalistic or patronising. Nevertheless, some paternalistic tones were deemed appropriate when directed towards children, or young people, in case they had not received parental support to establish healthy habits.

Posters, [showing] foods to avoid, it's just like saying stop doing that, it's just patronising. Maybe for kids if their parents aren't teaching them. [Group 2.3]
I don't want to be told what to eat when I go out. I know what you're allowed to have, and not, I know what's bad for me. [Group 2.1]

Participants expressed a reluctance to trust or believe some of the information they had observed in a food retail setting. This criticism was directed towards specialist or premium products, organic products, and even some staple foods. In the case of staple foods, participants felt labelling was used to allow products to be priced as a premium product when these products should remain affordable basic products. As such, product manufacturers' messages, such as product health claims, were viewed as 'clever' advertising to increase profit and therefore were not genuine.

My question around labels is - do you trust who is telling you that…it just depends on where the label has come from. [Group 5.4]

Despite stating a desire for authentic information, and easy to understand visual information (see section 3.2) this desire did not extend to information provision that was considered paternalistic, non-genuine or incredibly dense. Some stated they actively avoided interacting with paternalistic information and had reacted negatively towards it, mostly in relation to labelling, demonstrating both distrust and resistance. This involved highlighting occasions where they deliberately acted in opposition to recommendations.

14

I find labels are a level of complexity that I don't want in my life. So I avoid them. Like I didn't read the label - I know I was eating crap. It had a 1.5 star on it or something. What does that even mean [Group 2.2]

3.7 *A balanced view of food: Embracing all foods*

The food well-being concept rejects the restrictive and restrained nature of traditional health paradigms, and participants also expressed an alternative and desired position—that of moderation and balance. Participants recognised that food and meal sharing provide pleasure and social connection, which, at times, meant adopting a relaxed approach to food consumption. Participants accommodated or legitimised this through the notion of balance—between their priorities and that of others, between social pressure and individual goals, and between discipline and flexibility. Participants aspired to balance many parts of their lives to increase well-being (work and rest, socialising and restful solitude).

Healthy living for me is… a balance between good & fun choices (not always healthy) [Individual 30; sentence completion]

Participants expressed a need for balance to enable healthy living and general well-being and this need for balance extended to food, and by this extension, to food well-being. Participants spoke of notions such as consuming a diet that comprised '80% of healthy foods' or having an occasional treat and enjoying the experience or eating lots of fresh fruit and vegetables but having a balanced diet with everything in moderation. Balance was desirable for enjoyment and pleasure and to avoid restrictive ways of eating and what was perceived to involve an unsustainable level of effort to maintain a 'healthy diet'. Participants acknowledged that they struggled to stay motivated, to 'stick to' a healthy diet and that it was difficult to actively and consistently pursue health.

3.8 *A balanced view of food: Social nature of food*

Participants frequently mentioned the social aspects of food consumption, emphasising the importance of others in achieving a positive lifestyle. Parents, grandparents and single people all spoke of the happiness derived from sharing meals, having people 'drop in' or participating in activities together. Food contributed to the fulfilment of the need for belonging and connection.

For me, a healthy lifestyle looks like… Healthy food, exercise, laughter, connection with friends and family. [Individual 4; sentence completion]

15

Furthermore, many ideas included educative strategies, especially for children (as mentioned under food literacy), and the need for informal socialisation to encourage the development of practices that contribute to well-being.

The organic gardening site on Facebook…what I did like was young people were asking a lot of questions, and people who have been gardening for years were helping them. [Group 4.1]

Amongst the new ideas, participants expressed many and varied ways to increase healthy choices in their community. These often included experiential strategies designed to bring people together and socialise new ideas—for example, one program suggestion included market days held within the supermarket or garden centre to create interest and activity around groups of healthy foods and ingredients. Another idea was an Asian themed initiative to showcase exotic ingredients (often sourced from afar) involving cooking demonstrations by local chefs and the provision of recipes to encourage and enable shoppers to cook healthy produce in exciting new ways. Nominating a featured ingredient at both the garden store and the supermarket in the same week was proposed to introduce consumers to both ordinary and novel ingredients. The provision of demonstrations at both places was intended to inform consumers of those plants' health benefits and practical ways they could be prepared. Furthermore, consumers expressed a desire for social interaction within strategies that aimed to increase food knowledge or skills, and these were considered to enhance or reinforce the intent of those activities.

Love experiences. It makes you feel valued as a customer. Interaction, reassurance, personal experience and education. You are never too old to learn [Group 2.1]

3.9   *The role of community*

The role of community in striving for food wellbeing emerged very strongly and penetrated all other themes covered in discussions. It was the 'glue' that connected all ideas (as depicted in Figure 1). Knowing where food comes from, and passing this knowledge on to others, was seen as a way to reinforce the importance and salience of healthy food; the process by which food is grown and harvested; and the people involved in food production. Furthermore, the discussions about food production and food producers centred on local activities, producers and people who were considered members of the community, rather than a reference to large-scale or industry-level food production. Buying 'local' and knowing where

food comes from was seen as important to support family, friends, neighbours, acquaintances or members in the wider community who were food producers and were considered to be 'struggling' to make a living.

There was also a desire to integrate community activities to increase the impact that individual initiatives may have on healthy eating or food well-being. Observations were made that school programs could be linked to activities within the supermarket or garden centre aimed at children, reinforcing learning, and transitioning new skills from school to homes. This included combining the knowledge and experience of community members and using that as a platform for increasing individuals' abilities to produce, cook and eat healthy produce, to engage in a 'cycle of food' where consumers have vision, involvement and pride in the foods they consume.

> *Meeting the growers, the local community, and getting them to teach what they know…the idea of garden to table products - how to grow it, and eat it, and cook it.* [Group 5.2]

The co-operative was not viewed as just a collection of businesses but as a part of the community. Community members considered 'The Co-op' to be part of their town's history and an iconic entity in the region. They were willing supporters of the co-operative and valued the support it delivered to community groups. New program ideas extended beyond the supermarket setting and beyond the co-operative's commercial areas. For example, the concept of 'garden to plate' included workshops at the garden centre to teach people how to grow produce, coupled with displays and demonstrations in the supermarket showing how to prepare and cook the 'hero' produce ingredients. Additional ideas celebrated local produce and people, bringing them together in the co-operative's courtyard, neighbouring parklands and town commonplaces. These involved meals provided by the café, activities organised by local fitness staff, and specifically aimed to increase community gathering, socialisation and enjoyment. For example, one group advocated for community 'get togethers' to promote local healthy food, without sugary drinks or treats for children, and including social activities and games in the common areas near the supermarket.

> *All of these things are setting up a culture that we promote a healthy lifestyle. That's what you are highlighting. It says: That's what we stand for. That's what we are about.* [Group 1.2]

4   Discussion

17

This research adopted an innovative holistic perspective to understanding and encouraging food choices for health and well-being by taking a community-wide approach. We used an emerging method called co-design to obtain community members' views of food well-being and explore and develop new ideas for strategies in close collaboration **with** consumers and retail staff, rather than developing it **for** them. Such an approach offers a novel paradigm for behaviour change interventions, offering potentially more effective program design methods than traditional paternalistic approaches that are expert-driven rather than grounded in the experiences of those at the centre of the program. Indeed, previous program strategies were heavily criticised by our research participants, which points to the fact that consumers might have developed resistance and aversion towards paternalistic approaches that dominated the past decade's public health efforts.

This research uncovered views on aspects of food well-being, on previous healthy eating programs in a locally owned co-operative retail setting and beyond during the five co-design sessions with consumers and retail staff. Analyses revealed two significant insights:

(1) confirmation and new empirical evidence aligned with previous conceptualisations of food well-being (Block, et al., 2011) and other literature detailing the positive role of food practices in well-being; and

(2) novel and unique ways to incorporate a community-wide approach to food wellbeing initiatives.

4.1   Contributions to food wellbeing literature

Our findings provided new empirical evidence supporting the food wellbeing paradigm and prior research on factors that influence food choices (c.f. Bublitz, Peracchio, & Block, 2010; Cohen & Babey, 2012; Emilien & Hollis, 2017). Firstly, we saw support for individual elements (food literacy, motivations to eat healthfully), and the role of marketing context (through the retail setting, food availability, promotions and broader policy) in influencing healthfulness of food choices. Interestingly, we observed a strong resistance to paternalistic approaches to encouraging healthful eating. Instead, consumers and staff advocated for retail settings that offer a full range of food options and promote consumer free choice. Yet, there was also a recognition that aspects of the retail setting could help busy shoppers make healthier food choices more convenient (i.e. signage, promotion shelves, bundles of products).

We also found evidence of a strong need for a balanced view of food consumption, beyond nutrition quality (Cornil & Chandon, 2016; Pettigrew, 2016) and the importance of food literacy in terms of both knowledge and skills and abilities (Truman, Lane, & Elliott, 2017). Other insights were the need for a range of healthful foods to be both available and accessible

through traditional and alternative food networks (Birtalan, et al., 2020; Parkinson, et al., 2017) including the role of the wider community in growing, producing, cooking and consuming food together (Migliore, Schifani, Guccione, & Cembalo, 2014). The influence and positive impact that food marketing and policy can have on food well-being was also evident (Chandon & Wansink, 2012) reinforcing the role marketing can play in creating social good. Another insight was the important role that food plays in promoting positive social interaction and how community socialisation can foster healthier practices (Mendini, Pizzetti, & Peter, 2019). The community aspect was particularly strong in this region that has deep traditions of food production and consumption, as part of their cultural identity. This research presents a potential approach for community-based programs to improve food well-being through a better understanding of this community aspect of food consumption and choices, which could be adopted by many other regions, particularly those with food-producing capabilities.

4.2 *A community-wide approach to improving food well-being*

A particularly novel contribution of this research is uncovering and describing a community lens through which food well-being can be viewed and implemented. This approach allows consumers to feel co-ownership of their food well-being and empowers them to shape their environment to create one that is supportive and conducive to healthy choices. This is in stark contrast to the traditional health promotion approach which directs consumers towards recommended guidelines and demands compliance. The dominant paradigm in nutrition sciences is derived from a medical model that values precise action paths and an expert-driven approach. However, unlike many other medical issues and health behaviours (i.e. taking prescription medicine), food and eating behaviours involve a broader spectrum of actions that could contribute to health; not the least being mental health and happiness from enjoying food than starving oneself with a diet.

This study identified opportunities for a community-wide approach to improving food well-being. These opportunities involved community contribution towards elements of the original food well-being framework and ideas for how community initiatives can avoid paternalistic tones and adopt a more empowering and shared approach to creating food well-being. These are summarised in Figure 2 below, using selected examples from some of the program ideas and discussions about program strategies from the co-design sessions.

<< **Figure 2 about here** >>

The suggestions for strategies involved ***our*** producers—recognising the importance of the community members who produce food and bestowing a high value on their products. This was linked to ***our*** food—the food people grow and prepare for themselves. This extends to supporting the development of further skills in ***our*** gardens and involving ***our*** chefs—recognising the skills present in the community and seeking to transfer some of those to others to develop ***our*** skills. Finally, combining or broadening strategies enabled benefits to extend to ***our*** community members, and creating opportunities for community events allowed members to enjoy ***our*** shared experiences. These suggestions could underpin strategies aligned with the broad concept of food well-being—one that has an end goal of people functioning and thriving as part of vibrant communities, beyond a need to solely a need to eat to alleviate health burdens on individuals and society. Additionally, an empowering approach overcomes a common critical view found in the literature on the food environment, which is often blamed for fuelling unhealthy choices. The community lens allows people to take charge and become active actors in shaping their food environments.

4.3   *Theoretical insights*

The concept of food well-being shifts the focus from 'food' to 'people' and encourages a focus on food as a contributor to a holistic state of wellness, rather than as a set of nutrients to ensure health (Block, et al., 2011). This study extends that thinking by identifying a resistance to paternalism perceived to exist in previous health campaigns and suggesting ways in which the community may contribute to overcoming paternalistic tones in programs aiming to contribute to food well-being. Concerns have been raised about a coercive or paternalistic discourse in health promotion (and particularly weight reduction or healthy eating programs) (Carter, et al., 2011; O'Hara, Taylor, & Barnes, 2016) that appears to encourage 'free' choice, but instead directs people to make the 'right' choice. These concerns stem from academic examinations of health promotion programs; however, others have found consumer resistance to this discourse (Thompson & Kumar, 2011). This study contributes to the further refinement of the food well-being concept by adding the avoidance of paternalism as an important part of food well-being. This avoidance contributes to holistic wellness, particularly given previous healthy eating and obesity approaches have been associated with stigmatism and additional stress (Chen & Tan, 2018; Salas, 2015).

This study also contributes by extending beyond the domains of influence on food well-being (Block, et al., 2011) to conceptualise the path to food well-being as a collaborative venture to be co-created between consumers and other community actors. Others have

described the path to food well-being as requiring separate actions by different entities to improve overall well-being under each of the areas specified in the original framework (Block, et al., 2011). For example, consumers are encouraged to advance their food well-being, and navigate complex environments and mitigate external influences (Bublitz, et al., 2013). Producers, food services and corporate entities are encouraged to modify their actions to facilitate consumer well-being (Bublitz & Peracchio, 2015). Whilst acknowledging that the efforts of each entity, when combined, create a 'sum of benefits' a community-wide approach suggests an integrated and synergistic approach with additional benefits. Very few have advocated for collective action or 'brokering' of positive change (Parkinson, et al., 2017). Including community involvement (or other forms of collective involvement) and action in food well-being recognises that consumers may derive well-being from their engagement in the process of striving towards something better rather than only when a state of well-being is achieved (Mugel, et al., 2019). Furthermore, additional involvement in food-related community initiatives may produce additional benefits beyond well-being derived through the consumption of food. For example, participation in local food projects has been associated with better psychological well-being (Bharucha, Weinstein, Watson, & Boehm, 2020). This also emphasises the importance of socialisation as part of food well-being (Batat, et al., 2019), and the flow-on benefits for the larger community when individuals become empowered through their involvement in local initiatives (Bublitz, et al., 2019).

4.4 Methodological insights

The principal methodological innovation of this study is the use of an emerging method called co-design (Trischler, et al., 2019). While relatively new, this approach is rapidly gaining popularity among researchers, because of the emerging evidence that this method allows the design of more effective behaviour change strategies than more traditional paternalistic research approached (David, et al., 2019).

Our particular contribution here is demonstrating the co-design method to elicit consumer and staff responses concerning food well-being and healthier food choices in a community setting—a relatively novel context for this method. In the healthy eating domain, co-design has been more commonly used to advance the development of technological solutions such as smartphone applications (Lazar, et al., 2018; Martin, et al., 2020) rather than to conceive programs that can be implemented in community settings. Qualitative methods such as focus groups, interviews and ethnographic studies have a rich history of contribution to understanding eating from the consumers' perspective (Bisogni, Jastran, Seligson, & Thompson, 2012) which

then informs the development of programs or policy to enact change. However, even when beneficial change is sought for the consumer, 'problem articulation' is assigned to experts, who act as solution creators or 'problem solvers' (Sarwar & Fraser, 2019). This study demonstrates how consumers can be included and supported as problem articulators and solution creators through co-design. They can generate solutions that involve the breadth of the food well-being domains. Some early evidence suggests that consumers may find better solutions than experts (David, et al., 2019).

4.5 *Practical insights*

This research highlights the critical role of the community in achieving food well-being for many people and for their families. This is one of the few studies that had taken a whole-of-community focus, and the results strongly highlight the fruitfulness of such an approach. A community-wide focus was suggested as a way to promote healthier food choices through food policies at events (i.e. only healthy foods available), through running campaigns and promotions that educate and nudge consumers to consider health and well-being as an aspect when making their food purchases (among other factors). A community focus encourages exploration of natural synergies between multiple factors in food choices, which together could promote healthier behaviours. For example, in this case, choosing locally grown and produced foods to support local producers and regional economy, also offered fresher (fewer food miles) and often healthier (free from harsh chemicals and preservatives) food options. In other studies, consumers have associated fresh, natural and minimally processed foods with food well-being, and considered highly processed foods harmful to well-being (Ares, et al., 2014). Local food groups consider fresh, authentic and seasonal produce that is home-grown or locally produced to provide pleasure (and taste) and health benefits. These foods provide care for their community and the environment allowing them to reconnect with the methods and origins of food which have diminished in the current industrialised and globalised food system (O'Kane, 2016). Furthermore, preparing, eating, and sharing healthy foods provides enjoyment and gratification. Creating associations between these pleasures and healthful foods (or natural or seasonal food) may offer promising avenues to increasing food well-being (Pettigrew, 2016). These synergies give greater creative freedom to marketing and retail professionals when designing messaging and other promotional activities. More so, it expands the target audience from just those concerned with health outcomes to those who seek natural, sustainable foods and services and those who just want to support local economies (Migliore, et al., 2014).

22

There are further practical implications from this work that centre on making a retail environment conducive to healthier choices. These indicate the focus should be less on paternalistic and detailed education about health, and more on making healthier choices appealing, easier and more convenient. The preferred or suggested strategies in this study include: the prominent positioning of more nutritious foods (e.g. on checkouts or along the main fronts, reserving more prominent shelf space to fresh fruits and vegetables), creating bundles of healthy foods with recipe cards (for example, for a soup) which makes it easy to take the whole package, just to name a few. Price promotions are important drivers of retail food choices (Escaron, et al., 2013; Liberato, et al., 2014; van't Riet, 2013). Interestingly, consumers were quite realistic about these strategies, and acknowledged their appeal from a personal economic perspective (to save them money) but also that retailers may be limited in terms of how widely they can apply them. Consumers recognised price promotions could simply be a signage function that attracts attention and helps consumers consider a product. In this view, better signage for healthier options on shelves could be very effective, as many consumers still lack food literacy and ability (or time) to turn around the pack and correctly read detailed nutrition information labels.

4.6 *Limitations and future research directions*

The current study was conducted in one Australian community and pursued insights through one research method. Future research may explore whether consumers and staff in other communities have similar or diverse views on food well-being and strategies to improve it within their communities. This may extend to other nations, and to regional, suburban, and inner-city locations. This region had established ties to food production and consumption—interpretations of food well-being may differ in regions without that connection. The co-design method obtained rich insights and creative suggestions from participants; however, there are limitations to the process adopted in this study. The stimulus used to prompt discussion of previous programs may not have prompted discussion of all the experiences participants may have had with previous programs, especially those that were very different from the stimulus. The stimuli may have supported a functionalist view that equates well-being and healthy food, and unintentionally reduced the salience of other aspects of eating that contribute to food well-being. Future research may consider the use of stimuli that show all aspects of food well-being to prompt more in-depth discussion of the social, hedonic and epicurean aspects of easting that contribute to well-being.

The creative process encouraged participants to draw together their ideas into a representation of a potential new program. The audio discussions captured rationalisation of ideas within this creative process—it follows that all ideas may not have been fully captured because participants rationalised them from the emerging program concept. Future research could explore food well-being in community settings using a different co-design process (e.g. creating individual strategies rather than co-designing a program). Quantitative methods involving a broader sample in large-scale surveys could be used to confirm the insights generated by this study.

Although one strength of this study was the inclusion of both consumers and retail staff, this study did not include other community members. Given the research was focused around the retail co-operative, this study may not have elucidated all perspectives on food-wellbeing or extended to all parts of the community that may contribute to food well-being. Incorporating other stakeholders' views (e.g. managers, local food producers, local community groups) will add further understanding of their role in food well-being, and how they can improve this in their region. While the co-operative setting might not be typical of any retail setting, given the novelty of our approach and its unique contributions, the researchers needed a supportive environment, the perfect condition, to test their conceptual proposition in a real-life environment. Replication of the results observed in these (supportive) settings is needed in future studies to document how these ideas can be further translated into practice under different conditions. Despite this limitation, conducting this study as a 'proof of concept' in a real community setting is a unique and worthwhile contribution, guiding future research activities.

This study did not attempt to evaluate the ideas generated, and future research is needed to empirically assess the impact of community-wide initiatives as designed in this study. Given there were several varied program ideas, this would require a systematic evaluation of these ideas, particularly examining whether greater impact is observed when community members are involved in the co-delivery of these programs.

5   Conclusion

Programs that aim to assist people in achieving food well-being must create positive outcomes broader than health. Whilst this may include the provision of healthy, nutritious and tasty foods by supermarkets and other food providers, in this study, consumers envisaged this to involve a broader set of positive and shared food and non-food experiences with other consumers and the wider community. In particular, this involved a level of resistance to program strategies perceived to take a paternalistic tone; instead, participants expressed a desire

24

for programs that supported and enabled the community to pursue food well-being together. Furthermore, consumers expressed a desire for food-related initiatives and experiences that contribute to multiple areas of their lives, including strengthening community belonging, fostering regional pride and striving for a better life.

Author Contributions: J.C. and S.B. conceived and designed the study. Both authors were involved in data collection. J.C. led the data analysis. J.C and S.B. drafted the manuscript, and both authors have approved the final article.

Declarations of interest: None.

6   References

Adam, A., & Jensen, J. D. (2016). What is the effectiveness of obesity related interventions at retail grocery stores and supermarkets?—a systematic review. *BMC Public Health, 16*, 1247.

Addis, M., & Holbrook, M. (2019). From food services to food experiences: Eating, wellbeing, and marketing. In W. Batat (Ed.), *Food and Experiential Marketing* (pp. 16-37). New York: Routledge.

Ares, G., De Saldamando, L., Giménez, A., & Deliza, R. (2014). Food and wellbeing. Towards a consumer-based approach. *Appetite, 74*, 61-69.

Australian Bureau of Statistics. (2019). Australian Demographic Statistics, Dec 2018. In (Vol. 2019).

Batat, W., Peter, P. C., Moscato, E. M., Castro, I. A., Chan, S., Chugani, S., & Muldrow, A. (2019). The experiential pleasure of food: A savoring journey to food well-being. *Journal of Business Research, 100*, 392-399.

Belk, R. W., Wallendorf, M., & Sherry, J. F. (1989). The sacred and the profane in consumer behavior: Theodicy on the odyssey. *Journal of Consumer Research, 16*, 1-38.

Bharucha, Z. P., Weinstein, N., Watson, D., & Boehm, S. (2020). Participation in local food projects is associated with better psychological well-being: evidence from the East of England. *Journal of Public Health, 42*, e187-e197.

Birtalan, I. L., Bartha, A., Neulinger, Á., Bárdos, G., Oláh, A., Rácz, J., & Rigó, A. (2020). Community Supported Agriculture as a Driver of Food-Related Well-Being. *SUSTAINABILITY, 12*, 4516.

Bisogni, C. A., Jastran, M., Seligson, M., & Thompson, A. (2012). How people interpret healthy eating: Contributions of qualitative research. *Journal of Nutrition Education & Behavior, 44*, 282-301.

Block, L. G., Grier, S. A., Childers, T. L., Davis, B., Ebert, J. E. J., Kumanyika, S., Laczniak, R. N., Machin, J. E., Motley, C. M., Peracchio, L., Pettigrew, S., Scott, M., & Bieshaar, M. N. G. V. (2011). From Nutrients to Nurturance: A Conceptual Introduction to Food Well-Being. *Journal of Public Policy and Marketing, 30*, 5-13.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.

Brown, T., & Wyatt, J. (2010). Design thinking for social innovation. *Development Outreach, 12*, 29-43.

Bublitz, M. G., & Peracchio, L. A. (2015). Applying industry practices to promote healthy foods: An exploration of positive marketing outcomes. *Journal of Business Research, 68*, 2484-2493.

Bublitz, M. G., Peracchio, L. A., Andreasen, A. R., Kees, J., Kidwell, B., Miller, E. G., Motley, C. M., Peter, P. C., Rajagopal, P., Scott, M. L., & Vallen, B. (2013). Promoting positive change: Advancing the food well-being paradigm. *Journal of Business Research, 66*, 1211-1218.

Bublitz, M. G., Peracchio, L. A., & Block, L. G. (2010). Why did I eat that? Perspectives on food decision making and dietary restraint. *Journal of Consumer Psychology, 20*, 239-258.

Bublitz, M. G., Peracchio, L. A., Dadzie, C. A., Escalas, J. E., Hansen, J., Hutton, M., Nardini, G., Absher, C., & Tangari, A. H. (2019). Food access for all: Empowering innovative local infrastructure. *Journal of Business Research, 100*, 354-365.

Carter, S. M., Rychetnik, L., Lloyd, B., Kerridge, I. H., Baur, L., Bauman, A., Hooker, C., & Zask, A. (2011). Evidence, ethics, and values: a framework for health promotion. *American Journal of Public Health, 101*, 465-472.

26

Chandon, P., & Wansink, B. (2012). Does food marketing need to make us fat? *Nutrition Reviews, 70*, 571-593.

Chen, D.-R., & Tan, E. C.-H. (2018). Obesity, Public Attitude Toward Government-Funded Obesity Prevention, and Psychological Distress: A Cross-Level Interaction Analysis of 26 Countries. *Journal of Population Studies*, 41-77.

Cohen, D. A., & Babey, S. H. (2012). Contextual influences on eating behaviours: heuristic processing and dietary choices. *Obesity Reviews, 13*, 766-779.

Cornil, Y., & Chandon, P. (2016). Pleasure as an ally of healthy eating? Contrasting visceral and Epicurean eating pleasure and their association with portion size preferences and wellbeing. *Appetite, 104*, 52-59.

David, P., Rundle-Thiele, S., Pang, B., Knox, K., Parkinson, J., & Hussenoeder, F. (2019). Engaging the dog owner community in the design of an effective koala aversion program. *Social Marketing Quarterly, 25*, 55-68.

Dawson, J. (2013). Retailer activity in shaping food choice. *Food Quality and Preference, 28*, 339-347.

De Deyne, S., & Storms, G. (2008). Word associations: Network and semantic properties. *Behavior research methods, 40*, 213-231.

Dietrich, T., Rundle-Thiele, S., Schuster, L., & Connor, J. (2016). Co-designing social marketing programs. *Journal of Social Marketing, 6*, 41-61.

Dietrich, T., Trischler, J., Schuster, L., & Rundle-Thiele, S. (2017). Co-designing services with vulnerable consumers. *Journal of Service Theory and Practice, 27*, 663-688.

Domegan, C., Collins, K., Stead, M., McHugh, P., & Hughes, T. (2013). Value co-creation in social marketing: Functional or fanciful? *Journal of Social Marketing, 3*, 239-256.

Emilien, C., & Hollis, J. H. (2017). A brief review of salient factors influencing adult eating behaviour. *Nutrition Research Reviews, 30*, 233.

Escaron, A. L., Meinen, A. M., Nitzke, S. A., & Martinez-Donate, A. P. (2013). Supermarket and grocery store-based interventions to promote healthful food choices and eating practices: A systematic review. *Preventing Chronic Disease, 10*, E50.

French, J., & Russell-Bennett, R. (2015). A hierarchical model of social marketing. *Journal of Social Marketing, 5*, 139-159.

Galvagno, M., & Dalli, D. (2014). Theory of value co-creation: a systematic literature review. *Managing service quality, 24*, 643-683.

Grier, S., & Bryant, C. A. (2005). Social marketing in public health. *Annual Review of Public Health, 26*, 319-339.

Hawkes, C., Smith, T. G., Jewell, J., Wardle, J., Hammond, R. A., Friel, S., Thow, A. M., & Kain, J. (2015). Smart food policies for obesity prevention. *Lancet, 385*, 2410-2421.

Hémar-Nicolas, V., & Ezan, P. (2019). How do children make sense of food well-being? Food for thought for responsible retailers. *International Journal of Retail & Distribution Management, 47*, 605-622.

Houghtaling, B., Serrano, E. L., Kraak, V. I., Harden, S. M., Davis, G. C., & Misyak, S. A. (2019). A systematic review of factors that influence food store owner and manager decision making and ability or willingness to use choice architecture and marketing mix strategies to encourage healthy consumer purchases in the United States, 2005–2017. *International Journal of Behavioral Nutrition and Physical Activity, 16*, 5.

Kass, N. E. (2001). An ethics framework for public health. *American Journal of Public Health, 91*, 1776-1782.

Kennedy, A.-M. (2016). Re-imagining retailers' co-operatives. *The International Review of Retail, Distribution and Consumer Research, 26*, 304-322.
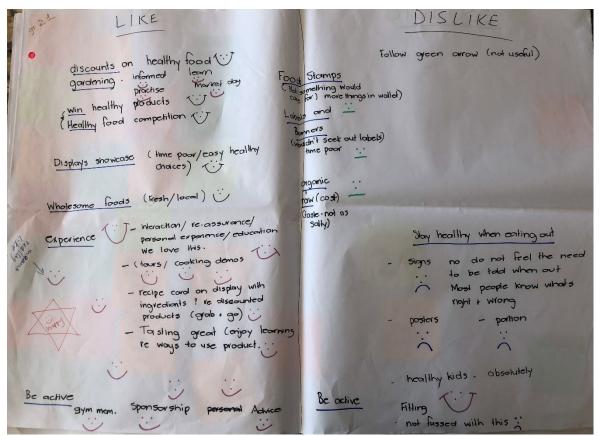
Lazar, J., Woglom, C., Chung, J., Schwartz, A., Hsieh, Y. G., Moore, R., Crowley, D., & Skotko, B. (2018). Co-design process of a smart phone app to help people with down syndrome manage their nutritional habits. *Journal of Usability Studies, 13*, 73-93.

Liberato, S. C., Bailie, R., & Brimblecombe, J. (2014). Nutrition interventions at point-of-sale to encourage healthier food purchasing: A systematic review. *BMC Public Health, 14*, 919-933.

Mah, C. L., Luongo, G., Hasdell, R., Taylor, N. G., & Lo, B. K. (2019). A Systematic Review of the Effect of Retail Food Environment Interventions on Diet and Health with a Focus on the Enabling Role of Public Policies. *Current Nutrition Reports, 8*, 411-428.

Marshall, D. (2018). Convenience stores and well-being of young Japanese consumers. *International Journal of Retail & Distribution Management, 47*, 590-604.

Martin, A., Caon, M., Adorni, F., Andreoni, G., Ascolese, A., Atkinson, S., Bul, K., Carrion, C., Castell, C., & Ciociola, V. (2020). A Mobile Phone Intervention to Improve Obesity-Related Health Behaviors of Adolescents Across Europe: Iterative Co-Design and Feasibility Study. *JMIR mHealth and uHealth, 8*, e14118.

Mendini, M., Pizzetti, M., & Peter, P. C. (2019). Social food pleasure: When sharing offline, online and for society promotes pleasurable and healthy food experiences and well-being", . *Qualitative Market Research, 22*, 544-556.

Migliore, G., Schifani, G., Guccione, G. D., & Cembalo, L. (2014). Food community networks as leverage for social embeddedness. *Journal of agricultural and environmental ethics, 27*, 549-567.

Milliron, B.-J., Woolf, K., & Appelhans, B. M. (2012). A point-of-purchase intervention featuring in-person supermarket education affects healthful food purchases. *Journal of Nutrition Education and Behavior, 44*, 225-232.

Mozaffarian, D., Rosenberg, I., & Uauy, R. (2018). History of modern nutrition science—implications for current research, dietary guidelines, and food policy. *BMJ, 361*.

Mugel, O., Gurviez, P., & Decrop, A. (2019). Eudaimonia Around the Kitchen: A Hermeneutic Approach to Understanding Food Well-Being in Consumers' Lived Experiences. *Journal of Public Policy & Marketing, 38*, 280-295.

Neulinger, A., Bársony, F., Gjorevska, N., Lazányi, O., Pataki, G., Takács, S., & Török, A. (2020). Engagement and subjective well-being in alternative food networks: The case of Hungary. *International Journal of Consumer Studies, 44*, 306–315.

O'Hara, L., Taylor, J., & Barnes, M. (2016). The extent to which the public health 'war on obesity'reflects the ethical values and principles of critical health promotion: a multimedia critical discourse analysis. *Health Promotion Journal of Australia, 26*, 246-254.

O'Kane, G. (2016). A moveable feast: Contemporary relational food cultures emerging from local food networks. *Appetite, 105*, 218-231.

Parkinson, J., Dubelaar, C., Carins, J., Holden, S., Newton, F., & Pescud, M. (2017). Approaching the wicked problem of obesity: an introduction to the food system compass. *Journal of Social Marketing, 7*, 387-404.

Pettigrew, S. (2016). Pleasure: An under-utilised 'P' in social marketing for healthy eating. *Appetite, 104*, 60-69.

Ratcliffe, E., Baxter, W. L., & Martin, N. (2019). Consumption rituals relating to food and drink: A review and research agenda. *Appetite, 134*, 86-93.

Salas, X. R. (2015). The ineffectiveness and unintended consequences of the public health war on obesity. *Canadian Journal of Public Health, 106*, E79.

Sarwar, A., & Fraser, P. T. (2019). Explanations in Design Thinking: New Directions for an Obfuscated Field. *She Ji: The Journal of Design, Economics, and Innovation, 5*, 343-355.
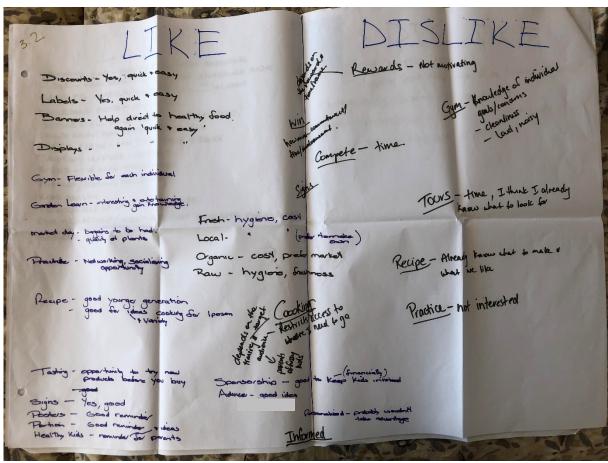
Scott, M. L., & Vallen, B. (2019). Expanding the Lens of Food Well-Being: An Examination of Contemporary Marketing, Policy, and Practice with an Eye on the Future. *Journal of Public Policy & Marketing, 38*, 127-135.

Steen, M., Manschot, M., & De Koning, N. (2011). Benefits of co-design in service design projects. *International Journal of Design, 5*.

Surkan, P. J., Tabrizi, M. J., Lee, R. M., Palmer, A. M., & Frick, K. D. (2016). Eat Right–Live well! supermarket intervention impact on sales of healthy foods in a low-income neighborhood. *Journal of Nutrition Education and Behavior, 48*, 112-121. e111.

Thompson, L., & Kumar, A. (2011). Responses to health promotion campaigns: resistance, denial and othering. *Critical Public Health, 21*, 105-117.

Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory, 30*, 167-186.

Toft, U., Bloch, P., Reinbach, H. C., Winkler, L. L., Buch-Andersen, T., Aagaard-Hansen, J., Mikkelsen, B. E., Jensen, B. B., & Glümer, C. (2018). Project SoL—A community-based, multi-component health promotion intervention to improve eating habits and physical activity among Danish families with young children. Part 1: Intervention development and implementation. *International Journal of Environmental Research and Public Health, 15*, 1097.

Trischler, J., Dietrich, T., & Rundle-Thiele, S. (2019). Co-design: From expert- to user-driven ideas in public service design. *Public Management Review, 21*, 1595-1619.

Truman, E., Lane, D., & Elliott, C. (2017). Defining food literacy: A scoping review. *Appetite, 116*, 365-371.

van't Riet, J. (2013). Sales effects of product health information at points of purchase: a systematic review. *Public Health Nutrition, 16*, 418-429.

Wiseman, J., Murphy, J., & Hewitt-Taylor, J. (2018). Changing food culture for food wellbeing. *International Journal of Home Economics, 11*, 20.

1 **Appendix: Worksheet examples**

2

3

4