



An audit of the dissemination strategies and plan included in international food-based dietary guidelines

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Abstract

Objective: Food-based dietary guidelines (FBDG) are an important resource to improve population health; however, little is known about the types of strategies to disseminate them. This study sought to describe dissemination strategies and content of dissemination plans that were available for FBDG.

Design: A cross-sectional audit of FBDG with a published English-language version sourced from the United Nations FAO repository. We searched for publicly available dissemination strategies and any corresponding plans available in English language. Two authors extracted data on strategies, which were grouped according to the Model for Dissemination Research Framework (including source, audience, channel and message). For guidelines with a dissemination plan, we described goals, audience, strategies and expertise and resources according to the Canadian Institute for Health Research guidance.

Setting: FBDG from fifty-three countries mostly from high-income (n 28, 52.8%), and upper-middle income (n 18, 34%) areas were included.

Participants: *n/a*.

Results: The source of guidelines was most frequently health departments (79.2%). The message included quantities and types of foods, physical activity recommendations and 88.7% included summarised versions of main messages. The most common channels were infographics and information booklets, and the main end-users were the public. For twelve countries (22.6%), we were able to source an English-language dissemination plan, where none met all recommendations outlined by the Canadian Institute for Health Research.

Conclusions: The public was the most frequently identified end-user and thus most dissemination strategies and plans focused on this group. Few FBDG had formal dissemination plans and of those there was limited detailed provided.

Keywords
Dietary guidelines
Dissemination
Knowledge translation
Implementation science
Reach
Adoption

Country-level food-based dietary guidelines (FBDG) are developed to provide guidance on what constitutes a healthy diet, and they typically form the basis of national and local nutrition policies for reducing dietary risk factors in the population^(1,2). FBDG include recommendations on the quantities and types of foods that are required for maintenance of overall health and wellbeing, with many also including broader recommendations on contextual factors that can influence dietary intake, such as regional

and cultural variations in local food^(3–5). More recently, FBDG have been identified as an important resource to improve the health of the population and provide an opportunity to address multi-sectoral issues across food systems that impact on dietary intake and broader environmental issues⁽⁶⁾.

To date, the discussion surrounding the development of FBDG has centred on ensuring a rigorous, research informed and transparent process^(4,5,7,8) so that recommendations are evidence-based and free from conflicts of

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interest. This process is usually overseen by an expert committee and underpinned by systematic reviews of the best available evidence on foods/nutrients and their influence on health and ability to mitigate development of chronic diseases. A frequent criticism of the process of guideline development, however, is the lack of consideration of implementation and dissemination strategies to support uptake of FBDG by end-users⁽⁹⁾.

The end-users of FBDG are varied and include the public, those working in health, food and nutrition and stakeholders from government, non-government and private/industry food producers, policy makers and providers. These end-users have different reasons for accessing and using FBDG, and therefore are likely to vary in terms of their preferences for receiving and interacting with information. For example, systematic reviews have shown that policy makers report access and timeliness barriers to using research evidence, and the way in which a message is framed and who they are receiving the information from (e.g. relationship with researchers/staff) can facilitate guideline and evidence use^(10,11). As such, dissemination strategies that are targeted to different barriers and information requirements of end-users are needed to facilitate adoption and achieve the intended population gains of FBDG.

Recognising this, leading guideline producers including the World Health Organization (WHO), Agency for Health and Research Quality and the National Institute for Health and Care Excellence recommend that all guidelines include a pre-specified plan that outlines intended dissemination approaches^(2,12,13). Dissemination is regarded as a planned process that involves consideration of target audiences, the settings in which research findings are to be received, and communicating and interacting with wider audiences in ways that will facilitate research uptake and understanding⁽¹⁴⁾. A dissemination plan is crucial to increase the impact of FBDG, as it allows for stakeholders and end-users to be systematically identified in the planning process, targeted strategies proposed and expertise and resourcing needs to support dissemination identified⁽¹⁵⁾. Additionally, dissemination strategies tailored to relevant audiences can increase effectiveness of uptake,^(16,17) reach and adoption of such guidelines. Many publishers, however, do not include explicit recommendations on what should be included in a dissemination plan. The Canadian Institute for Health Research provides some guidance on developing a plan, including the need to adequately address the following elements: specific goals, the identified audience, dissemination strategies, as well as the expertise and resources required to deliver these strategies^(18,19). Such guidance is consistent with review evidence regarding effective strategies and broad guidance by WHO^(17,20,21).

There are limited available data on whether FBDG have a formal dissemination plan and whether they adhere to the CIHR recommendations. Wijesinha-Bettoni⁽⁹⁾ et al.

surveyed twenty-seven countries and found that fourteen had a strategy/plan for implementation (all of which also included elements of dissemination). This study did not describe what was included in the dissemination plans, however, found that dissemination strategies frequently focused on engaging the public as end-users and most included social media campaigns as a primary strategy ($n = 22$). Eighteen countries were reported as having educational materials for students/teachers or providing training for health professionals. Less than half ($n = 11$) had an allocated budget for implementation and dissemination, while an additional three ($n = 14$) had a budget for dissemination only.

To inform future efforts to increase the dissemination and therefore impact of FBDGs, we undertook an audit of FBDGs published between 2000 and 2021 to identify: (i) the types of dissemination strategies; and (ii) those that had a dissemination plan. Of those that had an explicit dissemination plan, we also sought to: (iii) describe the goals, audience, strategies, expertise and resources for that plan (consistent with that recommended by the CIHR dissemination guidance) and (iv) the extent to which each of the components had been addressed.

Methods

Design and sample

This was a cross-sectional, desktop audit of FBDG listed on the FAO website⁽²²⁾. The FAO maintains an updated repository which lists the development, use and evaluation of all FBDG of countries internationally (<http://www.fao.org/nutrition/education/food-dietary-guidelines>). All information and materials on the website are sourced and verified by the responsible government agency at the country level.

All English language guidelines (or guidelines with an English translation) that were published or updated since the year 2000 as indicated on the FAO website were included. This time frame captured all guidelines with an English language translation. Where there were multiple guidelines for a country (for example, separate guidelines for children and adults), the guidelines that described recommendations for the adult population were included. For countries where only summary documents were available on the FAO website, a Google search was undertaken to locate the comprehensive full text guidelines for that country.

Where a guideline was included, additional publicly available English-language dissemination resources were sourced by examining supplementary resources published on the FAO or the main guidelines website. For example, the FAO or the main guideline website often contained additional dissemination material such as summaries or infographics or links to other materials. One researcher (LB, CW) searched all additional links and any additional

sources arising from this. Additionally, Google and Google Scholar searches were undertaken using the guideline name, as well as the country name and 'dietary guidelines' (e.g. Belgium and dietary guidelines) as search terms, with the first 100 results screened by a single author for any citations reporting relevant or additional dissemination strategies.

Data extraction

The following fields were extracted for all eligible guidelines from the FAO website and/or the guideline itself in December 2021:

Guideline characteristics: country name, region, World Bank income classification, population of country, guideline name, intended audience (i.e. group type targeted), dietary-only or including other recommendations (e.g. with physical activity), year of publication, author/organisation responsible for developing guidelines, stakeholders and presence of a dissemination plan for guidelines (yes/no).

Dissemination strategies

Dissemination strategies were defined as materials focused primarily on communicating results by targeting and tailoring findings and messages to a specific audience⁽²³⁾ and were extracted independently by two authors (HT, CW, LB) for all included guidelines. We described dissemination strategies according to the Model for Dissemination of Research which formed our synthesis framework⁽¹⁷⁾. This model integrates other communication theories including the Diffusion of Innovations Theory, Social Marketing Theory and Matrix of Persuasive Communications and has been widely used to inform and evaluate dissemination approaches to inform policy. The identified dissemination strategies were grouped under the four key components including the source (the organisations involved in publishing and publicly endorsing FBDG), message (the specific content and detail around what is being communicated and how the content is presented (if available)), audience (who is the specified target end user (if available)) and the channel (how the message gets delivered from the source to the specific target end-user).

Dissemination plan characteristics

A dissemination plan was defined as a specific component, section or document (either incorporated as part of the guidelines or as an additional resource), which specifies a systematic or planned approach and/or recommendation for dissemination. A dissemination plan should outline to some extent how the FBDG will be shared, communicated and distributed to the target audience. We also classified a country as having a dissemination plan where the producers of the guideline reported an explicit dissemination plan. These data were extracted by one author (LB) and checked by a second author (HT, CW). Where an explicit dissemination plan existed, information about components were extracted independently and in duplicate by authors

(LB, MF, ED and CB) and checked by another author (HT). This included mapping the contents or features of the plan into the following components: goals, audience, types of dissemination strategies, expertise and resources consistent with that recommended by the CIHR^(18,19). Two authors (SY, HT) also assessed the extent that each of the components of the plan were addressed according to guidance by the CIHR (ranked as not at all, minimally, partially and fully; see Appendix A). Plans were rank as fully meeting each of the elements if all criteria within each component was addressed.

Data analysis

All quantitative data analysis was undertaken using Microsoft Excel. We calculated the number and percentage of included countries that reported having a dissemination plan and the different types of dissemination strategies. We also narratively described the content of the dissemination plans.

Results

Characteristics of dissemination strategies included in guidelines

Of the ninety-five countries with FBDG published on the FAO website at the time of data extraction (see Appendix B for all included countries), 53 (55.8%) were published in English or had English translations available. Of these, thirty (56.6%) were also published in another language (typically the native language of the respective country, e.g. Japanese for Japan, or Swedish for Sweden). Fourteen (26.4%) were published or most recently updated prior to 2010, twenty-two (41.5%) between 2010 and 2015 and seventeen (32.1%) between 2016 and 2021. FBDG were mostly from countries classified as high-income (n 26, 49.1%) or upper-middle income (n 17, 33.2%) according to the World Bank categorisation. Eight lower middle income countries (15.1%) and two low-income countries were included (3.9%). Most guidelines targeted children (those 2 years and older or 5 years and older) and adults within a single guideline (n 47, 88.7%). Commonly these guidelines included specific recommendations or sections for population sub-groups other than adults such as older adults, pregnant women or children. One country (Cambodia) only had guidelines available for children aged 6–17 years. Table 1 summarises the dissemination strategies included in the fifty-three FBDG.

Dissemination strategies

Source. Government health departments were the most frequently reported source (i.e. publisher/s) of the FBDGs (79.2%), followed by nutrition and/or food-related organisations (30.2%), agriculture and/or related organisations (24.5%) and the FAO (22.6%) (see Table 1). Other source organisations included public health/health promotion

Table 1 Types of dissemination strategies employed within food-based dietary guidelines categorised by source, message, channel and audience

Dissemination strategies	<i>n</i>	%
Source (i.e. publisher)*		
Health (Ministry/Department)	42	79.2 %
Public Health/health promotion (government/non-government organisations (NGO))	10	18.9 %
Agriculture (and/or related)	13	24.5 %
Education	9	17.0 %
Economic/commerce	2	3.8 %
FAO	12	22.6 %
Health scientific organisation	3	5.7 %
Nutrition (and/or food-related organisation)	16	30.2 %
Dietary-related chronic disease organisation	1	1.8 %
Academic (e.g. university)	5	9.4 %
Youth/child-related organisations	1	1.8 %
WHO	3	5.7 %
Message*		
Types and quantities of food	52	98.1 %
Nutrient/nutrient content	20	37.7 %
Infant feeding guidelines	11	20.8 %
Meal ideas/planning healthy meals	11	20.8 %
Food safety	19	35.8 %
Physical activity	38	71.7 %
Climate/environmental impacts	2	3.8 %
Summarised messages (e.g top 5 messages)	47	88.7 %
Life-stage specific food recommendations	10	18.9 %
Channel*		
Manual	4	7.6 %
Infographic	41	77.3 %
Brief document (1–2 pages)	15	28.3 %
Guide for health care professionals	4	7.6 %
Brochures	6	11.3 %
Posters	7	13.2 %
Summary/information booklet	40	75.4 %
Consumer education materials	11	20.8 %
Translated materials	4	7.6 %
Audience*		
Healthcare providers/professionals	14	26.4 %
Policy makers/government officials	7	13.2 %
Educators/teachers	8	15.1 %
Media/journalists	2	3.8 %
Public	49	92.5 %
Those working in food supply	3	5.7 %

*Total is more than 100 % as guidelines had more than one strategy.

agencies, education departments, economic/commerce departments, health-related scientific organisations, WHO, universities, dietary-related chronic disease organisations and youth/child-related organisations.

Message. The message was operationalised as the types of recommendations included within FBDG. Fifty-three countries included recommendations regarding quantities and types of foods, whilst twenty (37.7 %) included specific recommendations outlining key nutrients of interest (e.g. sugar, salt). Forty-seven (*n* 47, 88.7 %) included summarised versions of these recommendations. Additionally, thirty-eight (*n* 38) FBDG included recommendations related to physical activity, and eleven (20.8 %) addressed infant feeding recommendations. A range of other topics were addressed in the guidelines including food safety, life stage specific food recommendations, meal planning ideas and climate change and/or environmental impacts of food choices.

Channel. The use of infographics (i.e. visual representation of the recommendations that are presented in an easily understandable form) was the most common channel for dissemination (*n* 41, 77.3 %). Examples of visuals within FBDG included choosing designs of cultural and/or symbolic relevance that target audiences could relate to (e.g. pagoda in China, cedar tree for Lebanon, food basket for Belize and coalpot for St Lucia). Fifteen (28.3 %) countries also produced brief summary documents of the key messages and forty (75.4 %) produced more detailed information booklets. Four countries (7.6 %) produced guides specifically for health care professionals and eleven (20.8 %) produced consumer education materials. Other information formats included manuals and posters, while only four had translated materials (into languages other than main spoken language of the country).

Audience. The general public were the primary end-users for the FBDG and their associated dissemination

Table 2 The extent to which the Canadian Institute for Health Research recommended components were addressed

Country	Goals	Audience	Strategies	Expertise	Resources
Albania	Minimally	Minimally	Minimally	Minimally	Partially
Bahamas	Minimally	Partially	Minimally	Minimally	Partially
Cambodia	Minimally	Minimally	Partially	Not at all	Not at all
Dominica	Not at all	Minimally	Minimally	Minimally	Minimally
Grenada	Not at all	Minimally	Minimally	Minimally	Minimally
Japan	Minimally	Partially	Partially	Partially	Not at all
Kenya	Minimally	Fully	Fully	Fully	Fully
Oman	Partially	Partially	Partially	Not at all	Not at all
Sierra Leone	Minimally	Not at all	Partially	Not at all	Not at all
St. Lucia	Not at all	Minimally	Minimally	Minimally	Minimally
St. Vincent and the Grenadines	Not at all	Minimally	Minimally	Minimally	Minimally
United States	Not at all	Partially	Minimally	Minimally	Not at all

products in 49 (92.5%) countries, followed by health care providers/professionals (n 14, 26.4%), policy makers/government officials (n 7, 13.2%), educators/teachers (n 8, 15.1%), those working in the food supply sector (n 3, 5.7%) and media (n 2, 3.8%).

Dissemination plan

Of the fifty-three countries included in our study, we were able to locate an English-language dissemination plan included as part of the guidelines and/or in a separate document for twelve countries (22.6%). Four countries (7.5%; Dominica, Grenada, St Lucia, St Vincent & the Grenadines) had the same dissemination plan with the recommendation to adapt the messages and strategies for each country.

Extent to which Canadian Institute for Health Research recommended components were addressed

Of the twelve countries with an English-language dissemination plan included in our study, none fully addressed all recommended components outlined by the CIHR as recommended in Appendix A (see Table 2). One country fully addressed four of the five components (audience, strategies, expertise and resources) but did not include clearly defined goals. The goals, expertise and resources components were most poorly addressed across all plans. Five countries did not specify a goal, three did not outline the required expertise and five did not identify whether any resources were allocated to implement the dissemination plan. The other components (i.e. audience, strategies) were most frequently minimally or partially addressed.

A summary of the information presented in each dissemination plan, mapped against the CIHR components is described below, with complete extraction for each country provided in Appendix C.

Goals. The nine countries that specified goals primarily focused on increasing knowledge and awareness of the recommendations and informing behaviour change. Three countries also included a goal to inform/change policy/legislation, whilst Japan had a specific goal related to preserving traditional dietary practices.

Strategies. Planned dissemination strategies primarily involved the distribution of guidelines via a range of resources including web pages, educational materials and communication strategies involving advertising through print, mass and social media as well as promotion through food retailers and food outlets.

Other proposed strategies included informational and educational sessions to a range of lay and professional audiences; meetings and workshops with stakeholders and promotion of FBDG messages through health, industry and community champions. One country had an extensive list of proposed dissemination strategies including those to be implemented prior to guideline release such as sensitisation meetings and consultative forums; development of a comprehensive social marketing strategy; field visits; incentives for health professionals to attend training sessions such as professional development credits and a detailed monitoring and evaluation plan. Additionally, Oman included a strategy to distribute fruit and vegetables to target communities.

Audience. The targeted audience in dissemination plans included the public, health professionals, the education system and educators (including primary schools and day cares), agricultural professionals, community organisations and non-governmental organisations representing vulnerable groups, policy makers, journalists, researchers, social leaders in the community, decision makers responsible for developing and implementing and government program deliverers.

Expertise and resources

There was varying detail about the expertise needed and the availability of any allocated budget for plan dissemination. Two countries specified that a budget was allocated, however, provided no additional details, with only one country providing extensive detail about cost and source of funding (grant/donation requests). Four countries identified the need to source partners who could provide support to obtain financial resources. Two countries specified the delivery agency and outlined specific expertise needed (e.g. communication specialists, national coordinators, graphic



artists, dietitians and various government departments). One also outlined the need for country-specific expertise and the coordination of national agencies to execute the dissemination plan.

Discussion

Our study sought to describe the types of dissemination strategies employed by various countries to support adoption of their FBDG locally, whether a formal dissemination plan existed, and the extent that these plans addressed recommended elements. We found that published dissemination plans were rare and did not include the detail recommended by the CIHR. Perhaps unsurprisingly, we found that most did not employ comprehensive dissemination strategies and executed strategies that primarily targeted the public. Such findings identify considerable scope to improve the dissemination of food-based dietary guidelines, and in doing so their impact in improving population nutrition.

The source of the guidelines in most countries was health and nutrition agencies; however, public health, agriculture and education agencies were also involved in producing guidelines. For several low- and low-middle income countries, the FAO had a significant role in supporting the development of the guidelines, often together with the WHO, and thus could also be considered a source of the guidelines. The involvement of a diverse range of agencies in guideline development has been suggested as way to increase buy-in and support implementation of these guidelines amongst varied stakeholders⁽²⁾; however, some concerns have been raised regarding potential conflict of interests in the development process, as well as the challenges faced when bringing together a broad range of diverse voices^(24–26).

We found that the guidelines often included a range of recommendations beyond food types and quantities, including information about food safety and physical activity recommendations, and almost 90% attempted to summarise the key messages. Although there has been increasing recognition that FBDG should be broadened to include environmental sustainability and climate health concerns, our audit found few FBDG explicitly addressing this. This is consistent with a previous review that found only thirty-seven of eighty-three FBDG mentioned environmental sustainability; however, this was often restricted to a general explanation of what a sustainable diet is⁽²⁷⁾. Given the opportunity it provides to improve climate health, future iterations of the FBDG aligning with the sixteen principles of sustainable and health diets published by in an FAO and WHO report is needed⁽²⁸⁾.

Research on FBDG message presentation has highlighted that consumer uptake of key messages can be enhanced if they are simple, goal orientated, use positive

framing and employ collective identity techniques to help target users situate their food-related behaviours⁽²⁹⁾. Given the large number of recommendations usually included within FBDG, attempts should be made to simplify, distil and better frame key messages to suit different audiences, to increase their awareness, understanding and uptake. For example, lay summaries, different methods of data visualisation and clear behavioural specification should be outlined in dissemination plans to facilitate different information needs.

The use of infographics, followed by written summaries and information booklets, was the most frequently used channels to disseminate key guideline messages. This is unsurprising given that the public was the main targeted audiences of FBDG. However, few included countries produced printed materials that were targeted at different end-users of FBDG (e.g. health care professional resources or translated resources). Such findings may account for the lack of knowledge of FBDG among health professionals and non-health professionals. For example, only 13% of Australian GP were familiar with the 2013 Australian Dietary Guidelines⁽³⁰⁾, and there is overall poor knowledge and adoption of nutrition guidelines in settings such as school and childcare centres, who provide food to large segments of the population^(31–33).

Many guidelines also targeted stakeholders who were responsible for implementing these FBDGs into different contexts or settings, such as policy makers, educators/teachers, health care providers and the food industry. Although there was some acknowledgement of different end-users, there was often an absence of targeted materials for nutrition, health, education and industry end-users. Other authors have also highlighted a need for training in the use of FBDG to be provided to health and non-health professionals who influence food availability and dietary habits, such as childcare educators and teachers, caterers and administrators of health and social services^(25,34).

To increase the reach of FBDG, a range of dissemination strategies that systematically considers how to align source, message, channel to the preferences of different end-users is needed. Broad dissemination guidance from the FAO suggests that developing tailored, value-based messages targeted at specific end-users or segments of the population, ensuring clear and accessible messaging, using multiple channels of communications including traditional and social media, engaging with health promotion efforts and community outreach, may be useful to increase the reach of FBDG⁽²⁾. However, our recently published scoping review found limited empirical data regarding the impact of such strategies on increasing the dissemination of public health interventions or guidelines more broadly⁽³⁵⁾.

Similar to others⁽⁹⁾, our audit found that only a small number of low-income countries had published FBDGs. It is possible that a lack of resources to develop and implement guidelines, a focus on interventions that address



more acute nutritional needs, data limitation and potential policy and governance challenges may account for this. Recognising the benefits of FBDGs for these countries, there have been efforts by the WHO and FAO to support the development and tailoring of FBDGs to consider the culture, context and infrastructure of the specific country. Notably, in an effort to support development in countries without an existing FBDG, the FAO put out calls for proposals to support the development and field testing of FBDG message and foods guide in 2019.

Despite recommendations to include dissemination plans for FBDGs, only twelve of the 53 countries in our study had a separate document or a defined section within the guidelines outlining an approach and/or recommendations for dissemination published in English. Amongst these countries, all except one addressed recommended components outlined in the CIHR (goals, audience, strategies, expertise and resources) to a minimal or partial extent. One country was rated as fully addressing four out of five components. No plan was rated as fully outlining clear goals for dissemination, and most did not describe their process for identifying relevant end-users. Most plans included broad dissemination strategies that were not sufficiently targeted towards intended audiences and did not explicitly address barriers and facilitators to knowledge use. Further, consistent with previous research⁽⁹⁾, there was limited detail provided of the expertise, implementation agencies and allocated budget needed to execute the plan. It is crucial to support the development of dissemination plans for FBDG as these plans allow the developers to better consider the information needs of the end-users of guidelines and to tailor messages and strategies to meet them.

Health communication research and methods have been applied to better understand how to frame messages or communicate guidelines in a way that increases public awareness of FBDG⁽²⁹⁾. This may have contributed to the reported improvements in the public's familiarity and awareness of the guidelines, although there is still a lack of understanding and use of FBDG in daily food choices⁽³⁶⁾. In contrast, little is known about methods to communicate FBDG to those who are responsible for supporting their implementation. There are fundamental differences in how the public understands and uses FBDG compared with guideline implementers. Dissemination and implementation science approaches seek to understand how to increase the spread, adoption and integration of evidence-based guidelines, thus providing an opportunity to systematically understand how to increase adoption of such guidelines amongst health care and non-health care professionals^(37,38). For example, a previous trial by the authors found that tailoring dissemination materials according to the theory of planned behaviour can improve intentions to adopt nutrition guidelines by childcare providers and improve the provision of fruit and vegetables on childcare menus⁽³⁹⁾.

Limitations

This study has several limitations. We included only guidelines that were listed on the FAO website and such this study does not include countries with FBDG not available on the FAO website at the time of our search. We sourced dissemination strategies that were publicly online and as such may have missed other materials. Our findings, however, are similar to a previous study where key informant surveys were undertaken to identify reported dissemination and implementation strategies for FBDG^(3,9). We excluded content such as blogs or other education materials produced by individuals/individual organisations as we were primarily interested in identifying dissemination strategies that were part of a coordinated approach undertaken by guideline producers. The dissemination plan outlines the proposed strategies; therefore, it is unknown if the strategies were implemented as planned. We excluded non-English translated guidelines and dissemination plans, which could have limited representation of non-English speaking countries; however, over 50 % of all guidelines were included in our final sample. Lastly, we were primarily interested in push strategies (i.e. efforts to tailor and target key messages arising from the guidelines by making it more accessible and easier to use) rather than pull strategies (i.e. how policymakers are supported through processes and structures to demand evidence from the research community)⁽²³⁾. As such, this study does not comprehensively describe pull strategies that may have been used.

Conclusions

This study found that a range of dissemination strategies have been applied to increase uptake of FBDG. Although there was recognition of a varied end-users, most strategies were targeted at the public. Few guidelines had a formal dissemination plan, and all but one of the plans were consistent with best-practice guidance. There is an opportunity to increase the impact of FBDG by prioritising the development of formal dissemination plans during the guideline development process. Within this plans, there needs to be a focus on improving the specification of goals and better describing expertise and budget allocated for this process. Additionally, more research on how to improve dissemination and implementation of these guidelines to health and non-health care professionals, as well as other sectors where these guidelines are likely to influence practice.

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Conflict of interest

S.Y., H.T., C.K.W., L.B., M.F., C.B., E.D. and L.W. declare no relevant conflict of interest.

Authorship

S.Y. and L.W. conceptualised the study idea. S.Y., H.T., L.B. developed study protocol and search strategy. H.T., C.W., L.B., M.F., C.B. and E.D. undertook data extraction and checking. S.Y., H.T., C.K.W. coded extraction according to specified frameworks. S.Y. drafted the first version of the manuscript. All authors provided critical input into interpretation of study results and approved the final version of the manuscript.

Ethics of human subject participation

No ethics approval was required for this manuscript.

Supplementary material

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