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1 **Facilitators and barriers experienced by federal cross-sector partners during the**
2 **implementation of a healthy eating campaign**

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32

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42 developing the study design and corroborating methods. M.T. was involved in data
43 collection and data analysis. All authors were involved in reviewing and editing the
44 manuscript.

45 **Ethical standards disclosure**

46 This study was conducted according to the guidelines laid down in the Declaration of
47 Helsinki and all procedures involving human subjects were approved by the *Comité*
48 *d'éthique de la recherche avec les êtres humains de l'Université Laval* (# 2013-055) and
49 the *Comité d'éthique de la recherche en santé de Université de Montréal* (#13-118-
50 CERES-R) research ethics committees. Written and informed consent was obtained from
51 all participants. As per participant consent, confidentiality was maintained by modifying
52 or omitting gender, number, region and language identifiers in excerpts reported.

53

54 **Abstract**

55 *Objective:* Identify facilitators and barriers that Health Canada's (HC) cross-sector
56 partners experienced while implementing the *Eat Well Campaign: Food Skills (2013-*

57 *2014)* (EWC) and describe how these experiences might differ according to distinct types
58 of partners.

59 *Design:* A qualitative study using hour-long semi-structured telephone interviews
60 conducted with HC partners that were transcribed verbatim. Facilitators and barriers were
61 identified inductively and analyzed according partner types.

62 *Setting:* Implementation of a national mass media health education campaign.

63 *Subjects:* Twenty-one of HCs cross-sector partners (food retailers, media and health
64 organizations) engaged in the EWC.

65 *Results:* Facilitators and barriers were grouped into seven major themes: operational
66 barriers, intervention factors, resources, collaborator traits, developer traits, partnership
67 factors and target population factors. Four of these themes had dual roles as both
68 facilitators and barriers (intervention factors, resources, collaborator traits and developer
69 traits). Subthemes identified as both facilitators and barriers illustrate the extent to which
70 a facilitator can easily become a barrier. Partnership factors were unique facilitators,
71 while operational and target population factors were unique barriers. Time was a barrier
72 that was common to almost all partners regardless of partnership type. There appeared to
73 be a greater degree of uniformity among facilitators, whereas barriers were more diverse
74 and unique to the realities of specific types of partners.

75 *Conclusions:* Collaborative planning will help public health organizations anticipate
76 barriers unique to the realities of specific types of organizations. It will also prevent
77 facilitators from becoming barriers. Whereas, advanced planning will help organizations
78 manage time constraints and integrate activities, facilitating implementation.

79

80 **Key words:** Implementation, facilitators, barriers, cross-sector partners, qualitative

81 Introduction

82 In Canada, child obesity was made a public health priority by Federal, Provincial and
83 Territorial Ministers of Health in 2010[1]. The *Eat Well Campaign: Food Skills* (EWC)

84 was an initiative that Health Canada (HC), a federal health agency, developed to address
85 child obesity prevention by targeting dietary changes at the family level. The EWC was a
86 multi-channel mass media health education campaign that used social marketing as a
87 strategy to disseminate messages about family meal planning to Canadian parents.
88 Dissemination of activities occurred over five activation periods (or phases) from March
89 2013 to March 2014 with the help of cross-sector partners (Figure 1). Partnerships with
90 the food retail industry, the media and health organizations were used to extend the reach
91 of the campaign and leverage resources and expertise to enhance outcomes[(2)]. The nature
92 of the partnerships included in-kind agreements with the food retail industry, paid
93 contracts with the media, and both in-kind agreements and cost sharing contracts with
94 health organizations.

95 Cross-sector partnerships in health are becoming more common and considered necessary
96 to address complex health issues like obesity[(3)]. Little is known about cross-sector
97 contributions to the implementation of nutrition interventions or partnership experiences
98 in public health. Public-private partnerships, particularly with the food industry, have the
99 potential to influence the public's choices about healthy food behaviors and they should
100 be strategically approached[(4)]. It is important to study how these partners interact together
101 to implement a nutrition initiative. The effectiveness of an intervention is closely linked
102 to the manner in which it is implemented[(5, 6)], and knowledge of implementation barriers
103 in particular can enhance the understanding of avenues for outcome improvement[(7)].
104 However, few studies investigate facilitators and barriers to implementation, which could
105 provide valuable insight into the implementation process as well as identify intervention
106 success factors[(8)]. The purpose of this study was to (1) identify facilitators and barriers
107 experienced by HC's cross-sector partners during the implementation of the EWC and (2)
108 describe similarities and differences in facilitators and barriers between cross-sector
109 partner groups (food retailers, media and health organizations) and partner agreements
110 (contractual versus in-kind).

111

Methods

Partners and recruitment

As previously mentioned, the EWC was implemented over five activation periods from March 2013 to March 2014 with 53 cross-sector partners[9]. The role and the level of involvement of each partner varied, with paid and cost sharing partners having defined roles as per contractual agreements and in-kind partners being involved voluntarily in various activities and phases of the campaign. The food retail industry included small and large food retailers and food retail associations. They promoted the campaign in-store, online and through grocery-store flyers. Media partners were involved in producing and promoting content for the campaign: televising vignettes, creating website content, print ads and editorials in magazines. Health organizations were primarily involved in developing and/or disseminating campaign materials through their regional networks.

The current study was part of a process evaluation to understand the implementation of the EWC among HC's cross-sector partners. Study execution and results reporting were conducted according to the 32-item Consolidated criteria for reporting qualitative research (COREQ)[10]. A stratified purposeful sample[11] of 41 organizations was identified. Key informants at each organization were first identified by a manager at HC, and then contacted by a trained bilingual interviewer (MT; registered dietitian, female, 36 y) by telephone and/or email prior to their interviews to invite them into the study. The purpose of the research was disclosed to all participants, signed written consent was obtained and the interview guide was provided to all participants by email prior to the interview. Interviews were conducted until data saturation was approached.

The interviewer (MT) conducted a semi-structured hour-long telephone interview (duration ranging from 45 to 88 min; median duration 57 min) with each participant capturing information on experiences implementing the EWC. The interview questions were based on an integrated model of program implementation[12, 13]. Interviews were recorded and transcribed verbatim. Transcripts were not returned to participants, but were verified for accuracy by trained coders (MAF; registered dietitian, female, 32 y or JD; anthropologist, female, 25 y). An initial codebook of facilitators and barriers was

142 developed inductively by lead coder (MAF) and interviewer (MT) with key words from
143 analytic memos of interview recordings. Using thematic content analysis[14], three
144 bilingual coders (MAF, MT, JD) challenged the codebook by triple coding six contrasting
145 interviews intermittently during the coding process to ensure inter-coder agreement was
146 maintained throughout. After each triple-coded interview, new themes and changes to
147 existing parent themes were validated together before proceeding to simple coding.
148 Parent themes were subsequently split[15] into sub-themes by the lead coder (MAF), and
149 the interviewer (MT) corroborated the most complex sections of interview text. Sub-
150 analyses of themes were also analyzed according to partner group (food retailer, media
151 and health organization) and partnership agreement (contractual vs in-kind). It was not
152 possible to validate themes with individual participants as results were reported
153 collectively by partner type; however, findings were corroborated with HC. To maintain
154 confidentiality of organizations, specific details of activities, identities and location were
155 omitted from quotes. To focus on the most salient themes, only those reported by three or
156 more respondents were analyzed.

157

158 **Results**

159 Twenty-two organizations accepted to participate; 1 health organization withdrew from
160 the study resulting in 21 completed interviews with 8 food retailers, 6 media and 7 health
161 organizations. The key informants representing organizations were a mix of dietitians,
162 public health practitioners, marketing representatives and communication experts that
163 worked either on a regional or national level in Canada. Characteristics of the
164 organizations that participated in the study are described in Table 1.

165 Seven major themes were identified and are listed in Table 2 with the number of
166 organizations that spoke of each respective theme. Facilitating factors were identified by
167 all partners except for one of the health organizations. The major facilitating themes that
168 emerged were (1) resources, (2) collaborator traits, (3) intervention factors, (4) developer
169 traits and (5) partnership factors (Table 2). Subthemes and examples are listed in Table 3
170 in decreasing order of frequency. All respondents mentioned diverse barriers related to
171 the implementation of the EWC. The major barriers identified were grouped into six

172 major themes: (1) operational elements, (2) intervention factors, (3) resources, (4) target
173 population factors, (5) developer traits and (6) collaborator traits (Table 2). Subtheme and
174 examples are listed in Table 4 in decreasing order of frequency. Intervention factors,
175 resources, partnership factors and developer traits had dual roles as both facilitators and
176 barriers. Major facilitating themes appeared to be homogenous and equally experienced,
177 whereas barriers appeared to be slightly more diverse and unique to specific groups of
178 partners.

179 *Operational elements*

180 Barriers that related to the regular functioning of the organization were clustered under
181 the theme "operational elements". This theme included all barriers involving time,
182 campaign integration into organizations' planned activities, and restrictions to mandates
183 that prevented optimization of intended activities. There were no facilitating factors
184 related to this theme. This theme represented the most prominent implementation
185 challenges, and time was a salient barrier that was universally experienced by nearly all
186 partners interviewed. The majority of food retailers and a minority of health
187 organizations (i.e., in-kind partners) also mentioned that activity implementation was
188 time intensive.

189 *"Too much time for what our business is about. There's too much time*
190 *involved." – Food retailer*

191 This barrier, however, was not an issue for contractual partnerships, presumably because
192 paid-partners expected campaign activities to take-up a certain amount of time and
193 resources. Although partners in all groups mentioned difficulties implementing activities
194 under a tight timeline and long delays from HC delivering materials or approvals
195 resulting in changes or alterations to planned activities, this barrier was particularly
196 challenging for the media.

197 *"Health Canada never managed to give us the information in time" - Media*

198 The majority of food retailers and health organizations involved in in-kind agreements,
199 experienced conflicts integrating EWC activities within existing organizational plans,
200 which challenged the implementation of the EWC.

"The challenge would be trying to fit a campaign into a specific period of time, around specific messaging that may or may not fit with the broader communication strategy at that point in time. We may be talking about getting ready for Thanksgiving at the same time as Health Canada was talking about getting back to school." - Food retailer

Having a restrained operational mandate and limited capacity to implement activities, was perceived as a barrier for a minority of respondents across partner groups.

"Of course with a bigger piece of the pie, I think we could have done something bigger and more comprehensive." – Media

Intervention factors

"Intervention factors" was defined as all elements intrinsic to the EWC that created barriers or were facilitating factors for implemention. Overall, the nature of the campaign (i.e., health oriented and positive messages) was seen as a major facilitator across partner groups, and this theme appeared to be extremely prominent among the media and food retailers.

"Because it's an important topic there's so many different ways that you can target or teach people." - Media

Facilitating intervention factors that characterized the EWC were organized, overall simple to implement and it was believed that second and subsequent phases of the EWC were easier than the initial activation period.

"The first one came a little quickly, but once we got into the rhythm of it I think the other ones were fine, because at that point we already knew what to expect." – Food retailer

More than half of partners across groups had issues with the intervention strategy used by HC. For example, partners questioned the choice of channels used to diffuse the campaign (e.g., traditional versus social media). Partners felt that the EWC did not appear to have a concrete intervention and that it was not interactive. HC was criticised for trying to implement too many activities and not taking into account social determinants.

230 *"I suppose I could adapt the content for [our population], but, you know I*
231 *shouldn't have to adapt everything. I mean it's not just white people that live in*
232 *Canada, right?" – Health organization*

233 Furthermore, half the food retailers and media respondents as well as a minority of health
234 organizations believed that the EWC messaging was not interesting or effective enough
235 to break through noise around health messages and grab the public's attention to affect
236 behavior change.

237 *"So there's innovative in terms of the creative, so yes, the creative was good*
238 *creative, but to me innovative means that there's something about it that's going*
239 *to break through and be compelling, and in helping consumers to make different*
240 *choices. But, I think in general, the Eat Well campaign was just another*
241 *education campaign." – Food retailer*

242 The majority of media respondents and a minority of both food retailers and health
243 organizations felt that poor campaign visibility was a major challenge.

244 *"Yea, but did it really reach enough people? It wasn't because of a lack of*
245 *interest… It's more that the campaign wasn't visible enough to impact many*
246 *people, you know." - Media*

247 In-kind partners were the only ones to experience challenges around commitments to
248 implement foreseen campaign activities consistently over multiple phases throughout the
249 year. The multiple activation periods of the campaign made it difficult for in-kind
250 partners to maintain implementation throughout the year, resulting in what appears strong
251 activation at the start of the campaign and fewer activities being carried out for
252 subsequent phases of the campaign.

253 *"It is extremely expensive to get visibility, we have a large network to cover, so*
254 *we did [the activity] once for Health Canada, and then we didn't repeat [the*
255 *activity]." – Food retailer*

256 *Resources*

257 Material resources was a prominent facilitating theme for all groups of partners.
258 Respondents spoke positively about the EWC resources as being high quality, ready-to-
259 use good tools that were practical.

260 *"The aspect of developing a campaign with really nice visual content, it's what*
261 *sets itself apart from other campaigns. I think it's the [EWC's] strength; the*
262 *quality of the materials produced." – Media*

263 Human resources that facilitated implementation included making support staff available,
264 having specific expertise in line with the EWC and a good fit between key staff and the
265 EWC. Financial resources were a facilitating factor for a minority of partners in each
266 group. Only food retailers spoke of their organizations allocating a budget as being a
267 facilitator, whereas a minority of respondents from each group of partners felt that HC
268 subsidizing costs, for example by providing material resources, was a facilitating factor.

269 *"Health Canada was funding the development of the artwork […] and they*
270 *helped fund a lot of base costs and then we also paid for production and*
271 *materials and distribution and added support and staff and that type of thing. So*
272 *it was a jointly funded program." - Food retailer"*

273 On the other hand, limited financial resources were experienced by nearly all food
274 retailers, the majority of health organizations and half of the media respondents.

275 *"Of course we could have done more, but with the budget we had... we tried to*
276 *do the best that we could." - Food retailer*

277 Respondents spoke about having to make extra investments, absorb activity costs, having
278 a limited or no budget and having to make trade-offs between choosing to invest in EWC
279 activities over other initiatives. Limited human resources and expertise were mentioned
280 by half the food retailers and health organizations and a minority of media respondents.
281 Specific challenges included the lack of manpower and expertise, poor staff fit and issues
282 managing staff. In-kind partners mentioned challenges regarding the materials provided

by HC not being in a usable format to meet their needs or not having the capacity to adapt materials for their clients/public.

> *"We don't really have the manpower here to do all that [adapt resources]. I'd really like it if people [Health Canada] could help us out." - Health organization*

Partnership factors

Partnership factors emerged only as facilitating factors. A good relationship between HC, collaborative effort and a positive experience were facilitators described across partner groups.

> *"I think we have a very good relationship with health Canada. Certainly part of our mandate is partnerships. I think [our organization] really sees the benefits of participating in partnerships […] the end result is bigger than the effort that you put in when you partner with someone else." – Health organization*

Having worked with HC in the past was a facilitator for some media and health organizations.

> *"I'm pretty sure that it went much smoother, because we knew we had a process [from working together previousluy]… and we could manage their expectations better." – Media*

The use of a creative and advertising liaison, contracted by HC, was described as a facilitator only by media partners.

Developer traits

Overall, Health Canada's ability to ensure good communication was an important facilitator among partner groups, particularly for food retailers and the media. Examples of strong communication mentioned included providing positive feedback and making themselves very available.

309 *"They gave us really good positive feedback on the content we were delivering,*
310 *and that they liked it and they thought it was relevant and great. So, there was*
311 *sort of a positive reinforcement. I think, that was really good." – Media*

312 A minority of partners also portrayed HC's nice, helpful and polite nature as a facilitating
313 factor. Only in-kind partners described HC as being supportive and flexible of
314 implementation activities and their expectations of partners' contributions. In addition,
315 the establishment of trust with HC as being a facilitator was mentioned only by media
316 partners.

317 *"In the end, there was really mutual trust, and in the end, they knew that if we*
318 *showed up, it was going to be great." - Media*

319 Almost half of the respondents mentioned difficulty having to work under HC's
320 demanding parameters; tough approval process, rigidity and changes to mandates. The
321 approval process was a major implementation barrier for all partner groups, especially all
322 members of the media. Last minute changes to mandates were big challenges only for the
323 media. In addition, all media partners and a minority of food retailers expressed a high
324 level of rigidity from HC with regards to control over messaging and details of campaign
325 activities.

326 *"Health Canada sort of came back with more and more strict guidelines about*
327 *what we could and couldn't say" - Food retailer*

328 Partners in every group mentioned communication issues. Partners felt that the
329 conference style communication with HC was inefficient. Some media and food retailers
330 felt that they had little to no direct contact with HC. Finally, communication gaps were
331 major challenges for half the food retailers and media respondents and a some health
332 organizations.

333 *"They weren't necessarily sharing details of the campaign and how the*
334 *campaign was going to roll out. We knew that the food retailers were*
335 *participating, because we saw in the grocery stores […] not necessarily,*
336 *because we'd been told by Health Canada." - Health organization*

337

338 *Collaborator traits*

339 Accommodating, committed, philanthropic nature and trusted source were the subthemes
340 identified as facilitating collaborator traits. Whereas, frustrated, political issues, limited
341 flyer space and issues working with competitors were competitor traits that were barriers
342 to implementation. The strong perceived level of commitment and implication of food
343 retailers and the media were considered as an important facilitating factor.

344 *"I think they were equally motivated to see this campaign succeed, and so were*
345 *actively involved and well-resourced, yeah." – Food retailer*

346 Some health organizations and media spoke of their reputation as trusted sources of
347 health information.

348 *"We are trusted, well respected so… you know it [EWC partnership with HC]*
349 *just makes sense". – Health organization*

350 A few respondents from each group felt frustrated and expressed disappointment
351 regarding the EWC implementation.

352 *"I guess because there wasn't a lot of promotion done by Health Canada in our*
353 *region, that even with all that we did, it still fell a little short." - Food retailer*

354 Food retailers experienced unique challenges; running the same campaign as a major
355 competitor and constraints for flyer space to promote the EWC over paid ads for product
356 placement.

357 *"It's a tough sell, because a flyer is to promote food and food products and this*
358 *was more messaging, and even when we have our own programs around health*
359 *and wellness, we struggle to find space in the flyer to promote them." - Food*
360 *retailer*

361 Political constraints over health messaging priorities were uniquely expressed by health
362 organizations.

363 *"Politically, the communications division was unable to participate actively."*
364 *- Health organization*

365

366 *Target population factors*

367 Audience segmentation was a barrier to implementing the EWC that was mentioned by a
368 minority of food retailers, media respondents and a majority of health organizations. The
369 target population was segmented in terms of preferences for local media content versus
370 mainstream mass-media content, traditional media versus social media and different
371 regional realities across the country.

372 *"It's such a challenge to disseminate anything across Canada, to so many*
373 *people, so I just think that what Health Canada has done in terms of*
374 *dissemination is more than they have ever done, but it's still a challenge. You*
375 *still talk to people like health professionals that don't know about it. So, it's just*
376 *the nature of the size of Canada more than anything." - Health organization*

377 Food retailers and the media spoke about the target population's lack of readiness to
378 make dietary changes, lack of time, perceptions about the affordability of healthy foods
379 and lack of knowledge as barriers to their responsiveness.

380 *"Not everyone is ready to change, not everyone wants to change [...] you can't*
381 *please everyone." - Media*

382

383 **Discussion**

384 Overall, many of the facilitators and barriers that emerged in this study (e.g.
385 communication, resources and time) have also been identified in program implementation
386 literature[13, 16] suggesting that regardless of the implementation context, similar themes
387 are likely to emerge. This observation may help anticipate certain commonly experienced
388 challenges, which can be taken into account during collaborative intervention planning.
389

390 Many similar barriers and facilitators were experienced across partner groups despite
391 differences in their relationships with HC. Furthermore, similar themes (e.g., resources
392 and communication) emerged as both barriers and facilitators. HC's capacity as strong

393 communicators was a facilitating factor that emerged from interviews with all partner
394 groups, and has been identified as a key implementation success factor for various
395 interventions[17, 18]. Communication can be an important facilitator for implementation
396 and building strong partnerships [13]. However, poor communication can cause frustration
397 and limit partners' ability to maintain or implement and intervention. Organizations
398 should dedicate resources to keeping their partners informed, providing feedback and
399 maintaining an open flow of communication in a consistent manner with all partners.
400
401 The most prominent facilitating theme was the material resources that HC provided to its
402 partners. Moreover, having adequate human resources was identified as a facilitator for
403 both the media and health organizations. Having access to adequate resources (material
404 and human) is often identified as a facilitator in implementation evaluations, whereas
405 inadequate resources is an impediment[18]. The nature of the campaign was another
406 prominent facilitating factor for food retailers and media respondents. This finding
407 indicates that regardless whether a partnership is in-kind or contractual, partners are
408 likely to be more open when the topic of the initiative is a cause that is universally valued
409 by the organization[19]. The nature of the EWC may have played a role in influencing
410 organizations' level of commitment and implication to its activities, particularly when the
411 company's values and or mission align with campaign objectives, which is supported by
412 the strong relationship between compatibility of an innovation and its assimilation within
413 an organization[20].
414
415 Two themes emerged as being completely unique to the media; trust of HC and working
416 with an excellent liaison. The importance to media of being trusted by HC may be a
417 reflection of their capacity to maintain good working relationships whilst working under
418 tough parameters. This aligns with the finding that partnership factors were extremely
419 important facilitators for the media including working collaboratively, having a positive
420 partnership experience and previous experience working with HC. Furthermore,
421 particular personality traits such as the media's understanding and their flexibility were
422 likely to facilitate tough working parameters, especially during changes to mandates.
423 These findings are backed by expert agreement that public-private partnerships need to be

424 governed by mutual trust and respect, which are key to ensuring transparency and open
425 communication allowing for collaborations to succeed[19].
426
427 Contrary to the EWC adoption[9] , barriers were more prominent during the
428 implementation process. Elements that had either facilitated (e.g., social participation) or
429 challenged (e.g., strict control of information by HC) the organizational adoption of the
430 EWC[9] re-emerged during implementation, reinforcing the strong connection between
431 adoption and implementation and their potential impacts on reach and effectiveness[6].
432 Other qualitative studies have highlighted the importance of taking into consideration the
433 contextual nature of factors associated with healthy eating program and policy
434 implementation[21-23]. Granular level analysis of sub-themes revealed salient differences
435 between partner groups that are contextual in nature and are particularly important given
436 the setting of an intervention implemented by cross-sector partners. For example, food
437 retailers experienced challenges regarding dedicating flyer space and working with their
438 competitors, whereas media respondents were the only ones to mention issues with
439 mandate changes and health organizations were alone to speak of political issues. These
440 differences between partners demonstrates that models for private-public partnerships
441 cannot be one-size-fits-all and should be flexible enough to cater to the different realities
442 of organizations from multiple sectors[3]. Working in close collaboration with cross-
443 sector implementers can assist in addressing solutions to overcome barriers ensuring
444 optimized execution of an initiative[8]. Pre-intervention discussions and advanced
445 planning can help anticipate contextual barriers by gaining a strong knowledge of
446 partners' realities. Collaborative planning can even help avoid unique barriers particular
447 to specific partners and reduce the likelihood that commonly experienced facilitators
448 become barriers.
449
450 The primary barriers experienced by all partners related to time, the intervention strategy
451 and having limited financial resources. Time was the most prominent theme for all
452 partners providing an indication of the importance of advance planning regardless of the
453 type of organization. Both time[24-27] and financial resources[28-30] are known and very
454 common barriers to intervention implementation often experienced at both the

455 organizational and user levels. There appears to be a need for strategies to help
456 organizations minimize time and cost-related barriers to cross-sector partnerships with
457 health agencies. Even though nearly all partners mentioned time as a major barrier to
458 implementation, the nature of the challenge differed according to partner group and/or
459 partnership agreement; in-kind partners spoke about the time intensive nature of the
460 mandate whereas delays and tough timelines were mainly issues for the media and health
461 organizations. A large majority of partners cited issues with the intervention strategy used
462 by HC. The EWC was a one-off campaign; however, had it been a program, the
463 perceived lack of intervention support could translate to the rejection or discontinuance of
464 the innovation potentially impacting the capacity for maintenance of a longer-term
465 intervention[(31)]. Collaborative planning and strong communication to help partners
466 understand the intervention strategy and rationale can be potential solutions for not only
467 overcoming this type of barrier, but also to leverage partners' expertise to find alternative
468 or more appropriate strategies.
469
470 For health organizations, audience segmentation appeared to be a concern for
471 intervention implementation. The vast geographic expanse, different regional realities
472 with regards to health needs and variable access to media in Canada is a major challenge
473 for any kind of national intervention. From a social marketing perspective, segmenting an
474 audience to determine which groups to target for an intervention and subsequently
475 tailoring it to meet their needs is a strategic standard; however, this type of strategy
476 involves considerable resources[(32)]. Nevertheless, in contexts where mass media access
477 may be variable, there are potential ethical considerations of using a non-segmented
478 approach, which may inadvertently exclude segments with less knowledge and further
479 promote health disparities[(33)]. For one health organization in particular, mass media
480 access was a major impediment to the adoption of the EWC[(9)], which turned into a
481 challenge during implementation and concern that a non-segmented approach could
482 exacerbate health inequities and exclude populations that were not part of the mainstream
483 target audience. The risks and benefits of employing a segmented approach would need
484 to be carefully weighed. It is important that interventions adopt the full scope of criteria
485 to effectively implement a social marketing campaign [(34)]. The intervention strategy was

486 strongly critiqued by partners, which is understandable given that the intervention's main
487 strategy (social marketing) did not appear to adhere to recommended benchmark criteria
488 laid out by experts[35, 36]. It was not clear to partners that the campaign sought to change
489 behavior, the prime objective of social marketing, or whether it was just "another
490 education campaign". Furthermore, partners perceptions of poor campaign visibility
491 indicate that the marketing mix criteria may not have been adequately addressed for the
492 EWC.
493
494 As mentioned previously, collaborative planning can anticipate and minimize barriers.
495 While all collaborators were defined as "partners", there was a major distinction in their
496 involvement depending on the types of their agreements with HC. Johnston and Finegood
497 (3) criticise the overgeneralisation of all types of collaborations as "partnerships" when
498 there is no shared-decision making or planning involved in the relationship, and suggest
499 the use of "public-private interaction or engagement". The later term better describes
500 many of HC's partners, particularly those involved in in-kind agreements. To improve
501 future interventions, it is important to define the extent of partnerships, their roles and
502 engage them in shared decision-making. These actions may help achieve greater
503 alignment between the private and public sector, facilitating implementation for all
504 parties involved, and ultimately leveraging partners expertise to increase the reach and
505 effectiveness of an intervention[3].
506
507 The authors are confident that data saturation was approached as no new information
508 came from additional interviews. Due to small sample size and easy identification of
509 highly recognizable organizations we had to group participants into partner groups (food
510 retailers, media and health organizations), and describe experiences collectively resulting
511 in a loss of data richness from the unique experiences of individual organizations. On the
512 other hand, the identification of high-level themes and subthemes, particularly those that
513 were experienced across partner groups and those with strong dualities, are likely to be
514 applicable to a wide range of government cross-sector partners in various settings and are
515 not just contextual facilitators and barriers specific to the implementation of the EWC.
516

Conclusion

Many barriers identified mirrored facilitators, and implementation of cross-sector initiatives could be enhanced by focusing on strengthening universally experienced elements (i.e., resources and communication). Strategies to overcome recurrent known barriers such as time are needed to optimize intervention implementation. Cross-sector partners have different organizational realities and will likely experience unique types of barriers. The effectiveness of an intervention could theoretically be optimized through engaging cross-sector partners in collaborative planning prior to implementation in order to foresee and address strategies to overcome potential barriers. In particular, the following practive points are recommended for public health organizations engaging in cross-sector partnerships.

- The importance of strong communication during all phases of implementation is not to be underestimated. Communication can be a strength when well exucuted, but communication gaps can seriously hinder effective and efficient implementation. Furthermore, poor communication or communication gaps can lead to unnecessary frustration and feelings of neglect. Consistent and appropriate communication throughout an intervention should include timely notices of changes to mandates, regular updates and feedback about performance and outcomes.
- Participatory planning of interventions is crucial when working in partnership, and it is particularly relevant for cross-sector collaborations where realities and resources of the parties involved may differ considerably. Participatory planning will prevent facilitators from turning into barriers and help anticipate barriers associated with specific types of partners. Furthermore, partners from different sectors likely have specific expertise that can be leveraged to optimize intervention strategies and outcomes. Therefore, including partners in intervention planning may minimize wasted time and resources during implementation.
- Advanced planning and prior agreements could help avoid unintended cessation of activities and facilitate the integration of an intervention within an organization. When engaging in-kind collaborations with cross-sector partners, it

548 is necessary to understand their individual realities in terms of level of
549 commitment, material and financial resources, competing interests and
550 organizational capacity.
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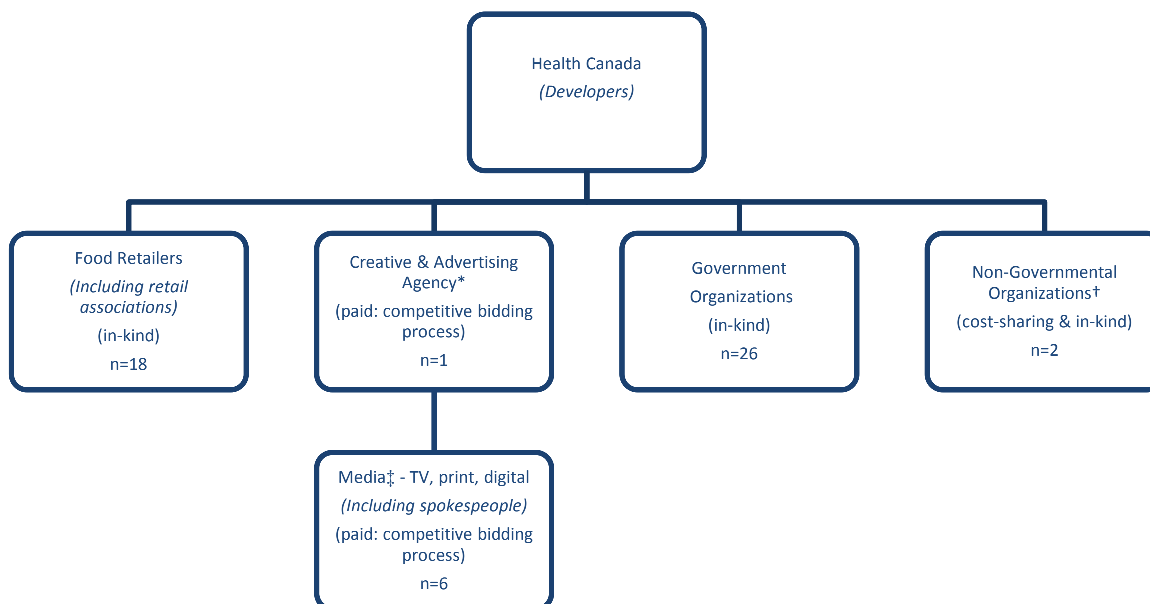
695 **Figures**



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697 **Figure 1. The *Eat Well Campaign: Food Skills* collaboration.** * The creative and
698 advertising agency was an intermediary between individual food retailers, the media and
699 Health Canada. † For reporting purposes, Non-Governmental Organizations were
700 combined with Government Organizations and are collectively called "health
701 organizations". ‡ For reporting purposes, media partners were combined with the creative
702 and advertising agency and are collectively called the "media". (Reprinted with
703 permission by Fernandez et al. 2016)

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715 # Tables

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Table 1 Key characteristics of participating organizations

Characteristic	Frequency (n)	Percent (%)
Type of partner		
Food retailers (retailers and retail associations)	8	38
Media (media, advertising, and spokespeople)	6	29
Health organizations (Non-governmental organizations, provincial, territorial and federal)	7	33
Type of agreement		
Contractual (paid or cost-sharing)	7	33
In-kind agreements (volunteer)	14	67
Regional activity†*		
National	8	38
Most Provinces and Territories	2	10
West Coast and Prairies	3	14
Central Canada	4	19
Maritimes or Far North	4	19

† Regional definitions: West Coast, British Columbia; Prairies, Alberta, Saskatchewan and Manitoba; Central Canada, Ontario and Quebec; Maritimes, Newfoundland and Labrador, New Brunswick, Nova Scotia and Prince Edward Island; Far North, Yukon Territory, Northwest Territory and Nunavut. * Some groups were combined to maintain the confidentiality of easily identifiable participants.

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Table 2 Major themes identified by different groups of cross-sector partners as facilitators and barriers to the implementation of the Eat Well Campaign: Food Skills (2013-2014)

	Facilitators (n sources = 20)				Barriers (n sources = 21)			
	FR	M	HO	Total	FR	M	HO	Total
Operational elements	0	0	0	0	8	6	6	20
Intervention factors	8	6	3	17	7	6	6	19
Resources	6	6	6	18	8	3	6	17
Partnership factors	6	6	5	17	0	0	0	0
Developer (Health Canada) traits	6	5	5	16	5	6	3	14
Collaborator traits	5	6	5	16	6	2	4	12
Target population factors	0	0	0	0	5	5	6	16

FR, Food retailers; M, media; HO, health organizations

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Table 3 Descriptions of themes and sub-themes that emmerged as facilitating factors for cross-sector partners during the implementation of the Eat Well Campaign: Food Skills (2013-2014)

Themes and subthemes	Description	Number of partners
Resources		18
Material ressources	Good quality or attractive posters, visuals, information sheets and advertising ressources	16
Financial resources	Adequate budgets allocated to execute activities	9
Human resources	Sufficient and competent staff available to execute activities	5
Intervention factors		17
Nature of the campaign	The positive, easy going, socially accepteable messages made the campaign easy to promote	15
Organized	Activites were well organized and planned	6
Easy work	The activites were easy to implement	5
Subsequent phases easier	The second and subsequent phases were easier to implement than the first	4
Partnership factors		16
Good relationship	Good working relationships between collaborators made implementation easier	10
Collaboration	Many organisations working together to advance the same objective	9
Positive experience	Being involved in the EWC was a good experience for partners	8
Worked together before	Having previous work experience with Health Canada made implementation easier	5
Excellent liaison	Having a liaison made working with Health Canada easier	3
Developer (Health Canada) traits		16
Good communicators	Essential information communicated at appropriate times and feedback provided	12
Nice, helpful, polite	Health Canada's staff were pleasant	5
Flexible and supportive	Health Canada provided support for activity implementation and gave partner's flexibility	5
Trusting	Gainning Health Canada's trust was important	3
Collaborator traits		16
Understanding and accomodating	Sympathetic, tolerant and forgiving of inconveniences, obliging and cooperative	11
Committed	Dedication to campaign implementation	10
Philantropic nature	Generous and benevolent, interested in the welfare of clients/population	7
Trusted source	Partner's were a reputable source of information and expertise	4

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Table 4 Descriptions of themes and sub-themes that emmerged as barriers for cross-sector partners during the implementation of the Eat Well Campaign: Food Skills (2013-2014)

Themes and subthemes	Description	Number of partners
Operational elements		20
Time	Delays, tight timelines and time consuming activities	19
Integration conflicts	Difficulties integrating campaign activities into organizational plans	12
Restrained mandate	Limitations to contracts and agreements that prevented the best implementation of activities	4
Intervention factors		19
Issues with strategy	Criticism of the appropriateness of the campaign strategy	12
Ineffective messaging	Criticism and doubts over the ability for campaign messages to break through to the audience	8
Visibility	Some campaign elements were not adequately promoted	7
Activity maintenance	Could not continue activities or had to reduce extent of implementaton in 2nd and subsequent phases of the campaign	5
Resources		
Financial resources	Inadequate or no budget allocated to the campaign	13
Human resources and	Inadequate staff allocated to the campaign	9
expertise		17
Material	Materials not adapted to population or not in an appropriate/usable format	4
Target population factors		16
Audience segmentation	Differences within the population	8
Level of readiness	Population may not be open to campaign messages and behavior change	6
Time restrictions	Parents have busy schedules and might not have time to change behaviors	5
Affordability	Perceptions that healthy eating is not affordable	4
Lack of knowledge	Parents might not have enough knowledge to make changes	4
Developer traits		14
Demanding work	Tough approval process, rigidity or processes, control of information, changes to mandates and directions	10
Poor communicators	Communication gaps, inefficient communication, little or no direct contact with Health Canada	9
Collaborator traits		12
Frustrated	Expressions or disappointment or annoyance about activity implementation	7
Flyer space constraints	Competition with valuble advertising space	5
Political constraints	Government politicies or programming that prevented implementation of activities	3
Reservations working with competitors	Difficulties working collborating with competitors	3

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