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1 **Title:** Barriers and facilitators to implementing a healthier food outlet initiative: perspectives from
2 local governments

3 **Short title:** Lessons from a UK healthy food service policy

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33 Declaration of Helsinki and all procedures involving research study participants were approved by the

34 Monash University Human Research Ethics Committee (reference 9076) and the City University of

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36 consent was obtained from all subjects/patients.

37 **Title:** Barriers and facilitators to implementing a healthier food outlet initiative: perspectives
38 from local governments

39 **Abstract**

40 **Objective:** Local governments have integral roles in contributing to public health. One recent
41 focus has been on how local governments can impact community nutrition by engaging food
42 service outlets to improve their food offer. The Healthier Catering Commitment (HCC) is an
43 initiative where London local governments support takeaways and restaurants to meet
44 centrally-defined nutrition criteria on their food options. Using the case of HCC, this study
45 aims to provide 1)practical learnings of how local governments could facilitate and overcome
46 barriers associated with implementing healthy food service initiatives in general, and 2)specific
47 recommendations for enhancements for HCC.

48 **Design:** Key informant, semi-structured interviews were conducted with local government
49 staff involved in HCC, exploring barriers and facilitators to HCC implementation in food
50 businesses. A thematic analysis approach was used, with results presented according to a logic
51 pathway of ideal implementation in order to provide practical, focused insights.

52 **Setting:** Local governments implementing HCC.

53 **Participants:** Twenty-two individuals supporting HCC implementation.

54 **Results:** Facilitators to implementation included flexible approaches, shared resourcing, and
55 strategically engaging businesses with practical demonstrations. Barriers were limited
56 resources, businesses fearing negative customer responses, and low uptake in disadvantaged
57 areas. Key suggestions to enhance implementation and impact included offering additional
58 incentives, increasing HCC awareness, and encouraging recruited businesses to make healthy
59 changes beyond initiative requirements.

60 **Conclusions:** In order to facilitate the implementation of healthy food initiatives in food outlets,
61 local governments would benefit from involving their environmental health team, employing
62 community-tailored approaches, and focusing on supporting businesses in disadvantaged areas.

63

64 **Introduction**

65 An unhealthy diet is estimated to be the second highest behavioural risk factor contributing to
66 disability-adjusted life years lost worldwide, and the highest risk factor for mortality in 2017⁽¹⁾.
67 Unhealthy diets include those high in salt and sugar sweetened beverages, and low in whole
68 grains and fruits and vegetables⁽¹⁾. Contributing to these unhealthy diets are the food
69 environments in which people live, work, play and learn⁽²⁾. Of particular concern is the increase
70 in the consumption of foods from food service outlets (e.g. restaurants, cafes, fast food chains,
71 and independent takeaways)⁽³⁾, which is associated with a greater total energy and fat intake⁽⁴⁾,
72 and higher body weight⁽⁵⁾.

73 While comprehensive actions across sectors are required to address unhealthy diets⁽⁶⁾, local
74 governments internationally have the potential to engage in innovative and impactful strategies
75 aimed at improving food environments within their communities. Local governments have a
76 historic role in promoting public health⁽⁷⁾, have existing influence and relationships with food
77 service outlets through the enforcement of food safety regulations⁽⁸⁻¹¹⁾, and have been identified
78 as key settings in which to test innovative and progressive policies aimed at addressing obesity
79 at a community level⁽¹²⁾. Local government are thus uniquely placed to impact local food
80 environments, with previous examples of policy action including mandatory menu labelling⁽¹³⁾,
81 limiting the development of new takeaway outlets through planning regulations⁽¹⁴⁾, and giving
82 tax credits to grocery stores that stock fruit and vegetables in low-income underserved
83 communities⁽¹⁵⁾. The Heathier Catering Commitment (HCC) is an example of a voluntary
84 London, UK initiative where local governments support food service outlets to create healthier
85 food offerings. Local governments award food outlets a HCC certification once their food and
86 beverage offerings have been assessed to meet specific, centrally-defined nutrition criteria.
87 HCC certification (a certificate and promotional materials) communicates to customers that the
88 food outlet is providing healthier options. Figure 1 provides an in-depth description of the HCC
89 criteria, and how it is implemented.

What is it?

The Healthier Catering Commitment (HCC) is a London-based certification given to fast food and other restaurants in reward for increasing the healthiness of their food offer within their business, according to set criteria. It was developed by the Greater London Authority (GLA), the Chartered Institute of Environmental Health (CIEH), and the Association of London Environmental Health Managers (ALEHM) in 2012⁽¹⁶⁾.

To receive the certification, businesses must meet a minimum of 8 of a possible 25 criterion. Four of these are mandatory criteria that all businesses must meet; 1) use of healthier fats or oils when cooking food 2) where salt is added after preparation, customers add their own salt 3) healthier packaged drink options are available and prominently displayed and, 4) smaller portions are available and advertised. A further 3 criteria are mandatory if the business sells fried food; 1) cooking oil is heated to optimum temperature, 2) excess fat is drained before food is served, and 3) frying oil is properly maintained. The remaining criteria encompass using healthier cooking methods, healthier ingredients, less salt and sugar, increasing the availability of vegetables and healthier carbohydrate options, smaller portion sizes, as well as health promotion by staff⁽¹⁷⁾. Food businesses are only eligible to join if they have a minimum of 3 out of 5 in the Food Hygiene Rating Scheme, a local government assessed measure of a business' hygiene standards⁽¹⁸⁾.

Compliant businesses receive access to promotional materials including a certificate they can display in their premise that identifies them as being part of the HCC. Some local authorities offer incentives to join such as free food hygiene, nutrition, or allergy awareness training.

In some local authorities, the HCC is tiered. For example, businesses meeting the basic requirements of the award (e.g. meeting a minimum of 8 criteria) receive the "bronze" level of the award. Businesses who meet additional criteria can be awarded "silver" and "gold" levels.

Local authorities delivering the HCC come together within the HCC support network, composed of individuals delivering the HCC from different local authorities, as well as representatives from the organisations involved in its development (GLA, ALEHM).

How is it implemented?

Local governments in London choose whether or not they will deliver the HCC in their borough, and the environmental health and public health teams often work together to do this. Most often, the environmental health officers (EHOs) recruit food businesses and support them in meeting specific criteria related to the healthiness of their food and drink offerings. Once EHOs have assessed food businesses as being compliant, the EHOs may support businesses in meeting the criteria by identifying what changes they need to make and how they could be made and providing basic nutrition information.

While most of HCC delivery is focused on independent food outlets, there has also been work conducted with a number of other organisations. This includes a key supplier of takeaways to deliver price discounts on healthier cooking oils, and working with small chain food outlets with headquarters in London and sports and recreation centres to increase healthier food provision.

91 While there are a plethora of policies and recommendations on how local governments can
92 tackle obesity and unhealthy food environments^(13, 14, 19-24), there is less evidence on the barriers
93 and facilitators to doing so, and how these policies could be strengthened. One study examining
94 local government-delivered initiatives aimed at creating healthier takeaways found that retailer
95 engagement was a key challenge to policy uptake⁽²⁵⁾. A further study examined the effects of a
96 program to incentivize grocery stores to stock healthier options in San Francisco – interviews
97 with non-participating store owners revealed that some were unable to meet the eligibility
98 requirements due to practical considerations such as space and fear of loss of profits⁽²⁶⁾. Yet
99 there is growing interest in initiatives aiming to improve the healthiness of food options in
100 existing retail outlets. For example, the Healthier Oils Program in NSW, Australia offers advice
101 to food service retailers on how to switch to healthier cooking oils in order to reduce saturated
102 fat in the food supply⁽²⁷⁾. In Singapore, food service operators that make healthy changes to
103 their menus are eligible to apply for a grant that can be used to promote their healthier options,
104 under the Healthier Dining Programme⁽²⁸⁾. If these types of healthy food service initiatives are
105 to grow, more needs to be known about how local governments can facilitate their
106 implementation and overcome barriers.

107 This study aims to identify how local governments can facilitate implementation and overcome
108 barriers to healthy food service initiatives, using the case study of the Healthier Catering
109 Commitment, a voluntary initiative implemented in London (Figure 1).

110 **Methods:**

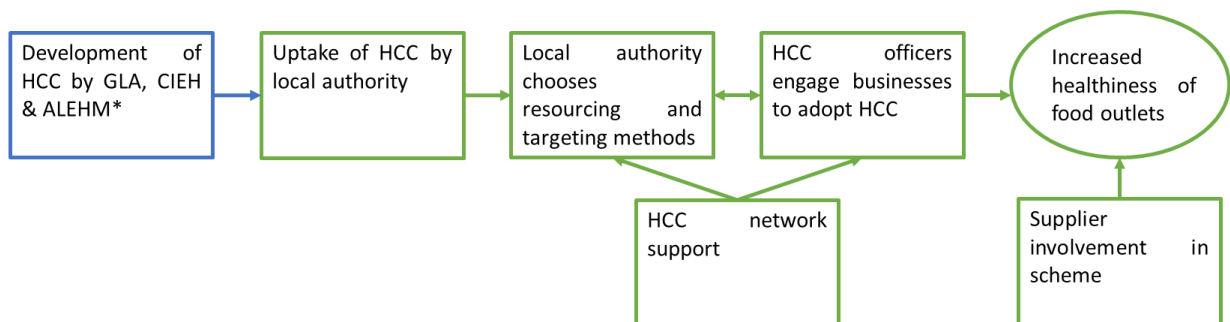
111 Overall method and theory

112 HCC was chosen to study through a document review of all accessible London local authority
113 Local Plans, relevant Supplementary Documents and Health and Wellbeing documents, where
114 it emerged as the most frequently mentioned initiative targeting the healthiness of options in
115 food service outlets.

116 A qualitative descriptive method of enquiry was employed. The design of the study was based
117 on a collective case study approach, in order to gain a broad understanding of the central
118 phenomenon under study⁽²⁹⁾. A logic pathway of ideal implementation was used to guide
119 interviews, analysis and presentation of results (Figure 2). Logic pathways demonstrate the
120 sequence of activities involved in a policy or program and hypothesize the outcomes they are
121 intended to achieve⁽³⁰⁾. This allowed us to identify potential elements to strengthen the
122 implementation of healthy food service initiatives delivered at a local authority level, and to

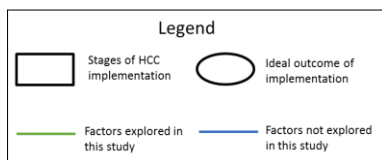
123 understand how elements may be adapted to other social systems. The terms “implementation”
 124 and “delivery” are both used within this study to describe the actions taken by local government
 125 staff towards the outcome of food service outlets obtaining HCC certification, including
 126 engagement of businesses, internal resourcing etc. The term “implementation” is used in the
 127 context of policy theory⁽³¹⁾, and is therefore used when discussing theoretical implementation.
 128 “Delivery” is the term favoured by the local authorities interviewed for this study and is
 129 therefore used in examination of the results.

130



131

132 * HCC (Healthier Catering Commitment), GLA (Greater London Authority), CIEH (Chartered
 133 Institute of Environmental Health, ALEHM (Association of London Environmental Health
 134 Managers)



135

136 Figure 2: Logic pathway of ideal implementation of Healthier Catering Commitment

137

138 Data collection

139 The lead author conducted key informant interviews using a semi-structured interview schedule.
 140 Participants were 1) those delivering or overseeing delivery of the HCC within local
 141 government or supporting organisations (e.g. that provide funding or technical expertise for
 142 HCC delivery) and were identified using a purposive sampling approach and 2) individuals
 143 who could give context to the HCC, e.g. a supplier involved in the HCC, others involved in
 144 healthy food service initiatives, and were identified through snowball sampling and were
 145 invited to participate via email. Purposive sampling was employed in order to collect the

146 perspectives of individuals with the most proximate knowledge of delivering HCC to
147 businesses. Data triangulation was pursued through the inclusion of individuals at different
148 levels of seniority and involvement (e.g. Environmental Health Officers delivering HCC and
149 Public Health Leads overseeing delivery), from different departments (Environmental Health,
150 Public Health), from different local authorities, and the inclusion of individuals from
151 supporting organisations. Local authorities were identified as participating in the HCC through
152 the 2016 Good Food for London guide⁽³²⁾ and communication with the HCC network, a
153 collection of individuals from local authorities who delivered the initiative. HCC coordinators
154 were asked to participate by an email sent out by the HCC network coordinator and were
155 reminded at an HCC network meeting. At the time of this study, there were 24 local authorities
156 delivering the HCC⁽³³⁾, all of whom had a representative in the HCC network. Participant
157 recruitment was conducted until data saturation was reached where no new themes emerged
158 from the interviews, and the research questions had been sufficiently addressed.

159 An interview guide containing open-ended questions were developed prior to the interviews,
160 developed based on existing experience with food policy implementation research by several
161 authors. An interview guide was developed for each type of participant (e.g. local authority
162 HCC coordinator, HCC-supporting organisation, supplier engaged in HCC etc.). See Appendix
163 I for interview running sheets. Questions examined the participants role in delivering the HCC,
164 challenges in engaging food businesses in the initiative and strategies for overcoming them,
165 existing tools and resources used to deliver the HCC, and how the HCC could be improved.

166 Semi-structured interviews were conducted by the lead author either in person at a location and
167 time convenient to participants (at their place of work, excepting one participant who attended
168 the University of the lead author), or over the phone if no convenient time could be determined
169 between the interviewer and interviewee to meet in person. Interviews lasted from 25 to 70
170 minutes. Interviews were audio recorded and then transcribed by a professional transcription
171 company. Participants were given the opportunity to review their transcripts over email, with
172 two interviewees adding further details to their statements. The remainder of participants
173 agreed with their transcripts in their entirety or did not respond to the communication.

174 Analysis

175 Thematic coding and organisation of themes arising from all interviews was conducted by the
176 lead author using QSR NVivo Version 11⁽³⁴⁾. An open coding approach was employed, with
177 descriptive codes applied to blocks of text⁽³⁵⁾. Deductive and inductive coding approaches were

178 applied. Descriptive codes were organised into overarching deductive themes related to
179 implementation stage, see Figure 2 (i.e. uptake of HCC by local authority, business engagement
180 method, adoption by food business, and effectiveness of changing food offer). If descriptive
181 codes did not map onto any implementation stage, they were organised under emergent themes
182 as arising from the text. Themes and sub-themes were identified by the consistent contribution
183 of ideas across participants. Another researcher conducted thematic analysis of three of the
184 interviews with HCC coordinators, with discrepancies resolved and final key themes
185 consolidated through discussion with the lead author.

186 This study was conducted according to guidelines laid down in the Declaration of Helsinki⁽³⁶⁾
187 and all procedures involving research study participants were approved by [REMOVED FOR
188 BLINDING]. Written informed consent was obtained from all participants.

189 **RESULTS**

190 Forty-four individuals were invited to participate in an interview, of which 22 participated.
191 Seventeen of these individuals were directly involved in, or supporting delivery of the HCC
192 (representing 10 of the potential 24 local authorities), and the remainder were individuals who
193 could give context to the HCC. Table 1 describes participant details.

194 *TABLE 1 INSERT HERE*

195 Overview of results

196 Results are reported according to the stage of implementation pathway; (1) the choice of local
197 authorities to deliver HCC, (2) methods targeting food businesses, (3) the adoption of HCC by
198 food businesses, (4) the effectiveness of the HCC at increasing the healthiness of the food
199 environment within these contexts, and (5) the supplier perspective. Within each stage, results
200 are organised according to barriers, facilitators, and participant recommendations (presented in
201 matrix form in Table 2).

202 *TABLE 2 INSERT HERE*

203 **Uptake of Healthier Catering Commitment by local authority**

204 **Facilitators**

205 The local authorities interviewed perceived the HCC as a key part of a package of strategies
206 designed to improve food environments to deliver on their commitments to improve diet-

207 related public health in their communities. HCC officers reflected on the many positives of the
208 initiative, stating that it was easy to deliver, recruit and assess due to the existing resources and
209 documents available.

210 *“...in terms of the actual package and the resources available, it's quite easy to pick...I mean*
211 *it's not like myself or anybody in the council needs to develop it further”* HCC Officer, Local
212 Authority 7

213 **Barriers**

214 Participants reflected on why other local authorities did not deliver the HCC, or stopped
215 delivering it, noting that there had been limited or reduced funding to local authorities as a
216 whole, and Environmental Health teams in particular. Funding for HCC was largely focused
217 on employing HCC Officer/s.

218 *“...a lot of local authorities have faced funding cuts, so they just cannot dedicate the same*
219 *resource and capacity to delivering the HCC.”* Project Officer, Supporting Organisation 1

220 **Further resources and actions to enhance implementation**

221 Participants spoke to the idea of making HCC mandatory for all new businesses and suggested
222 that having a dedicated HCC Officer in each borough would enable them to deliver the
223 initiative to more businesses.

224 *“I think it should be mandatory...because it's not too hard to implement, especially if new*
225 *premises are coming.”* HCC Officer, Local Authority 10

226 **Choosing resourcing and targeting methods**

227 **Facilitators**

228 Not only was the HCC seen as easy to deliver, but delivery could be tailored to the existing
229 strengths and resources of the local authority. Among interviewed local authorities, delivery
230 was done by 1) a dedicated Environmental Health Officer (EHO) who delivered HCC with the
231 support of the public health team, 2) all EHOs delivered the initiative as part of their normal
232 duties, or 3) delivery was contracted to an external organisation. Delivery of the initiative via
233 an external organisation played to the strengths of this particular community; the organisation
234 in question had existing ties to the community, experience working in food environments, and
235 was able to assign more time to deliver the initiative than the EHOs. In contrast, the benefit of
236 using EHOs was that in their role as a local authority representative, business owners were

237 more familiar and responsive to their approaches to join. Delivery was usually enacted through
238 both public health and environmental health teams through varying different means (as
239 described above) and was seen to capitalise on the expertise of each department.

240 *“HCC is mainly driven by environmental health...[and] I borrow the nutritionist’s expertise*
241 *from the health and wellbeing team”*. HCC Officer, Local Authority 5

242 Resourcing of the HCC officer varied across councils, from a dedicated full-time position, to
243 one with one day a fortnight, reflecting the different prioritisation of the local authorities. Some
244 HCC officers had targets on how many businesses to sign up.

245 *“And, within each of the environmental health officers’ remit [they] are...given a target to sign*
246 *up new business to Healthy Catering Commitment.”* Public Health Lead, Local Authority 5

247 There was divergence in how participants viewed the role of the EHO in relation to HCC
248 delivery. EHOs most commonly interact with businesses through the monitoring and
249 enforcement of mandatory food safety regulations. This existing relationship gave them the
250 opportunity to deliver the HCC initiative, but created a challenge in terms of differentiating
251 between the mandatory (food safety) and voluntary (HCC) initiatives. Some participants
252 viewed this factor as important in getting businesses to consider the HCC, while others
253 reflected that they wanted to ensure the voluntary nature of the initiative was clear.

254 Participants drew heavily on shared resources to deliver the HCC, making efficient use of
255 existing tools, and drawing on knowledge and expertise. These were drawn from three sources:
256 1) the HCC network, where HCC officers were able to share new techniques and resources (e.g.
257 flyers), while coming up with solutions together; 2) resources shared across local authority, e.g.
258 drawing on nutrition expertise in another local authority; and 3) resources shared within council
259 e.g. relying on the environmental health officers to identify which food businesses may be more
260 willing to sign up to the HCC, or the use of internal printing services.

261 *“... the [Healthier Catering Commitment] network is so great, when I drop an email...they*
262 *would ask their nutritionist on my behalf.”* HCC Officer, Local Authority 7

263 Due to limited resources, HCC officers focused on being strategic, practical and effective with
264 the delivery of the initiative. For example, one geographical location would be targeted at a
265 time, chosen by areas of highest obesity rates, surrounding schools, or being located on a busy
266 high street. Types of cuisines were also targeted at the same time, allowing the HCC officers

267 to understand what healthy changes were feasible and likely to be culturally acceptable, and
268 used this approach for similar businesses. This approach enabled HCC officers to play on the
269 competitive nature of the businesses, by noting that competitors had signed up to the initiative
270 and would attract more customers as a result.

271 *“...we also found it quite useful to target one type of business at a time, for example, at one*
272 *point we did most of the falafel shops in the borough and that was quite useful in terms of*
273 *knowing how they prepare the food and that gives us - it makes us an expert in one area.”* HCC
274 officer Local Authority 4

275 **Barriers**

276 The task of engaging owners and supporting changes was viewed as time and resource
277 intensive, with varying rates of success. Getting in touch with the correct person, convincing
278 them to join, and walking them through the changes often required several onsite visits to each
279 business. HCC officers often completed HCC work as one aspect of their role in the local
280 authorities, and therefore had to balance competing demands. HCC officers were often required
281 to seek nutrition information from other sources.

282 *“... it’s just been very difficult to get businesses to be interested because these are often people*
283 *we can’t even get hold of. It’s difficult to get hold of owner, they’ve got staff working in these*
284 *places and you can’t even get to the owner.”* Public Health Lead, Local Authority 7

285 For some local authorities, the cross-departmental relationship between Public Health and
286 Environmental Health required to deliver the HCC could be strengthened, with inherent
287 tensions existing that come from working across councils (e.g. competing or different
288 priorities).

289 **Further resources and actions to enhance implementation**

290 There was ongoing resource and tool development that participants believed would aid further
291 recognition, uptake, and customer demand for HCC. This included promotional materials being
292 developed by the Greater London Authority (GLA). These promotional materials were part of
293 a larger movement towards centralised resources, and greater involvement of the GLA. Increasing
294 the consistency of branding and awareness of HCC across London would improve the uptake
295 of the initiative by businesses and raise awareness amongst customers.

296 *“And then as I said, the resources that they’re now creating, I don’t know how they’re going*
297 *to work, but there’s never been any publicity at all ‘cause it’s all been disparate. Different*
298 *boroughs have put different amounts of money into it, it’s all been very disparate, and different*
299 *boroughs are doing different things. So to make it more unified, maybe, across London.”* HCC
300 Officer, External Organisation delivering to Local Authority 2

301 **Adoption by food businesses**

302 **Facilitators**

303 Participants encouraged businesses to join by conveying the following potential benefits: a
304 growing demand for healthier options; discounted products from a supplier; promotion by the
305 local authority; offering discounted hygiene and allergy training; and that it was free to join.
306 Perseverance was key to engaging businesses, particularly in overcoming the challenge of
307 getting in touch with owners and managers. HCC officers found that being persistent, flexible
308 with visiting times, and taking the time to communicate with and address concerns of the owner
309 was essential to engagement.

310 *“Publicity is a good offering. Any business would love to get free publicity. We offer free food*
311 *hygiene training and obviously it’s the sticker and being able to be identified with being a*
312 *healthier premises, or at least an award-winning premise. ... And those sort of forward-*
313 *thinking premises would love to jump on this.”* HCC Officer Local Authority 8

314 Another engagement method was highlighting the potential benefit the business could make to
315 the health of the community, by reflecting on the high obesity rates of children in their local
316 area, and how unhealthy food contributes to this phenomenon.

317 *“...I talk about sort of local, the fact that obesity is quite high in [Local Authority 7] compared*
318 *to other parts of London or nationwide”.* HCC Officer, Local Authority 7

319 *“...I try to explain how, regarding their type of business, how we can contribute to the public*
320 *health or the health of the population in [Local Authority 3].* HCC Officer, Local Authority 3

321 Some businesses were more open to joining the initiative: where the owner or chef has an
322 existing interest in nutrition or had a personal experience with nutrition-related chronic diseases,
323 and/or when they perceived a benefit in terms of attracting customers. Businesses that that were
324 already selling some healthy food or that already met some requirements (e.g. kebab shops
325 already served vegetables as sides) showed more interest. HCC officers capitalised on this by
326 initialling identifying what criteria the premise was already meeting. The HCC checklist

327 enabled them to demonstrate what small achievable steps could be made, was a good talking
328 point, and easy for business owners to understand. Furthermore, it didn't require a dietitian to
329 deliver.

330 *"We're also recognising, in that process, premises that are already doing or that are already*
331 *half-way there, perhaps they serve really healthy vegetables and vegetables are at the forefront*
332 *of the display and that's really positive. So we can work on the positives and suggest that they*
333 *make one or two changes, in addition to that."* HCC Officer, Local Authority 8

334 Across local authorities, HCC officers commonly reflected on having a tailored approach to
335 each business, depending on the owner, location, and type of food business. In particular, being
336 cognisant of how the initiative could be delivered within different language and cultural
337 contexts was essential in adoption by businesses. For example, creating language-specific
338 information sheets was essential in communicating the correct information.

339 *"You have to understand their business or the culture around their business ... to be able to*
340 *assess how you can do the HCC or how they can do the HCC."* HCC Officer, Local Authority
341 3

342 **Barriers**

343 Participants reflected on owners' reluctance to join, citing a fear of negative business outcomes,
344 prioritisation of selling high volumes of unhealthy food for as cheap as possible to maintain
345 competitiveness and value for money, with the alternative driving customers elsewhere.
346 Business owners were concerned that it would cost time and money to implement, and were
347 limited in some aspects of change, e.g. had been given drink fridges or menu boards from food
348 and beverage companies.

349 *"[Business owners] see it as something that's going to cost them, and it's difficult in some*
350 *cases to see that they could benefit from that by serving smaller chip portions."* HCC Officer
351 Local Authority 2

352 Cultural differences meant that some healthier options would be unfamiliar to customers, or
353 challenging to implement due to traditional cooking techniques. Access to healthier ingredients
354 that met religious specifications was also challenge for some business owners (i.e. accessing
355 low-fat dairy products for Jewish business owners). Owners often failed to see the advantage
356 in joining, given there were limited incentives to offer. Low recognition of the initiative was
357 also seen as an issue, while some owners did not understand the initiative, or had little health

358 knowledge. Language barriers often limited successful communication between HCC officers
359 and business owners.

360 *“Another challenge is that there is sometimes language barriers, communication. A lot of*
361 *businesses don’t have an email address or don’t answer the phone.”* HCC Officer, Local
362 Authority 1

363 Maintaining HCC was a challenge, and without ongoing pressure, businesses could return to
364 their old modes of operation and would automatically lose eligibility for the initiative if their
365 hygiene rating fell below a certain level. Some local authorities addressed this by working with
366 businesses to increase their hygiene rating while implementing HCC.

367 *“I’ve also gone back to some now to make sure they’re still maintaining, not fallen off, you*
368 *know. And most of them have maintained the criteria. And sometimes... some have had to drop*
369 *some of things.”* HCC Officer, Local Authority 4

370 Areas of deprivation experienced the aforementioned challenges more acutely and were harder
371 to engage; they were more likely to be micro-businesses with low margins, more likely to drop
372 in and out of meeting hygiene criteria and had a higher number of customers that were seeking
373 value for money (i.e. large portion sizes at low costs).

374 *“There was the challenge of going to more deprived areas that the businesses that are located*
375 *in the most deprived areas of the borough, they tend to have, as a whole, tend to have lower*
376 *food hygiene so we were trying to target them.”* HCC Officer, Local Authority 1

377 There were also constraints where businesses that only sold a small number of products were
378 ineligible to join. Some businesses found it harder to meet the requirements, particularly if they
379 predominantly sold fried food – indicating that the least healthy businesses may remain so.

380 **Further resources and actions to enhance implementation**

381 Increasing the awareness and (consistency of) publicity of HCC was viewed as essential in
382 both harnessing the existing desire for healthier options from customers, and in creating a
383 “tipping point” of enough food businesses joining HCC to influence others to do the same.
384 Being able to provide further incentives was also seen as a method of encouraging businesses
385 to adopt the initiative.

386 **Effectiveness at changing the food offer**

387 **Facilitators**

388 Respondents from four of the ten local authorities interviewed mentioned using a tiered version
389 of the HCC initiative, where there were additional benefits to meeting more of the criteria, e.g.
390 having a bronze, silver and gold level. This was seen to encourage businesses to continue to
391 make healthy changes above and beyond the minimum requirements for joining.

392 *“...it just encourages those businesses that are really keen to make further changes and those*
393 *who are at - they have a very high nutritional standard of food can apply to go on silver and*
394 *gold.”* HCC Officer, Local Authority 1

395 Three of the local authorities interviewed had award ceremonies where they would recognise
396 businesses that had exemplified shifts to healthier food provision. An HCC twitter account that
397 promoted new businesses that had joined the initiative was a useful way to encourage
398 customers to engage in the HCC.

399 HCC was often viewed as a “foot in the door” and starting point towards creating healthier
400 food environments, by changing the expectation of what businesses could achieve, and
401 customer demand for healthier options, and thus shifting the culture around healthy food
402 service. Rewarding businesses for making small changes was a long-term investment that could
403 pave the way for further changes to be made at a later stage.

404 *“Because the good thing about the scheme is that it does recognise small changes and therefore*
405 *it gives more avenue for more changes in future.”* HCC Officer, Local Authority 8

406 **Barriers**

407 With more focus on recruitment over maintenance and evaluation of the changes, it was
408 difficult to understand the impact of the initiative on customer behaviours and diets.
409 Participants thought that more could be done to leverage recruited food business to make
410 further changes in becoming healthier, and that resources or funding specified for evaluations
411 would help measure the impact of HCC implementation on the healthiness of food
412 environments.

413 *“How do we monitor it afterwards to make sure that things are happening? So that it doesn’t*
414 *become too costly for us to do it.”* Public Health Lead, Local Authority 6

415 *“I really do think that in general the HCC isn’t given enough leverage afterwards. It’s very*
416 *easy to recruit and maybe do that assessment, and then what?”* HCC Officer, External
417 Organisation delivering to Local Authority 2

418 In contrast with the benefit of recognising was the concern that HCC could create a “halo effect”
419 whereby takeaways that were still largely unhealthy food environments could be viewed as
420 generally healthy because of the award.

421 “... *there’s a lot of things on that menu that aren’t healthy, especially in a take-away or a café*
422 *that does fried food...*” HCC Officer, External Organisation delivering to Local Authority 2

423 This concern was particularly revealed in the approach taken by different authorities. Many
424 HCC officers reported that they aimed to get as many businesses to sign up as possible, with
425 some EHOs having their yearly goals or Key Performance Indicators (KPIs) include having a
426 specific number of businesses signed up. Other local authorities noted that there could be more
427 benefit by maximising the healthiness of fewer businesses. Participants reflected that it was
428 possible for all food businesses to be healthier.

429 **Further resources and actions to enhance implementation**

430 Participants considered that there would be greater impact of the initiative if customers were
431 able to locate the businesses that had been awarded the HCC. There was also discussion of an
432 online map being developed that would enable this to occur.

433 **Perspective of supplier involved in HCC**

434 **Facilitators**

435 The supplier involved in the HCC noted that their business had invested time and resources
436 into the initiative, e.g. offering a short-term discount on healthier products. They viewed their
437 involvement as good for their long-term business and good for their customers, while creating
438 a positive image of the company itself through favourable media pickup.

439 “*We are still being perceived in the marketplace as the leaders in what we are doing here.*”
440 Manager, Food supplier

441 **Barriers**

442 While supportive of HCC, the supplier noted that not many food businesses had taken
443 advantage of the discount available on healthier options. Part of the motivation to be involved
444 was recognition of responsibility they played in supplying unhealthy products, and the potential
445 role in promoting healthier options, while recognising that manufactures had a big part to play
446 as well.

447 “... if I was to put my business hat on for the amount of time and effort and money that we
448 put into this, it hasn't given us a return. But again, I default back to my earlier answer which
449 is we still see it as a long-term investment. We still see it as the right thing to do and we
450 intend to keep following this path.” Manager, Food supplier

451 **Further resources and actions to enhance implementation**

452 The supplier noted that other businesses may not see it as their responsibility to contribute to
453 the healthiness of the food supply. Making it clear which options were healthier at a
454 manufacturer and/or supply level was recommended to further aid healthiness of food
455 provision.

456 **Discussion**

457 This study offers a unique and in-depth examination of the barriers and facilitators to delivering
458 the London Healthier Catering Commitment from the perspective of local authorities and offers
459 key insights into how local governments in other contexts can facilitate successful
460 implementation of food service initiatives.

461 There were many factors that supported the uptake of the HCC by local authorities, including
462 the existence of a fully formed initiative, and the sharing of resources, networks and knowledge.
463 Participants universally viewed the HCC network as an integral strength and resource that they
464 relied upon to share knowledge and learn from each other. The flexibility of the initiative meant
465 that it could be delivered differently across local authorities, a positive given their different
466 structures, relationships and strengths. Strategic targeting of businesses and demonstrating
467 culturally appropriate methods to meet the requirements engaged businesses, however low
468 recognition of the initiative, and fear of customer loss were main obstacles in adoption.
469 Participants identified a number of actions that would aid implementation, including consistent
470 and London-wide promotion of the initiative to both businesses and customers to increase
471 recognition and demand, making HCC mandatory for new businesses, increased funding for
472 the role of HCC officers and towards evaluation of changes, and identifying healthier options
473 at a manufacturing level.

474 There is a paucity of research that examines the implementation of local government-led
475 healthy food service policies, reflecting perhaps a lack of these policies in the first place, and
476 the lack of research literature that investigates them. Below we explore our results in the context
477 of other local government delivered initiatives ^(25, 37, 38) as well as experiences of other

478 implementors (e.g. researchers) who have partnered with small grocery stores ⁽³⁹⁾ and
479 restaurants ⁽⁴⁰⁻⁴³⁾.

480 In our study, the uptake and delivery of initiatives by local authorities was limited by reduced
481 or restricted funding, a common finding in similar studies in local governments ^(25, 37). Existing
482 relationships between different parties, between environmental health and public health, and
483 between HCC officers and business owners was seen to facilitate the delivery of the HCC; a
484 finding echoed in previous literature ^(25, 42).

485 We found that there were many engagement strategies that were echoed in previous literature,
486 including making small changes at a time ^(37, 39), offering incentives such as publicity and free
487 training ^(25, 37), considering the financial impacts ^(25, 37), delivering tailored and intensive
488 interventions ^(25, 39), the importance of considering language and cultural language differences
489 ^(25, 39), and highlighting the potential community benefit ^(39, 42). Similarly, many of the
490 challenges to business engagement had been previously discussed, such as the reluctance to
491 change ⁽³⁷⁾, the perception that healthy food wasn't popular with customers and would result in
492 economic losses ⁽³⁷⁻³⁹⁾, working with limited resources ⁽²⁵⁾ and a lack of interest from food
493 business owners ⁽²⁵⁾. This study highlighted that local authorities had difficulty in engaging
494 businesses in areas of deprivation, citing lower hygiene ratings, lower profit margins, and
495 customers with more sensitivity to changes in price and portions. This echoes the findings of a
496 survey of UK local authorities and food businesses implementing various healthy food service
497 initiatives in areas of deprivation ⁽³⁷⁾.

498 The supplier involved in the HCC viewed their involvement as contributing to social good and
499 as a strategic short- and long-term investment. While little other research has explicitly
500 examined the perspective of suppliers, other retailers have expressed that healthy food policies
501 contribute towards community stewardship ⁽⁴⁴⁾ and make good business sense ⁽⁴⁵⁾.

502 Participants identified that greater and more consistent promotion of the HCC would enhance
503 uptake by businesses and increase customer demand, consistent with findings from Bagwell ⁽³⁷⁾
504 where there was confusion over different food service initiatives.

505 Strengths of this study include that 10 boroughs were included in the research, and multiple
506 participants were requested from each of these, although not all participated. This allows us to
507 gain multiple perspectives, which is of importance when considering the joint public health
508 and environmental health delivery and interest in the initiative. Furthermore, the inclusion of
509 auxiliary interviews provides a deepened contextual view of the initiative, its challenges and

510 the policy implications. A further strength is that one researcher conducted the interviews and
511 analysis, thereby having a deep knowledge of the data.

512 This study is susceptible to selection bias, in that it is likely that local authorities who are
513 succeeding and more invested in delivering the HCC would agree to participate. A further
514 weakness is that not all local authorities delivering the HCC agreed to participate, however all
515 were invited. Future research could also explore what is holding back local authorities that are
516 not engaging with the HCC or other healthy food retailers to gain a deeper understanding of
517 the barriers in the first step of choosing to take up the HCC. Business owner and customer
518 perspectives were not captured in this study, which have been explored previously⁽⁴⁶⁾. It is
519 valuable to capture perspectives from multiple stakeholders to further elucidate the potential of
520 food service initiatives to increase the provision and purchase of healthier foods, and how they
521 could be incentivised. Further research could explore the impact of the HCC on customer
522 nutrition choices, to add to the existing literature demonstrating that increasing the availability
523 of healthier options and decreasing unhealthy options in restaurants leads to increased
524 healthiness of the food environment ^(47, 48) and improved consumer choices ⁽⁴⁹⁾. Several HCC-
525 specific recommendations arose from this study that are in response to the identified barriers:

- 526 - Consider how further incentives could be provided to businesses for meeting HCC
527 criteria in order to engage businesses and encourage adoption.
- 528 - Targeted strategies for deprived areas that focus on their specific barriers to eligibility
529 and adoption (e.g. developing menu items that are low-cost healthier alternatives,
530 providing methods to reduce food wastage, increasing their food safety rating).
- 531 - Consider how to further leverage participating businesses to make additional changes
532 to increase the healthiness of food environments (e.g. through using tiered versions of
533 the HCC).
- 534 - Consider the balance between a focus on the quantity of businesses recruited to the
535 HCC, and quality (i.e. extent of change of healthiness of food environment,
536 maintenance of changes, demonstrated impact on purchases) and take a unified
537 approach throughout.
- 538 - Evaluate the sustainability and maintenance of HCC changes within different
539 businesses to determine how the healthiness of options in food outlets is changing.
- 540 - Investigate if and how businesses are using supplier discounts, and how this impacts
541 HCC maintenance and business outcomes (e.g. profit margin).

542 Reflecting on the strengths of the HCC and how they might function in other contexts, this
543 study elucidated lessons for other local governments exploring the potential of delivering
544 healthy food service initiatives:

- 545 - Use the existing networks and relationships between local governments, community-
546 based organisations and local food businesses to develop community-tailored delivery
547 methods.
- 548 - Identify the strengths, reach and capacity within local governments and across
549 departments (i.e. environmental and public health) to capitalise on existing expertise.
- 550 - Understand the density, cuisine and ownership of food outlets in order to develop
551 practical, culturally-relevant, and efficient delivery methods (e.g. in areas of low food
552 outlet density assign initiative delivery to all EHOs who would be visiting these
553 premises anyway).
- 554 - Reflect and revise the standards of entry to the initiative, or consider adding additional
555 ‘tiers’ as more businesses become successful in their goal of creating healthier food
556 environments to leverage already engaged businesses to become even healthier.
- 557 - Explore how to increase awareness of the initiative amongst businesses and create
558 demand for customers (i.e. simultaneously work on supply and demand driven factors,
559 such as customer demand for healthier options⁽³⁹⁾).

560 **Conclusion**

561 In this study we consider multiple aspects of local authority decision making and involvement
562 in the Healthier Catering Commitment initiative. Local governments and other organisations
563 seeking to improve the healthiness of offerings in food service outlets in their jurisdictions
564 should consider existing interactions with food service outlets as avenues for initiative
565 engagement and delivery, and the use of personnel resources in a targeted manner. Working
566 closely with food outlet owners and managers to implement healthy changes that are acceptable
567 to their customers and which maintain business profits is likely to enhance the maintenance
568 and sustainability of such changes. The exacerbated challenges of initiative engagement,
569 delivery and maintenance in food outlets within areas of disadvantage means these businesses
570 are likely to require additional support.

571

572

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687

688

689 **TABLES AND FIGURES**

Role (environmental health qualifications)	Organisation	Team within local Authority
HCC* Officer	Local Authority 1	Public Health
HCC Coordinator (EHO**)	Local Authority 2	Environmental Health
HCC Officer (EHO)	Local Authority 3	Environmental Health
Senior Practitioner	Local Authority 3	Public Health
HCC Coordinator (EHO)	Local Authority 4	Environmental Health
Public Health Lead	Local Authority 4	Public Health
Environmental Health Lead	Local Authority 5	Environmental Health
Public Health Strategist	Local Authority 5	Public Health
Public Health Strategist	Local Authority 6	Public Health
HCC Officer	External Organisation delivering HCC to Local Authority 2 and 6	N/A
HCC Officer	Local Authority 7	Environmental Health
Public Health Lead, PH	Local Authority 7	Public Health
HCC Officer (EHO)	Local Authority 8	Environmental Health
Public Health Strategist	Local Authority 9	Public Health
Public Health Officer	Local Authority 9	Public Health
HCC Officer	Local Authority 10	Environmental Health
Senior Policy Officer	Supporting Organisation	N/A
Manager	Supporting Organisation	N/A
Manager	Supporting Organisation	N/A
Manager	Supplier involved in HCC	N/A
Manager	Evaluation Organisation	N/A

Manager	Industry Group	N/A
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*Healthier Catering Commitment

**Environmental Health Officer

690 *Table 1: Participant characteristics*

691

	Sub-themes emerging from open coding under a priori themes, organised into facilitators, barriers, and further resources		
Themes (stage of logic pathway to HCC implementation)	Facilitators	Barriers	Further resources and actions to enhance implementation
Uptake of HCC by local authority	<ul style="list-style-type: none"> Existing scheme easy to pick up 	<ul style="list-style-type: none"> Limited funding for delivery Additional workload to environmental health officers 	<ul style="list-style-type: none"> Making HCC mandatory for all new businesses Having dedicated HCC officer in each borough
Local authority chooses resourcing and targeting methods	<ul style="list-style-type: none"> Existing relationships between environmental health and food businesses Flexible delivery plays to strengths of local authority Partnership between environmental and public health draws on expertise Sharing resources capitalises on existing knowledge Strategic targeting to make efficient use of time 	<ul style="list-style-type: none"> Resource and time intensity of delivery Sometimes weak existing relationships between environmental and public health 	<ul style="list-style-type: none"> Creating more centralised resources
Adoption by food businesses	<ul style="list-style-type: none"> Incentives to join Increased customer interest in health Checklist easy to understand and accessible 	<ul style="list-style-type: none"> Owners fear loss of business due customers not accepting smaller, healthier portions 	<ul style="list-style-type: none"> Consistent promotion to increase awareness of scheme for

	<ul style="list-style-type: none"> • Some businesses only had small changes to make to meet criteria • Feasible, culturally acceptable and tailored way to deliver to different businesses 	<ul style="list-style-type: none"> • Communication and contact with food business owners • Eligibility criteria to join excludes some businesses • Challenges exacerbated for businesses in areas of deprivation 	<ul style="list-style-type: none"> businesses and customers • Providing further incentives to businesses for joining
Effectiveness of changing food offer at outlets	<ul style="list-style-type: none"> • Delivering tiered scheme encourages businesses to go above and beyond • Public recognition of success through award ceremony • HCC as the first step of many towards creating healthier food environments 	<ul style="list-style-type: none"> • May mislead customers to perceive all food options in business as ‘healthy’ • Little measurement of maintenance of HCC • More difficult for unhealthy businesses in areas of low deprivation to join 	<ul style="list-style-type: none"> • Additional funding to conduct evaluation of change in food environment • Online map for customers to identify participating businesses
Perspective of supplier involved in HCC	<ul style="list-style-type: none"> • Supplier perceived as being a leader in the restaurant supply industry • Positive health impact on customers • Long-term outlook essential 	<ul style="list-style-type: none"> • Rest of supply industry perceives they don’t have the responsibility • Other suppliers not acting in the space 	<ul style="list-style-type: none"> • Identifying what products are healthy at a manufacturing level

692 *Table 2: Summary of barriers and facilitators emerging from participant interviews*

693

694

695 **Appendix I: Interview guides**

696 **Interview guide for local authority participants**

- 697
- Can you tell me about your role at **your local authority**?
- 698
- Can you tell me a bit about the work you do in relation to the Healthier Catering
- 699
- Commitment?
- 700
- How have you approached retailers to involve them in these initiatives?
- 701
- Have you had any challenges in working with retailers or engaging them in healthy food
- 702
- initiatives? If so, please explain what they have been.
- 703
- How did you find was the best way to overcome these challenges?
- 704
- Are there any tools or resources that you rely on to implement these initiatives? (Either within
- 705
- or outside of the local authority)
- 706
- Were there any additional resources or tools that would have been useful in addressing these
- 707
- challenges?
- 708
- Did you have anything else you wanted to add?
- 709
- Is there anyone else at your local authority or other local authorities that you think might be
- 710
- interesting to talk to?

711 **Interview guide for supporting organisations**

- 712
- Can you tell me about your role at **your organisation**?
- 713
- Can you tell me a bit about the work you do in relation to the Healthier Catering
- 714
- Commitment?
- 715
- How does your organisation support the delivery of the Healthier Catering Commitment?
- 716
- Have you had any challenges in supporting the Healthier Catering Commitment delivery? If
- 717
- so, please explain what they have been.
- 718
- How did you find was the best way to overcome these challenges?
- 719
- Are there any tools or resources that you provide to local authorities to support the delivery of
- 720
- the Healthier Catering Commitment?
- 721
- Were there any additional resources or tools that would have been useful in supporting the
- 722
- delivery of the Healthier Catering Commitment?
- 723
- Did you have anything else you wanted to add?

- 724 • Is there anyone else at your organisation or other local authorities that you think might be
725 interesting to talk to?

726 **Interview guide for supplier involved in HCC**

- 727 • Can you tell me about your role at **your organisation**?
- 728 • Can you tell me a bit about how your organisation is involved in the Healthier Catering
729 Commitment?
- 730 • How did the involvement with the Healthier Catering Commitment come about? Please step
731 me through the process.
- 732 • What kind of products do you supply?
- 733 • Who are the main food service outlets that you supply?
- 734 • What kind of considerations did you think about when starting this work with the Healthier
735 Catering Commitment? For example, did you consider any potential impact on your
736 businesses profits?
- 737 • What do you think the outcomes for your business have been as a result of your involvement
738 with the Healthier Catering Commitment?
- 739 • Why do you think your company has become involved in the Healthier Catering Commitment
740 when other suppliers haven't?
- 741 • Are there any challenges that you have experienced or foresee in promoting and selling
742 healthier options?

743 **Interview guide for evaluation organisation**

- 744 • Can you tell me about **your organisation** and your role here?
- 745 • Can you tell me a bit about how your organisation is or has been involved in the Healthier
746 Catering Commitment?
- 747 • What are some of the other healthy food service or food retail strategies or evaluations that
748 you have been a part of?
- 749 • Have you had any challenges in working with retailers or engaging them in healthy food
750 initiatives? If so, please explain what they have been.
- 751 • How did you find was the best way to overcome these challenges?
- 752 • Are there any tools or resources that you rely on to implement these initiatives? (Either within
753 or outside of the local authority)

754 • Were there any additional resources or tools that would have been useful in addressing these
755 challenges?

756 • Did you have anything else you wanted to add?

757 **Interview guide for industry group**

758 • Can you tell me about **your organisation** and your role here?

759 • Can you tell me how **your organisation** sees the role of your industry in healthy eating?

760 • What are the kinds of initiatives that your industry has implemented to promote healthy
761 eating?

762 • What do you think is the role for other organisations and sectors involved in the food
763 industry?

764 • What do you think are the most important factors that influence consumer choice? How does
765 health factor into this? How might this be different from 5 or 10 years ago?

766 • There are often comments made about how unhealthy food is cheaper – could you comment
767 on that?

768 • What do you think the role of the government should be in supporting healthy eating?

769 • Did you have anything else you wanted to add?

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