Food, culture, and identity in multicultural societies: Insights from Singapore

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AbstracT

The choice of food practices can be influenced by one's identity in many societies, but has mostly been evaluated in light of the maintenance of cultural identity in migrant populations. This study focused on understanding the influence of identity on food practices among individuals in multicultural societies. We conducted 18 focus group discussions (n = 130) among Indian, Chinese and Malay women in Singapore. Focus group transcripts were analysed using Thematic Analysis both inductively and deductively. Deductive analysis was framed within a Social Representations Approach, a social psychological theory that allows a deeper understanding of the contextual aspects of identity. Participants highlighted the central position of food in social events, cultural celebrations, and persistent traditional beliefs about health (such as 'hot-cold balance'). These beliefs extended to the perception of certain traditional foods possessing medicinal properties. Importantly, the consumption of these traditional foods was accepted as necessary for the maintenance of health by the women. We propose that while cultural food practices are integral to identity preservation and identity continuity for Singaporean women from all three racial groups, this is different to other multicultural societies such as Canada where communities preserve their cultural food practices, in part, due to fear of cultural identity loss. In addition, cross-cultural food practices are readily adopted in participants' daily lives for a number of reasons such as the promotion of health, convenience, and variety. At times, this adoption blurred boundaries between different cultural cuisines. Food practices in multicultural societies like Singapore are thus a reflection of everyday multiculturalism, multicultural social policies, and attitudes towards traditional healthful food practices, and these aspects need to be considered in the development of public health policies and interventions.

1. Introduction

Culture, race, and ethnicity are intricately connected, important social identities in the study of food and food practices because they allow researchers to understand the complex ways that individuals make decisions about food choice. Cooking and eating practices are often not only symbolic but also tangible and concrete ways that ethnic identities are preserved by migrants in multicultural societies (D'Sylva & Beagan, 2011). There is a strong desire to preserve one’s culture through food practices especially when one's culture is not the dominant culture in that society (Beoku-Betts, 1995). However, what is perhaps less studied is the maintenance of cultural food practices and the sharing of cross-cultural food practices by different cultural, racial, and ethnic groups within multicultural societies. Social identities, as both a process and an embodiment of personal characteristics, hold different meanings for individuals as they make sense of their social worlds. Race, for example, is relevant to understanding food practices because racialisation of food practices often takes place in a diverse multicultural societies (Slocum, 2011). Food is also used to assign meaning to oneself (Fischler, 1988), making food practices not only a practical decision influenced by access, environment, and nutritional needs but also one that is fundamentally social, cultural, and psychological (Rozin, 1980). Therefore, understanding the psychology of identity and the importance of different social identities for individuals may help researchers and practitioners examine food choices better (Bisogni, Connors, Devine, & Sobal, 2002) and this is the goal of this paper.

This paper is part of a larger study looking at the determinants of eating habits among Singaporean women. In this paper, we shed light on the many ways that food and food practices are important in the creation and maintenance of social identities in multicultural contexts, and that the preservation of these identities by individuals provides
insight into the value placed on traditional food practices. Cross-cultural food practices are often present in multicultural societies and as a result, culture is constantly evolving when different food practices come into contact with each other. This has implications for researchers and practitioners in public health and psychology who wish to understand the interconnected nature of food practices in multicultural societies.

1.1. Social identities and social representations

The health of an individual's body and mind is influenced by social factors that shape one's social identity. The social identity approach in social psychology has highlighted the many ways that social identity processes are central to a scholarly understanding of health and well-being (Haslam, Jetten, Cruywys, Dingle, & Haslam, 2018). Identities allow us to make sense of who we are and can help in maintaining one's well-being, especially if the identity is meaningful and important to the individual. Social Identity Theory (SIT; Tajfel & Turner, 1979) helps us understand the motivations of identity construction. Tajfel (1978) defined social identities as “that part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups), together with the value and emotional significance attached to that membership” (p. 63). SIT is a social psychological theory of how people conceptualise themselves in terms of groups—through group membership, processes, and intergroup group relations (Hogg, 2006). SIT posits that individuals are, in part, motivated to identify themselves as group members because of the need for positive self-esteem. One of the ways identities are constructed is through self-categorisation, where individuals define themselves in terms of social categories such as race, religion and gender. This is the basis of Self Categorisation Theory (SC; Turner, 1975; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). While distinct theories, many social psychologists use both SIT and SCT together in the understanding of psychological processes. This is referred to as the Social Identity Approach (SIA, Reicher, Spears, & Haslam, 2010, pp. 45–62). Therefore our point of departure is that race, ethnicity and culture are distinct socially constructed concepts with different scholarly and policy origins. We acknowledge that within a biomedical perspective, race relates to differences in health outcomes and is the subject of continued discussion, with calls for greater rigour and care in the interpretation of observations of differences within a population (see Caulfield et al., 2009; Cooper, 2013). With reference to Singapore, scientists are able to broadly classify individuals into different racial groups based on their genetic data (Teo et al., 2009).

We use ethnicity in this paper to highlight the complexities of culture, religion and generational practices that are embedded in this concept. To this end, we understand that multiple ethnicities can be found in one racial category in Singapore. For example, Hokkien, Teochew and Hainanese are ethnicities found in the racial category of Chinese. In addition, we draw from the relevance of race in the study of food that has been discussed in great detail in Slocum (2011). Our point of departure is that racialisation takes place in multicultural societies, and that racial categories are often broader groups that encompass multiple ethnic identities within the Singaporean context. Culture is thus seen at different levels—within a racial group, an ethnic group and at the intersection of multiple ethnic groups.

1.2. Distinction between race, ethnicity, and culture

Race, while a concept often avoided in most contemporary scholarly work and replaced by the term ethnicity, is a necessary signifier in our research context as race is a category used both in official government policies and practice, as well as in informal interactions in Singapore. However, race and ethnicity are used interchangeably in both formal and informal contexts in the country (see Reddy, 2016 for in depth exploration of race in Singapore). We use the term race in this paper, without double quotes, when discussing the three broad racial categories (Malay, Indian, and Chinese) that are used to categorise Singaporeans at birth. We understand that race as a construct has historically been rooted in biology, yet social scientists today take great pains to disrupt the relevance of such an ideology in understanding race based divisions in society. We maintain that race and ethnicity are distinct socially constructed concepts with different scholarly and policy origins. We acknowledge that within a biomedical perspective, race relates to differences in health outcomes and is the subject of continued discussion, with calls for greater rigour and care in the interpretation of observations of differences within a population (see Caulfield et al., 2009; Cooper, 2013). With reference to Singapore, scientists are able to broadly classify individuals into different racial groups based on their genetic data (Teo et al., 2009).

Next, we will discuss key concepts relevant to our study before providing a brief background on the research context of Singapore.

1.3. Research context: Singapore

Food choice is heavily influenced by many aspects of socio-cultural contexts (Roudsari et al., 2017). Identity is also contextual, and the individual's everyday engagement with the historical, social, and

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1 The lifeworld is an intersubjectively shared space where “communities link the past, the present and the future through social memory, social representations and social identities” (Jovchelovitch, 2007, p.79).
political aspects of the context needs to be taken into consideration when studying identity (Reddy & Gleibs, 2019). The research context for our study, Singapore, is a multicultural country. It is a product in some ways of migration and, British colonisation. Racial categories introduced by the British during colonial rule to enumerate and manage the diverse Asian population in Malaysia and Singapore, are still used by post-colonial governments (Reddy, 2016). Locals are ascribed racial categories- Malay, Chinese, or Indian. These categories hold many diverse ethnic groups. For example, individuals who have ancestry in Kerala, Punjab, Tamil Ndu, and Karnataka are all grouped under Indian within this racial categorisation process. Each of these Indian states are home to many diverse ethnic groups, cultural practices, languages and religious backgrounds. That is to say, each of these three broad racial categories hold diverse individuals who identify with different ethnic groups and cultures. Malays form 15.0% of the Singaporean population, Indians make up 7.4% of the population and Chinese are a majority in Singapore with 76.2% of the population. Social policies are operationalised based on racial demographics and racial categorisation. Housing, education, political party representation and social support are some of the ways that everyday life is influenced by these multicultural social policies in Singapore (Reddy, 2018). The motivation for such social policies has been the desire to ensure racial harmony among the diverse Singaporean population (Clammer, 1998). Individuals are thus racialised formally within this multicultural framework.

Multiculturalism is also present in informal ways in the country. Religious and cultural festivals celebrated by one community are also celebrated by other communities. Furthermore, multiculturalism is viewed as part of the Singapore fabric and a necessary quality to uphold to live in Singapore. Recently, a campaign called “Cook a pot of Curry” was initiated that drew individuals from different ethnic and cultural communities together in response to a disagreement between a family from China and a Singaporean Indian family about the Singaporean family not being allowed to cook traditional food in their home (Aw Yeong, 2011). This is an example of how a multicultural society comes together to practice what Wise and Velayutham (2009) refer to as everyday multiculturalism. This perspective refers to how cultural diversity is experienced and negotiated in everyday situations, and how social relations and social identities are constructed and reconstructed within the wider social, cultural, and political processes that take place daily.

The multicultural nature of the context is important to note because multiculturalism has also been conceptualised as “embodied ways” of experiencing belonging through sharing food practices in a diverse migrant society (Johnston & Longhurst, 2012, p. 330). Migrants in new food environments adopt new food practices as part of their integration process (Wilson, Renzaho, McCabe & Swinburn, 2010) whilst maintaining traditional food practices invoke memories, and build transnational connections to cultures they have physically moved away from (Choo, 2004). This means for those interested in engaging in food practices are not only imports and exports but also the local food systems (Flay & Petraitis, 1994). The first author pilot tested the interview protocol using literature on the theory of triadic influence (DiCicco-Bloom & Crabtree, 2006). We developed the interview protocol using literature on the theory of triadic influence that outlines that biological specifics, social situation in which these biological particulars manifest and the cultural environment within which meaningful action takes place are contextually linked (Flay & Petraitis, 1994). The first author pilot tested the interview protocol using in-depth interviews with nine women. The interview protocol was then given to three professional focus group moderators who were females. Moderators were trained professionals hired by the company that was employed by the National University of Singapore (NUS). All moderators had relevant experience moderating focus groups. Authors briefed moderators ahead of the sessions and feedback was provided to them after each session. One member of the research team (the authors as well as other NUS researchers) was present as an observer at each of the focus groups. Focus group sessions lasted approximately

| Age, years | Chinese | Malay | Indian | Total |
|------------|---------|-------|--------|-------|
| 45.9 (7.7) | 44.1 (6.6) | 48.2 (6.1) | 46.1 (7.0) |
| Body Mass Index, kg/m² | 23.9 (4.4) | 25.4 (4.8) | 27.3 (5.7) | 25.4 (5.1) |
| Education level | < 4 years of secondary school | 4 (7.8%) | 5 (13.2%) | 10 (24.4%) | 19 (14.6%) |
| 4 years of secondary school | 20 (39.2%) | 15 (39.5%) | 12 (29.3%) | 47 (36.2%) |
| High school/higher vocational training | 20 (39.2%) | 12 (31.6%) | 15 (36.6%) | 47 (36.2%) |
| University degree | 7 (13.7%) | 6 (15.8%) | 4 (9.8%) | 17 (13.1%) |

* Numbers represent mean (SD) or frequency (percentage).
Each of these moderators identified with the racial identities of their respective focus groups. That is to say the moderator who conducted all focus group discussions with Chinese participants identified as Chinese herself. Given that Singaporeans are expected to develop competency in both English and a second Asian language (which roughly translates to a language spoken by members of one's racial group) focus group discussions were conducted mainly in English, with moderators switching to different Asian languages as and when requested by participants. Focus group discussions were audio recorded and transcribed verbatim, with English translations provided alongside speech in the various Asian languages. The Asian languages used were Malay, Tamil, and Mandarin, as well as some Chinese dialects. The transcripts were checked for accuracy of translation by members of the research team who were fluent in Mandarin, different Chinese dialects, Malay, and Tamil.

2.2. Ethics

The study was approved by the NUS Institutional Review Board (IRB) and has therefore been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki. All participants signed an informed consent form prior to their inclusion into the study. Participants were remunerated for their transport and participation as per IRB approval.

2.3. Analysis

Focus group transcripts were analysed both inductively and deductively using thematic analysis (Braun & Clarke, 2006). Thematic analysis offers significant contributions in the study of health as it offers flexibility in research paradigms as well as allows for an in depth understanding of health through a grounded interpretation of participants conversations (Braun & Clarke, 2014). All transcripts were analysed both by hand and using Atlas.ti (version 6.2.23, ATLAS.ti Scientific Software Development GmbH, Berlin, Germany). Atlas.ti functioned as a data management software that allowed us to code and segment different sections of the data according to common ideas. The first author independently coded the transcripts. Once the basic codes were established, connections between different codes were created by hand. She then returned to Atlas.ti to retrieve quotations and recoded the data. The codes and themes were discussed in detail with the second author, who had previously analysed the data for the larger study. The development of codes and themes was an iterative, and reflexive process where both authors shared their perspectives on the data (Braun, Clarke, Hayfield, & Terry, 2019). A final thematic map was created collaboratively (Fig. 1). In the inductive approach, themes that were important in the understanding of relevant to culture and food were identified. An example of an inductive basic theme is “Special events, differentiated by cultural events and social gatherings dictate different eating practices”. In the deductive approach, theories and literature discussed above facilitated in the identification of themes. An example of a deductive basic theme is “Cultural eating practices are integral to participants’ identities”.

We identified three main themes in the final thematic map for this paper, and these themes will be presented in the section below. They are (1) Food enables construction and maintenance of different types of identities (2) Cross cultural food practices are common and influenced by multiple factors and (3) Cultural food practices are often perceived as medicine. Quotations are followed by information on racial group as well as educational level of participants in that particular focus group discussion. Discussions on all themes were present among all three racial group participants. Our analysis framework which details the coherent interpretation of the data as outlined by Braun and colleagues (2018) is attached as Appendix B.

3. Results and discussion

3.1. Food enables construction and maintenance of different types of identities

In our analysis, we found that participants’ own cultural food practices were integral to their identities. Specifically, social interactions around food (both cultural events and social eating) were fundamental in the construction of participants’ cultural and ethnic identities. Participants engage in different food practices when eating socially versus eating on a daily basis. We make the distinction between social eating and cultural events, because participants discuss both religious and cultural events such as Chinese New Year (non-religious cultural celebration) or Hari Raya Puasa (religious festival celebration at the end of the fasting month Ramadan) as well as social gatherings (weekly or monthly meet ups with extended families). There is a difference between these two types of events where daily food practices are abandoned. As outlined in this quote below, participants in the Malay focus group discussions discuss how quantities of food change from their daily food practices during Ramadan.

**Extract 1**

Moderator: Anything different? When do you eat with your family?
Respondent: We are not like the other races where they have high tea, dinner. We do not practice that. Only dinner with the family, that's all.

Moderator: When we have special occasions... like religious feast and we see the amount of food. Perhaps when you eat with your family, you will eat rice with one or two dishes. When you have special occasions, how much is the amount of food?
Respondent: Many, a variety of dishes
Respondent: Barbecue... usually we barbecue during chalets
Respondent: Especially during the fasting month
Respondent: Rice... no no rice. Ordinary like satay. Sausage and nugget.

Moderator: Ok, anymore?
Respondent: When we have gatherings, we will just take the food that we rarely eat. Like that. If the food is familiar to us, we will eat it last. Find the food that you have never seen. [Laughter] Then just take one or two pieces.
Respondent: Eat a little.
Respondent: [Laughter] Eat a little. If it is good, we can take more
Moderator: Just now you mentioned about it is getting close to the fasting month. What about the fasting month?
Respondent: Usually during the fasting month... we will see whose house we want to break fast in. Then we will allocate, who is cooking what, usually it’s potluck. So we have many kinds of foods. (Malay, LHE)

Four key issues were identified in this extract. Firstly, not only do quantities of food prepared change, the variety of dishes also increases. Secondly, participants also prepare food differently as can be seen in the use of barbeques in “chalets” (accommodation that is rented for occasions), and “potlucks” where meal preparation is shared amongst different families. Thirdly, participants’ declaration that they are “not like other races” is important to note because their food practices are constructed in comparison with other racial groups in Singapore. In
other words, Malay food and identity is constructed against the background of other racial group’s food practices. Lastly, Malay participants also distinguish between social gatherings and gatherings around religious events, drawing a comparison between “religious feasts” and “eat (ing) with your family”. Notably, food typically prepared for Hari Raya Puasa (religious feast) is laborious and requires highly skilled knowledge of traditional food preparation (Raji, Ab Karim, Ishak, & Arshad, 2017; Sharif, Rahman, Zahari, & Abdullah, 2018). This in part explains the differentiation between regular cooking practices and that for special religious feasts.

In the following quote, we see how cultural events such as Chinese New year result in Chinese participants changing their daily food practices when they eat at different restaurants or cook more food than usual because of the special occasion.

**Extract 2**

Respondent: Reunion now outside already...
Respondent: Now outside already.
Respondent: All outside, because it’s a lot of dishes, Chinese traditional you cannot have two, three dishes. You have to like, have meat
Respondent: Yes
Respondent: Have fish, everything…it’s a Chinese custom thing. Nobody will eat in anymore.

(Chinese, LHE)

Here we see that participants discuss eating out for Chinese reunion dinner as a customary Chinese practice. Similar to Malay participants identity construction, Chinese participants construct the preparation of multiple food items “have fish, everything” as typical of Chinese identity practices. By enacting certain food practices which are seen to be representation of Chinese identity, participants communicate their Chinese identity to others in the focus group. It is of note that Chinese communities in Singapore also tend to eat out on a regular basis (Wang, Naidoo, Ferracca, Reddy, & Van Dam, 2014) but here participants seem to highlight the change in eating practices during reunion dinners when they say “Reunion now outside already”, signalling that this was not the case in the past. The festival food practices of Malay, Chinese, and Indian Malaysians have changed over time (Muhammad, Zahari, & Kamaruddin, 2013), and we see that this change is also present in the Singaporean participants.

Embedded within this theme is the understanding of food as being an important aspect of cultural and ethnic identity, as participants often distinguish between different ethnic groups’ food within each racial category. This highlights how racial category food preferences are not homogenous. In the following quote taken from participants who identified as Indian, we see the moderator introducing her favourite type of cooking method as a way to encourage conversation around food practices within the group.

**Extract 3**

Moderator: It smells lovely. When I came back to Singapore, my mum started making using thalippu (Tamil word meaning a seasoning of spices in oil that is added to any dish in the final stages of cooking to give it extra flavour). Oh my God, the smells.
Respondent: Is it? Are you a Malayalee (A language group in the state of Kerala in India.)?
Moderator: No, I’m Tamil (A language group in the state of Tamil Nadu in India. It is the neighbouring state of Kerala.). I think she must have heard from some of the sisters or over the radio or...
something, it was magic.

Respondent: The thing is they said that this guy who wrote the book about virgin coconut oil, they said that it was actually back in the 60s or 70s, when they came to bring their own brand of cooking oil, they condemn coconut oil and said that it is bad and everything. They did a big advertisement and said that it is quite bad. Honestly speaking, I look back it's true if not all Malayalees do that.

Respondent: Thousands of years, Indians have been using coconut oil for everything you know (...).

(Indian, HE)

Both participants and moderator, who identified as Indian (racial category) are constructing their own ethnic identities in this extract. Malayalee identity is seen to be synonymous of the consumption of coconut oil, but the moderator states that she is Tamil. Another participant brings in the idea that coconut oil has been used by Indians, not just Malayalees, in their cooking practices. Within this extract, we see how participants distinguish ethnic identities and their respective food practices, whilst also maintaining that these food practices are shared across the Indian sub-continent and have been shared for a very long time. This not only constructs the food practice as ancient and traditional but also does the work of constructing their own racialised identity as Indian within the context of Singapore.

3.2. Cross cultural food practices influenced by multiple factors

In the second theme identified in our data, we found that cross cultural food practices were prevalent amongst our participants and the decisions to carry out these practices were influenced by multiple factors. Namely, health, variety, taste, and convenience guided participants’ decisions to choose cross-cultural food practices over that of their own culture, however they identified. Discussion about another racial group’s food practice was not present in the semi-structured interview schedule that moderators referred to during the focus group discussions. However, talking about cultural food practices prompted discussions on cross-cultural food preferences and practices. Within this theme, we found that participants engaged in discussions about other culture’s food practices when they talked about learning recipes and best practices in food preparation, finding convenient ways of preparing food, and the variety of dishes they prepared. We found that cross-cultural eating was a common and salient aspect of their food habits.

In the following extract from an Indian focus group discussion, participants discussed how Indian food is not inherently unhealthy, but rather the cooking method is what made Indian food unhealthy. However, in their rationalisation of this, they brought up an important point on the sharing of food practices that takes place across cultures and racial groups in Singapore.

**Extract 4**

Respondent 1: It’s the cooking methods that actually make the Indian food unhealthy, not so much the food.

Moderator: So, what makes you think… What changed the cooking method?

Respondent 1: I think it's the culture. I mean if we're mixed with different cultures.

Respondent 2: Fusion, lah.

Respondent 1: Yeah, I agree with the fusion

Moderator: So, whose other... Whose culture do you think we adopted for our culture to have a little bit mixed up, maybe?

Respondent 1: Maybe it’s Singaporean.

Respondent 2: I think it's basically Chinese, Malays, Indians... I mean it's all like... you know...

Moderator: Yeah.

Respondent 2: No telling this is Chinese food. This is came from Malay.

Moderator: Yeah.

Respondent 2: Like... you know... Briyani, people say it's Malay. Some say it's Indian.

Moderator: Yeah. So, what do you think lead to all that? Why do you think that our way... our method of cooking has changed?

Respondent: I... Okay. I... I... I... I... Forgive me. I think I would differ from this idea.

Moderator: Okay.

Respondent 2: Ergh. It's not so much... ergh... I... I strongly agree to a certain extent. I think the fact that living among Chinese and Indians, We've actually... I mean Chinese and Malays actually kind of made a Rojak of our dish. You know, it could be a little bit here and there.

(Indian, HE)

Each culture is not separate and distinct from one another, especially when thinking about food practices. In multicultural societies, culture is often (re)created and (re)constructed as it interacts with different social elements it is exposed to. Often similar foods are associated with many different ethnic groups and cultural practices. This is clear in the Singaporean context as well. Briyani (as referred to in South Asian communities) or Nasi Briyani (as referred to in Malay communities) is commonly eaten by Singaporeans of all cultures. Nasi Briyani itself is said to reflect Indian and Middle Eastern influences (Brown & Backenheimer, 2006). Food that is attributed to Peranakan communities in Singapore uses ingredients from Indian, Malay, and Chinese food practices (Kong, 2015). Sharing foodways from different cultures has been a key feature of Singaporean food practices and, food practices continue to evolve in the country.

It was clear across the data corpus that cross-cultural practices incorporating Western food practices was increasingly prevalent amongst the younger generation. This was at times attributed to a lack of cooking skills. In the quotation below, participants in the Malay focus group discussions talk about the incorporation of Western food practices amongst the younger generation.

**Extract 5**

Moderator: How about the younger generation? One... I mean, the younger generation younger than you. Do you think they are even less skilled at cooking or...?

Respondent 3: I think that's not...

Respondent 2: I think they tend to be more westernised, lah.

Moderator: More westernised.

Respondent 2: Fast food.

Respondent 3: Westernised.

Respondent 4: Lazy to cook.

Respondent 2: My daughter tends to cook more of western... like macaroni, spaghetti, and she likes all those Campbell soups.

Moderator: Okay.

Respondent 2: She likes fish and chips, like you. I think she's... ergh... probably you're... you're in your twenties or thirties?

2 Peranakan communities have ancestry from China, India, the Malay Archipelago, and Europe, and have distinct cultural and food practices (Pillai, 2015).
A preference for cooking Western foods is seen as a skill that younger generation have developed, while it is notable that participants perceive this negatively by using the phrase “lazy to cook”. This can also be seen in the choice of examples given by respondent 2 such as Campbell soups, which require only gentle heating before consumption unlike the laborious cooking methods of traditional dishes. This pattern of young migrants consuming Western foods alongside traditional foods from home cultures is seen in other multicultural countries like Canada, the United States, and Australia, though for different reasons such as limited access to resources for traditional food consumption (Blanchet, Sanou, Batal, Nana, & Giroux, 2017; Patil, Hadley, & Nahayo, 2009; Wilson & Renzaho, 2015). This is not the case in Singapore where traditional foods are both financially, and physically accessible to most communities because of demand of, and proximity to, local food producers and suppliers. It is not uncommon to see traditional foods that are mentioned in the section below readily available in grocery stores across the country.

Western cooking practices are also preferred for variety in the daily consumption of foods. In this Indian focus group discussion, participants talk about how their children prefer Western foods over curry dishes, and an inability to prepare Western dishes means that children end up not eating at home.

**Extract 6**

Respondent: No, my children like varieties, something like Western food. But I only know how to cook Indian food, so only sometimes we argue lah. For us well, our children what type of food to cook. “Ah ya, you always cook curry curry curry, told you not to cook curry already. You don’t know how to cook other pasta, lasagna…” they like that type. But I don’t know how to cook! I say, ‘I’m very sorry.’ Every Sunday my husband goes to market; they buy food like fish, mutton, chicken- these only. So I only know to cook that only, so I am very sorry. “We want to go outside and eat.” Most of the time they very late come back. Lunch, they always take, most of the time is outside.

(Indian, LHE)

The lack of variety in home cooking stimulates participants’ children to consume food outside of the home, especially that of the “Western” kind. The increasing desire for a cosmopolitan life amongst next generation Singaporeans is reflected in their food practices. Whilst their parents have incorporated food practices from other cultures in Singapore during their lifetimes, the next generation exhibits a preference for widening their food choices beyond those that their parents have capacities to prepare, or desire to partake in their daily lives. Across our focus group discussions we found that when parents possessed the ability to prepare these Western foods, children then ate at home. However, the desire to prepare Western foods at home was not always present without other family members expressing a preference. When participants themselves expressed a preference for Western foods, this need was mostly met by consuming the foods outside of the home environment. Affordable prepared food that is readily available has been previously shown to motivate Singaporeans to eat out (Wang et al., 2018). Whilst the cost of eating out differs across the country with cost increasing in newer planned neighbourhoods (Goh, Leong, & Lim, 2018), studies have shown that school going Singaporean children eat out at least once a week and 44% of these children eat Western fast food (Ling Ang & Foo, 2002). North American and European restaurants are increasingly popular, and common in the country. Such globalisation of food in Singapore is the result of popular culture’s influence, the desire for cosmopolitan identity, and Singapore’s “foodie” culture that highlights the receptiveness of Singaporeans to new foreign cuisines (Kong, 2015). Therefore, cross-cultural eating practices are expected to continue being a salient aspect of Singaporean food habits.

### 3.3. Cultural food practices are medicine

The third and last theme identified for this paper was “cultural food practices are medicine”. Within this theme, participants include certain types of healthful food practices when they discuss meanings associated with Chinese/Malay/Indian identity. In this extract taken from a Malay focus group discussion, participants discuss traditional food practices more generally associated with Chinese in Singapore.

**Extract 7**

Moderator: How about cooling foods? What are cooling foods?

Respondent: Cooling foods, you have to learn more from the Chinese.

Moderator: Why?

Respondent: Because they practice the yin and yang

(Malay, HE)

The concept of heathy and cooling foods is a key feature of Chinese food practices and is consumed to remedy ailments related to “hot” or “cold” energy (Koo, 1984). In an interview study of 50 Chinese families living in Hong Kong, Koo (1984) outlined how such traditional healing through food complimented Western medicine. In this focus group amongst Malay women, they show that knowledge of cooling food lies with Chinese in Singapore because they adopt an approach of balancing energies (“yin and yang”) through food consumption.

In another Malay focus group, participants also attribute cooling foods to Chinese in Singapore and that they learn about the influence that such foods have on their bodies from their Chinese friends.

**Extract 8**

Respondent: So... there are certain times when I actually learn from my Chinese friend, and when I have cough they say I cannot take. Because they say too cooling.

Moderator: Like what, what is it you cannot take if you have cough?

Respondent: Like... winter melon, with winter melon I think the kids would love the soup. Then sometimes they like to stir-fry the beef and mushroom and then they... they put a lot of ginger. The ginger actually supposed to remove the wind, but it can be heathy.

Moderator: Ok, so ginger is heathy?

Respondent: Yeah, sometimes people say ginger is to cool themselves, but I think... I also don't understand. The, the amount of time to eat the food... for our food, I don't think we have. Ours is mostly heathy... (laughs)

Respondent: If you pregnant, after your confinement doesn't take chin chow (Chinese word for grass jelly drink.). They say no good for your body system. Chin chow is very cooling and, don’t know leh. This is what my friend said because she experienced that, then after that got this bintut (Malay word for allergic rashes).

(Malay, HE)

In the quotation above, we see Malay women exhibiting knowledge of what these cooling foods do to the body. However Malay participants were not entirely sure which foods were classified in each category as seen in the conflicting ideas between ginger being heathy or cooling food. What is interesting to note is that Malay Singaporean women in another study were aware of hot and cold food practices in their own
cultures that were carried out during pregnancy and post-partum (Chen et al., 2014). Yet here, cooling foods were more commonly attributed to the Chinese even though Indian participants mention that food like yoghurt, a typical ingredient in South Asian cooking, is considered to have cooling properties. Connecting to the previous theme, we see that the desire to incorporate healthish eating practices is part of what drives cross-cultural eating practices within Singapore.

In a focus group discussion with Chinese participants, the moderator asked the participants which foods were considered cooling. Participants began naming these foods without referencing them as being part of Chinese food practices. The discussion then proceeded to understanding why these foods were considered cooling.

**Extract 9**

Moderator: So the type of food, had cooling property itself or the way you cook it then it is cooling?

Respondent: Properties lah.

Moderator: So it is the properties of it. So if you take cooling food, what will happen to your body?

Respondent: A lot of phlegm. Cough.

Moderator: Cough. Any others?

Respondent: Cough (Majority)

Respondent: All those who got age one, eat all these cooling food, cannot stand.

Moderator: Arh… Is that true? Like they got knee pain and all these.

Respondent: Soft legs.

Respondent: People eat bitter gourd and brinjal, will have this problem.

Respondent: The beans also.

Respondent: All kind of beans.

Moderator: Joint pain. Ok.

(Chinese, HE)

Here participants build on shared knowledge (Elcheroth et al., 2011) on what are commonly known ailments related to the consumption of certain kinds of cooling foods. Chinese medical philosophy on achieving balance in the body through the consumption of healthy and cooling foods (hot pot versus herbal tea) is present in migrant Chinese communities in other multicultural societies as well (Wu & Smith, 2016). What is notable here is that foods that are part of Chinese, Malay, and Indian daily diets are described as having healing properties or known to cause health problems. Participants did not refer to special herbs that are known within their communities to have medicinal properties but rather they refer to vegetables that they consume on a regular basis.

This knowledge is about healing properties of food is also inter-generational knowledge. In the following discussion in a focus group amongst Indian participants, one participant shared how she advised her mother to eat traditional leafy vegetables commonly eaten in South and Southeast Asia for their perceived nutritional value.

**Extract 10**

Moderator: She took your advice?

Respondent: Ya, she does. Everything, I take is very good. It is full of calcium and iron. It's good for ladies. So everyday I say I must eat, we'll cook and then the Indian leafy vegetables, murungakkai keerai (Tamil word for Moringa plant) or murungakkkeerai

Moderator: Murungakkai (Tamil word for Moringa plant) or murungakkkeerai

Respondent: It's full of calcium and iron. It's very good for the ladies. And then kang kong (Malay word for water spinach) is also iron.

Moderator: Good for diabetes people also.

Respondent: (...) there is another one pulicha keerai (Tamil word for Roselle leaves). That one is full of iron because when you keep it for one day, the color changes. Oxidized. Full of iron. So I read all these. So I say to mum eat this one. My mother really happy. The other one is sirukeerai (Tamil word for Amaranth leaves). It is good for your urinary track. So I know why I'm eating this one.

(Indian, HE)

Foods that are part of traditional diets, and commonly eaten, such as drumstick leaves are consumed for their medicinal benefits. They are perceived to not only help diseases such as diabetes but also for their nutritional value in providing the body with vitamins.

Malay participants in another focus group shared the view of food as medicine. In this extract, we see that Malay participants showed a preference for eating traditional herbs instead of Western medicine.

**Extract 11**

Respondent: Oh, ulam (Malay word for Wild Cosmos plant)? You know, you can buy at Geylang - because I learn to eat ulam I think when I learn for one week. So I don't know nothing to eat so I not a veggie from there. Down there got so many ulam raja you eat the…I don't know what's the word- got so many things ah. Even petai (Malay word for Bitter Bean/Parkia speciosa) I learn to eat when I was there.

Respondent: I find it's good for your body system also...

Moderator: How so?

Respondent: Oh, you can read, you go library you can... (laughter) find from there. This one good for blood pressure, like antioxidant. Let's say like you got cough right, it's good to take starfruits for your respiratory… I tried that because I got laryngitis so I take a lot of this book from...

Moderator: Ok. Anything else?

Respondent: Yeah, I agree on that, because basically it's like a traditional remedy or herbal remedy to cleanse our system, rather than to keep taking panadols and all those pills, which really... actually it would tear down, break down your own immune system. So I'd rather have like, what she said, some of those herbal or food remedy kind of thing. Besides, medicine is very expensive nowadays.

(Malay, HE)

In this extract, participants talk about learning how to identify nutritional value of traditional foods like ulam as well as fruits readily available in Singapore like starfruit. Participants are opposed to regular consumption of pharmaceutical medicine such as paracetamol because it is perceived as having long-term negative effects.

4. Conclusion

In conclusion, we make three main points with our analysis of these focus group discussions. Firstly, Singaporean women maintain food practices from their own cultural, ethnic, or racial backgrounds not only in the food preparation, food consumption, and food purchase for special social and cultural events, but also in their daily lives. Secondly, cross-cultural eating practices are a salient aspect of daily eating and
food preparation practices in multicultural Singapore. This includes an exchange of practices between different Asian ethnic groups within Singapore and increasingly also the consumption of Western dishes. Thirdly, we posit that the cultural food practices prove important for participants because these are perceived to provide medicinal value.

In a multicultural society like Singapore, we see that women do not feel motivated to maintain their cultural food practices for fear of losing their ethnic and racial identities unlike other multicultural societies like Canada (D’Sylva & Beagan, 2011) or the United States of America (Beoku-Betts, 1995). Instead, cultural food practices are undertaken so as to participate in specific cultural events (like Ramadan or Chinese New Year). This could be because Singapore positions itself as a multicultural country that celebrates its diversity, and this is especially visible in the promotion of Singapore as a food haven for food from all over the world. Furthermore, food metaphors such as “salad bowl, buffet, and pot luck” are often used to describe the multicultural nature of the country (Aiyer, 2007, p.286). That different food practices are presented in the imagination of the country and can live harmoniously side by side is of note in understanding why identity and food practices take a different form from other multicultural societies around the world.

Whilst individual cultural food practices are still maintained, cross-cultural food practices are present in the daily lives of Singaporeans. Participants learn about traditional beliefs regarding the healing properties of food, best practices for cooking, and introduce variety into their cooking through the sharing of food practices traditionally associated with specific racial and ethnic groups in the country. We do not make the claim that consuming the “Other” leads to better ties amongst diverse cultural and ethnic groups. Differences remain visible and identifiable to each cultural practice when Singaporeans partake in food practices from other ethnic and racial groups, unlike multicultural societies where white settler and colonial populations consumption of the “Other” often leads to a perceived eradication of differences (Hooks, 1992). Similar to the sharing of food practices in postwar multicultural Canada (Lallani, 2018), celebrations for specific ethnic and racial groups in Singapore are celebrated by other groups also through partaking of the former’s cuisine. Thus Singaporeans are aware of the distinctiveness of each ethnic and racial group’s cuisine as they participate in cross-cultural food practices.

Even so, some food practices are so “mixed” - shared by different groups within a society - that one is unable to locate the origin of the practice, or to which ethnic and racial community it should belong to. Whether briyani is Malay or Indian for example is unclear for participants. This evolution of culture tells us that cultural boundaries are less rigid and the distinction between different cultural food practices is less distinct in multicultural societies like Singapore. The blurring of cultural boundaries can be seen in the intake of food practices across cultures. Migrant food patterns are often constructed interchangeably between different ethnic groups and cultures. Whilst cross-cultural food practices are inherent in many multicultural societies across the world, what is perhaps less common is an individual’s inability to name which food practices are particular to a single ethnic or racial group without looking into historical and geographical trajectories that food practices take. Food practices in Singapore thus facilitate the creation of a hybrid, superordinate identity - that of the Singaporean food identity. Because food is often at the heart of intercultural contact (Wise, 2011), especially in a country like Singapore which proudly claims its food diversity, the intermingling of different food practices also leads to the creation and maintenance of a strong national identity. Food functions as a communicative action that fosters the Singaporean identity and thus sharing food practices becomes an essential part of one’s identity and daily life.

With our in-depth qualitative study, we have responded to calls for the understanding of complex and interconnected eating patterns within culturally diverse countries outside of North America and Europe (cf. Tucker, 2010). In particular, the cross-cultural food practices highlighted by this study have important implications for dietary advice provided by health professionals or in public health campaigns directed at specific racial groups in Singapore. Epidemiological studies often discuss morbidity along broad racial categories, but increasingly dietary advice should be personalised rather than assume that individuals have a set of food practices based on their racial background. We expect the need for dietary recommendations to be sensitive to inter-cultural food practices will be increasingly relevant to cosmopolitan settings in different parts of the world, as we join other scholars (Ayala, Baquero, & Klinger, 2008; Curry, 2000; Liu, Berhane, & Tseng, 2010; Vorster et al., 2001) in advocating for more flexible and tailored interventions in multicultural societies. Food was also perceived to serve a healing purpose for many participants in our study based on traditional health beliefs. These beliefs may reduce adherence to dietary recommendations based Western medicine and should therefore be considered by health professionals when providing dietary counselling. Future research should be dedicated to exploring how traditional food practices and medicine co-exist in contemporary Asian societies so as to better promote healthful food practices.

Author contributions

First author participated in the creation of study protocol, data collection, data analysis, and article writing process. Second author applied for the research grant and participated in the creation of study protocol, data analysis, and article writing process. Both authors have approved the final article.

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Appendix C. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.appet.2020.104633.
Appendix A. Focus group discussions on eating habits among Singaporean women

Discussion Guide for Moderators

| Introduction | Remarks | Time |
|--------------|---------|------|
| (Introduce yourself and others with you) | Thank you for coming down to today's focus group discussion. Throughout this session, we would like to learn more about eating habits among Singaporean women. As a moderator, I will first ask a couple of questions. Please feel free to answer and respond to each other's comments. Please share with us as much as you can about your eating habits and diet. There are no right or wrong answers. Your experiences and opinions are important to us. Your responses will be tape recorded and transcribed to help us analyse the results accurately. No names or personal identifiers will be used at any stage of the analysis. All information will be kept confidential and will be used for research purposes only. Because this is a group discussion, we encourage everyone to talk and we respect each other's opinions. Are there any questions at this stage? | 5 |

| Main Discussion points | Issues that require attention/Probes | Time |
|------------------------|------------------------------------|------|
| 1 Introduction participants | Moderator to set the tone for interaction in the group. | 10 |
| Name | • Issue of sustenance versus taste (“eat to live/live to eat”) | 20 |
| Opening question for each participant: | • How would you describe your relationship to food? | |
| What is your favorite food? | • Has this relationship changed during different stages in your life? | |
| Free listing – Participants are provided with different images related to food and asked to pen their one word/short phrase (not more than 3 words) responses. Participants are then asked to share their responses with the group. | • Does it play a major role in all aspects of your life? Happy occasions, sad occasions? | |
| How important is food in your life? | • Do you enjoy taking your time to eat? | |
| Describe some of the meals prepared at home. | Or, do you think perhaps eating is sort of a waste of time – you could be doing other more important things? | |
| What type of foods does a complete meal need to include? | * Issue of sustenance versus taste (“eat to live/live to eat”) | |
| What foods would you not be able to give up? | * How would you describe your relationship to food? | |
| What does your religion (if any) say about food? | * Has this relationship changed during different stages in your life? | |
| * Issue of sustenance versus taste (“eat to live/live to eat”) | * Does it play a major role in all aspects of your life? Happy occasions, sad occasions? | |
| * How would you describe your relationship to food? | * Do you enjoy taking your time to eat? | |
| * Has this relationship changed during different stages in your life? | Or, do you think perhaps eating is sort of a waste of time – you could be doing other more important things? | |
| * Does it play a major role in all aspects of your life? Happy occasions, sad occasions? | * Do you enjoy taking your time to eat? | |
| * Do you enjoy taking your time to eat? | Or, do you think perhaps eating is sort of a waste of time – you could be doing other more important things? | |

| Issues to surface: Preferences | If no clear responses probe for meat or fish, rice, dessert/sweet-dish? | |
|-------------------------------|---------------------------------|------|
| * How many complete meals does one have a day? | * How many complete meals does one have a day? | |
| * What is considered a snack? How many times a day do you have a snack? | * What is considered a snack? How many times a day do you have a snack? | |
| * What are some food items that you need to have at every meal? How about every week? | * What are some food items that you need to have at every meal? How about every week? | |
| * Is it important to follow these rules? | * Is it important to follow these rules? | |
| * How is this done in everyday life? | * How is this done in everyday life? | |
| * Are there moments when rules are not followed? | * Are there moments when rules are not followed? | |
| * Issue of sustenance versus taste (“eat to live/live to eat”) | * How would you describe your relationship to food? | |
| * How would you describe your relationship to food? | * Has this relationship changed during different stages in your life? | |
| * Does it play a major role in all aspects of your life? Happy occasions, sad occasions? | * Do you enjoy taking your time to eat? | |
| * Do you enjoy taking your time to eat? | Or, do you think perhaps eating is sort of a waste of time – you could be doing other more important things? | |
| * Or, do you think perhaps eating is sort of a waste of time – you could be doing other more important things? | * Issue of sustenance versus taste (“eat to live/live to eat”) | |
| * How would you describe your relationship to food? | * Has this relationship changed during different stages in your life? | |
| * Does it play a major role in all aspects of your life? Happy occasions, sad occasions? | * Do you enjoy taking your time to eat? | |
| * Do you enjoy taking your time to eat? | Or, do you think perhaps eating is sort of a waste of time – you could be doing other more important things? | |
| * Or, do you think perhaps eating is sort of a waste of time – you could be doing other more important things? | * Issue of sustenance versus taste (“eat to live/live to eat”) | |
| * How would you describe your relationship to food? | * Has this relationship changed during different stages in your life? | |
| * Does it play a major role in all aspects of your life? Happy occasions, sad occasions? | * Do you enjoy taking your time to eat? | |
| * Do you enjoy taking your time to eat? | Or, do you think perhaps eating is sort of a waste of time – you could be doing other more important things? | |

| Issues on convenience, availability and price should be addressed in discussion. | Does the maid/parent do the marketing? Do they decide where to buy? | |
|-------------------------------|-------------------------------------------------|------|
| * Do you eat differently if you can determine what you eat yourself? | * What about eating out or buying prepared food? | |
| * In what ways is that different? | * Do you eat out? | |
| * Issues on convenience, availability and price should be addressed in discussion. | * How do you choose where to eat out? | |
| * Does the maid/parent do the marketing? Do they decide where to buy? | * How often do you have social occasions during which more than the average daily amount is eaten? | |
| * Do you eat out? | * How do you decide how much to prepare for these occasions? | |
| * How often do you have social occasions during which more than the average daily amount is eaten? | * How do you decide how much to prepare for these occasions? | |

| Issues to surface: Family dynamics | Does the maid/parent do the marketing? Do they decide where to buy? | |
|-------------------------------|-------------------------------------------------|------|
| * Who influences what food is eaten at home: husband, children, parents, and maid? How important do you find their advice? | * What about eating out or buying prepared food? | |
| * In what ways is that different? | * Do you eat out? | |
| * Issues to surface: Taste, cost, ease of preparation, access, health benefits | * How often do you have social occasions during which more than the average daily amount is eaten? | |
| * Do you eat differently if you can determine what you eat yourself? | * How do you decide how much to prepare for these occasions? | |
| * In what ways is that different? | * How do you decide how much to prepare for these occasions? | |

| Issues to surface: concept of hot and cold foods | Does the maid/parent do the marketing? Do they decide where to buy? | |
|-------------------------------|-------------------------------------------------|------|
| * What are some examples of healthy food? | * What about eating out or buying prepared food? | |
| * What makes food healthy/unhealthy? | * Do you eat out? | |
| * Are there various sources of information on food. | * How do you choose where to eat out? | |
| * Issues to surface: concept of hot and cold foods | * How often do you have social occasions during which more than the average daily amount is eaten? | |
| * Does the maid/parent do the marketing? Do they decide where to buy? | * How do you decide how much to prepare for these occasions? | |

| Issues to surface: concept of hot and cold foods | Does the maid/parent do the marketing? Do they decide where to buy? | |
|-------------------------------|-------------------------------------------------|------|
| * What are some examples of healthy food? | * What about eating out or buying prepared food? | |
| * What makes food healthy/unhealthy? | * Do you eat out? | |
| * Are there various sources of information on food. | * How do you choose where to eat out? | |
| * Issues to surface: concept of hot and cold foods | * How often do you have social occasions during which more than the average daily amount is eaten? | |
| * Does the maid/parent do the marketing? Do they decide where to buy? | * How do you decide how much to prepare for these occasions? | |
Appendix B. Development of codes and themes

| Initial codes | Basic codes                        | Basic Themes                                      | Main Themes                                      |
|---------------|------------------------------------|---------------------------------------------------|--------------------------------------------------|
| Buddhist eating practices | Religious Eating                  | Religious practices shape eating behaviours       | Food enables construction and maintenance of different types of identities |
| Eating during Ramadan   |                                    |                                                   |                                                  |
| Islamic eating         |                                    |                                                   |                                                  |
| Religious Eating       |                                    |                                                   |                                                  |
| Chinese Cultural Eating| Chinese Cultural Eating             | Cultural eating practices are integral to participants identities |                                                  |
| Indian cultural eating | Indian cultural eating              |                                                   |                                                  |
| Malay cultural eating  | Malay cultural eating               |                                                   |                                                  |
| Malay Cultural foods   | Food & Identity                    | Eating around cultural events                     | Special events, differentiated by cultural events and social gatherings dictate different eating practices |
| Food & Identity        |                                    |                                                   |                                                  |
| Eating around cultural events | Food & Identity |                                           |                                                  |
| Eating around special occasions | Eating around special occasions |                                           |                                                  |
| Healthy food is secondary when eating in special occasions | Healthy food is secondary when eating in special occasions |                                           |                                                  |
| Deserts for special occasions | Deserts for special occasions |                                           |                                                  |
| Social eating          | Social eating                      |                                                   |                                                  |
| Cultural exchanges in food preparation | Cross-cultural exchanges in food preparation | Health, variety, taste, convenience guide decisions to choose Asian cross-cultural food practices | Cross cultural food practices are guided by multiple factors |
| Learning from other cultures | Indian eating Chinese/Malay foods |                                                   |                                                  |
| Indian eating Chinese food | Indian eating Chinese/Malay foods |                                                   |                                                  |
| Indian eating Malay foods | Chinese eating Malay/Indian foods |                                                   |                                                  |
| Chinese eating Malay foods | Chinese eating Malay/Indian foods |                                                   |                                                  |
| Chinese eating Indian foods | Chinese eating Malay/Indian foods |                                                   |                                                  |
| Chinese discussing Malay cultural foods | Malay eating Indian/Chinese foods |                                                   |                                                  |
| Malay discussing Indian eating habits | Malay eating Chinese foods |                                                   |                                                  |
| Malay eating Chinese foods | Western foods | Convenience, variety guide decisions to choose Western food practices | Cultural food practices are medicine of foods are integral to perception of health |
| Western food preparation | Western foods                      |                                                   |                                                  |
| Western food consumption | Food as medicine                  | Traditional beliefs regarding hot-cold balance and medicinal properties of foods are integral to perception of health |                                                  |
| Food as medicine       | Food as medicine                   |                                                   |                                                  |
| Hearty and Cooling foods | Hearty and Cooling foods           |                                                   |                                                  |
| Hearty foods            |                                    |                                                   |                                                  |
| Cooling foods           |                                    |                                                   |                                                  |
| Coconut milk is healthy/unhealthy | Coconut milk is healthy/unhealthy |                                                   |                                                  |
| Indian food is meant to be healthy | Indian food is meant to be healthy |                                                   |                                                  |
| Food is connected to health | Food & Health                     |                                                   |                                                  |
| Health is wealth        | Health is wealth                   |                                                   |                                                  |
| Health more important than looks | Health more important than looks   |                                                   |                                                  |
