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# Developing a Grain Fortification Social Marketing Toolkit for Advocates Worldwide

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2008

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## **Abstract**

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Nearly 30% of the world's population suffers from micronutrient deficiencies.<sup>1</sup> One of the most effective interventions to reduce micronutrient deficiencies is fortifying staple foods, like cereal grains, with vitamins and minerals. A successful fortification program depends on the participation of key stakeholders who must be reached and encouraged to take action in favor of grain fortification. Social marketing campaigns have the potential to foster behavior change to support fortification in a broad range of stakeholders.

The Food Fortification Initiative (FFI) advocates for fortification of cereal grains and provides technical assistance to countries in pursuit of this goal. FFI identified gaps in the communication support it provides to countries interested in fortifying their wheat and maize flour and rice.

The goal of this special studies project is to create a toolkit for country leaders and nongovernmental proponents of fortification to support their social marketing and advocacy efforts. This toolkit will guide them through the design, implementation, and evaluation of a social marketing campaign.

The toolkit is based on a literature review of the best practices from the field of social marketing. It also includes several case studies, the most substantial from Armenia. A flour fortification social marketing strategy for Armenia was developed with UNICEF Armenia during the summer of 2013. The Armenia social marketing strategy drew on a literature review, market research, key informant interviews, and participant observation. The toolkit also highlights case studies from New Zealand, South Africa, and the United States of America.

This toolkit is designed to support the development, implementation, and evaluation of social marketing campaigns based on best practices and to increase the likelihood of a fortification program's success. It also expands the capacity of FFI to offer more advocacy and communications support to countries interested in starting a fortification program. FFI plans to pilot test the toolkit and to market and promote its use.

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## Chapter 1: Introduction

### *Introduction and Rationale*

Over 2 billion people suffer from deficiencies in vitamins and minerals, such as vitamin A, iodine, iron, and zinc.<sup>1</sup> More than 30% of the world's population are anemic, mainly due to iron deficiency.<sup>2</sup> Developing countries are impacted in particular with 50% of pregnant women and 40% of preschool children suffering from anemia.<sup>2</sup> Iron deficiency anemia is exacerbated by diseases such as malaria, HIV/AIDS, tuberculosis, and worm infections, that may be prevalent in developing countries.<sup>2</sup> Anemia impacts individual and societal wellbeing through ill health, low energy and productivity levels, and premature death.<sup>2</sup> However simple interventions that increase vitamin and nutrient intake can improve health and people's lives.

The Food Fortification Initiative (FFI) has been working for 11 years to promote the fortification of cereal grains worldwide with micronutrients, such as iron, folic acid, and zinc to improve nutrition. Its vision is for 'smarter, stronger, healthier people worldwide through improved vitamin and mineral nutrition.' For its first several years, FFI focused primarily on wheat flour fortification, but recently it has been expanding its scope to include maize flour and rice. While many groups campaign to fortify staple foods, FFI is the only organization that is solely dedicated to the fortification of cereal grains. FFI's staff and network of partners comprise the leaders in this field.



Fortifying cereal grains is an intervention to address high iron deficiency rates and other micronutrient deficiencies which can lead to birth defects like spina bifida. Addressing these deficiencies has health and economic benefits. Fortifying wheat flour has been particularly successful at reducing the prevalence of neural tube birth defects. One study estimated that 38,417 birth defects a year are prevented worldwide due to this intervention.<sup>3</sup> Countries which fortify grains can also expect to reap economic dividends, especially when healthcare expenditures associated with treating children with neural tube defects are compared to the minimal costs of fortification.<sup>3</sup> The Copenhagen Consensus Center (CCC) conducts research and analyzes development-related spending priorities for governments and philanthropists. Every four years, the CCC brings together the world's top economists to consider the best investments to address global concerns and determine the most cost-effective development strategies. Confronting micronutrient deficiencies through fortification of staple foods was determined to be one of the top two interventions at the last three meetings in 2004, 2008, and 2012.<sup>4</sup> Cereal grain fortification is extremely cost effective; the cost of fortification is quite small compared to the money saved in healthcare costs and lost labor. For instance "based on a 10-year projection, Indonesia could see a return of \$8 in program benefits for every \$1 of estimated costs to fortify flour with iron, folic acid, and other nutrients."<sup>5</sup>

Currently 79 countries have legislation to mandate wheat flour fortification.<sup>6</sup> In 2004, only 33 countries had legislation.<sup>6</sup> In addition, seven countries fortify at least half of their industrially milled wheat flour through voluntary efforts.<sup>6</sup> FFI estimates that in 2013, 31%

of the world's industrially milled wheat flour was fortified with at least iron or folic acid, which is up from 18% in 2004.<sup>6</sup>

FFI and other groups that promote fortification have found that cereal grain fortification is most sustainable and successful when it is implemented by national stakeholders, including government officials, grain industry leaders, civic-sector advocates, and nongovernmental organization (NGO) staff. FFI collaborates with these multi-sector partners to provide them with technical training and advocacy assistance.

In addition, FFI promotes mandatory legislation as this ensures the widest reach of fortified products. Millers typically prefer mandatory fortification because it means everyone in the industry has to bear similar costs and prevents some millers from offering slightly cheaper, unfortified flour. Voluntary fortification has been tried in many countries, but countrywide fortification is rarely reached in this way and thus the health benefits are not widely distributed. If a country imports a significant amount of its flour, then legislation can also require importers to fortify. Failing this, the health impact may be diminished depending on the amount of unfortified flour imported.

### *Problem Statement*

FFI works closely with national stakeholders to help build their fortification capacity. Two of FFI's key service areas are technical assistance and advocacy. Technical assistance includes building capacity to actually fortify and monitoring programs to ensure quality.

Advocacy includes encouraging policy makers to create legislation that makes fortification mandatory and encouraging other audiences to take action for grain fortification.

FFI staff typically provide technical assistance at regional workshops and by sending consultants to countries as requested. They help millers identify the equipment needed, how to use the equipment on a daily basis, what systems need to be in place to monitor fortification, etc. In addition to workshops and consultants, FFI has created a Flour Millers Toolkit to educate millers on health benefits, procurement of premix, mill set-up, system operations, quality control, and advocacy and marketing. The Flour Millers Toolkit is available in English in PowerPoint format on the FFI website, and older versions are available in Arabic, Chinese, French, and Russian.

Despite the straightforward science that shows the health and economic benefits of fortification, key stakeholders still need to be convinced that it should be done. According to Quentin Johnson, FFI's Training and Technical Support Coordinator, flour millers around the world share a lot of common characteristics, and they are relatively easy to convince to fortify their grains.<sup>7</sup> However advocating with policy makers is more challenging, because every government is unique and has its own set of hurdles. Yet policymakers are a critical target audience as they hold the key to creating legislation that will make fortified cereal grains mandatory. Furthermore, consumers need to be educated on what flour fortification is and what its benefits are, especially when fortification leads to an increase in the price of bread or cereal grain. A communication campaign is the best way to educate and move people to action.

If fortification is mandatory, it raises the question: “Why even bother to market to consumers? People have to accept it if it is mandatory.” Marketing fortified products to consumers is important as it educates them and promotes acceptance. Knowledge alone is not enough; acceptance is critical. As New Zealand leaders considered making wheat flour fortification mandatory, some measures were taken to try to educate consumers about fortified flour. However, consumers received conflicting messages from groups in favor of and against fortification. This ultimately led to consumers derailing fortification legislation in New Zealand.<sup>8</sup>

FFI’s decade of experience indicates that the main target audiences for communication around cereal grain fortification are: millers, policy makers, consumers, health providers, and sometimes bakers. Outreach to these stakeholders should educate and promote acceptance of fortification. Ultimately, they will need to change their behavior in order for a fortification program to be successful. These actions include making a law, adding premix to grains, paying more for fortified products, etc. Yet FFI has very limited resources to help fortification advocates successfully communicate the benefits of fortification to these target groups and encourage them to take action in support of fortification. In the past when FFI has assisted countries in advocacy work, it has generally been on a case-by-case basis. With a small staff, it is difficult for FFI to give a country trying to create a communications campaign their full attention. In addition, there is only one communications position at FFI, and this position focuses on FFI’s organizational communications, not fortification program communications.

My special studies project will produce a social marketing and advocacy toolkit for FFI that will guide fortification proponents on developing a campaign to educate and encourage target audiences to accept and take action to support fortified cereal grains. Much like the Flour Miller's Toolkit guides millers, this toolkit will guide individuals and organizations in creating posters, factsheets, educational materials and events, TV/radio commercials, etc. that resonate with their audience. Without a social marketing and advocacy toolkit to guide proponents through the process of creating a quality communications campaign, their messages run the risk of being less effective. If campaigns are grounded in solid market research and best practices from the field, then they will be much more likely to be effective.

### *Purpose Statement*

The purpose of this project is to create for FFI a social marketing and advocacy toolkit to benefit country leaders and NGO proponents who are interested in fortifying cereal grain(s). This toolkit will guide them through the design of a social marketing campaign and will include tools, examples from past campaigns, and additional resources.

### *Significance Statement*

FFI is unable to assist every country with communications from start to finish. This project will provide cereal grain fortification proponents a guide on how to plan, implement, and evaluate a communications strategy. It will expand FFI's technical capacity, allowing them

to assist more countries with social marketing and communications campaigns and supporting staff members who do not have a communications background as they work with countries that are developing communications materials. The toolkit will be housed on FFI's website, so that anyone interested can have access to it. FFI will also have a small supply of printed copies to disseminate as needed.

Information on the success or failure of fortification communications campaigns has not been compiled and made publicly available. The literature review and the suggestions made in the toolkit will provide resources in a singular location to address a gap in knowledge within the fortification field. It is hoped that with stronger communications and social marketing, cereal grain fortification campaigns will be more effective and reach their goals more quickly and efficiently.

### *Definition of terms*

**Fortification:** Fortification adds vitamins and minerals to cereal grains during the milling process, so that foods made with fortified grain products are more nutritious. There are other fortification methods, such as sprinkles that generally are added to food at home or bio-fortification that alters the genetic make-up of the grain to make it more nutritious. For the purposes of this special studies project, fortification only refers to fortification that happens during the milling process.

**Cereal grains:** We use the term cereal grains to refer to wheat and maize flour and whole kernel rice. FFI focuses on these three cereal grains. There are other cereal grains, such as

sorghum and millet, however only a relatively small proportion of countries worldwide consume these grains in large quantities.

**Premix:** Premix is a powdery blend of vitamins and minerals that is added to the cereal grain thus improving its nutritional value.

## Chapter 2: Literature Review

This literature review focuses on social marketing and nutrition campaigns. Social marketing methodologies and case studies are discussed. Since there are few studies examining grain fortification social marketing campaigns, other nutrition and communications examples have been included. This chapter will conclude by examining literature on advocacy with policy makers, because advocating to policy makers is an important component of grain fortification programs since grain fortification is most effectively achieved via legislation.

Social marketing is a strategic tool that can increase acceptance and adoption of public health behaviors and beliefs. It is a relatively new approach that began to develop in the 1970s and is in its essence the application of marketing principles developed in the private sector to social problems where the goal is to influence behavior.<sup>9-12</sup> Social marketing aims to encourage voluntary behavior change in target audiences that will improve the wellbeing of themselves and their community.<sup>9,11,12</sup> There are four typical ways people change their behavior: accepting a new behavior, rejecting a harmful behavior, modifying a current behavior, or abandoning an old undesirable behavior.<sup>12</sup> The behavior may be a one-time action or a behavior that needs to be sustained.

There are six key elements that can assist in identifying an approach as social marketing:<sup>13</sup>

- The goal of social marketing is to change or influence the behavior of the target audience.
- Audience research is used consistently throughout the creation of the campaign.



- Audience segmentation is carefully conducted to increase campaign effectiveness. This involves dividing people into similar subgroups based on their common characteristics, interests, motivations, challenges, etc., and targeting carefully crafted messages to these subgroups.
- The development of attractive and motivating exchanges with the target audience. When an individual adopts a behavior, they pay a tangible or intangible price, for example paying more for fortified products that can improve health or giving up an hour of TV time to enjoy the health benefits of playing soccer with friends. In order to take part in this “exchange,” they must believe the benefits are worth the cost. The social marketer needs to identify the audience’s perceived costs and benefits in order to emphasize the benefits and minimize the barriers in messages to the audience.
- The strategy attempts to use all of the four Ps of marketing:
  - *Product* – The product is a behavior change in the case of social marketing rather than a physical product.
  - *Price* – The prices are the benefits and costs to adopting this new behavior. Price can be monetary and non-monetary (e.g. time, popularity, productivity, etc.).
  - *Place* – The place is where the behavior change would take place. Behavior change cannot occur if the appropriate products and services are not available where the change in behavior occurs.
  - *Promotion* – Promotion is how messages are communicated through various media channels.

- Attention is given to the competition of the desired behavior for the target audience. Each targeted behavior has competition. For example, the competition to purchasing fortified products is purchasing cheaper, unfortified products, and the competition of creating mandatory fortification legislation is having no legislation and leaving it voluntary. Social marketing campaigns highlight the benefits and challenges to the targeted behavior and its competition.

Substantial literature shows that health communications and social marketing campaigns can improve the success and effectiveness of a public health intervention.<sup>14-20</sup> Three systematic reviews have examined the effectiveness of social marketing campaigns focusing on substance abuse and physical activity.<sup>18,20</sup> Interventions were included in the reviews only if they met the six elements of a social marketing campaign described above. Fifty-four campaigns met the criteria and were included in the review. The review concluded that social marketing campaigns were effective in a wide range of scenarios with different targeted behaviors, audiences, and settings. Almost all campaigns reviewed were domestically focused, while the present project will be internationally focused. The effectiveness of social marketing in international settings can be inferred, but further systematic reviews are needed. The ability to regulate the quality of included studies was also an issue, because most campaigns only reported overall results and did not conduct or share process evaluation.

Social marketing utilizes a systematic planning approach, and there are a series of general steps in the social marketing method.<sup>9,11,12,21</sup> These steps serve as a guide to creating a social marketing campaign. Every campaign will have different goals, audiences, targeted behaviors, and environments, thus it may not be appropriate to follow these steps exactly. Steps may need to be varied or slightly altered depending on the scenario, however the general outline should be followed.

<b>Step</b>	<b>Definition of Step</b>	<b>Key Questions to Answer</b>
1. Situational Analysis	The situational analysis includes formative research to determine the scope of the problem, the context of the problem, and audiences to target. This can be conducted primarily through a literature review and expert interviews. Formative research on target audiences will then help create targeted messages for them.	<ul style="list-style-type: none"> <li>• What is the problem your social marketing campaign will address? What do you know about the problem?</li> <li>• What factors could affect the environment where your intervention will take place? (Social, political, economic, demographic, opposition, etc.)</li> <li>• What are the resources you currently have, and what will you need? (Monetary, skills/expertise, equipment, outside help, etc.)</li> <li>• What are the knowledge, beliefs, and behaviors of the target audiences? What communication channels do target audiences have access to and prefer?</li> </ul>
2. Strategy development	The strategy development is founded in the research conducted in step one. Divide the audience into segments based on similar geography, demographics, physical/medical characteristics, or psychological characteristics (lifestyle, personality, values, social norms, etc.). This will help identify specific groups that are most open to changing their behavior.	<ul style="list-style-type: none"> <li>• What segmentation strategy is relevant? Using geography, demographics, physical/medical characteristics, or psychological characteristics (lifestyle, personality, values, social norms, etc.)</li> <li>• What are the goals and objectives for each audience?</li> <li>• Define Product, Price, Place, or Promotion for the campaign.</li> </ul>

	<p>Set goals and objectives for these specific target audiences to reach. Identify barriers and benefits associated with adopting the new behavior. Apply the four Ps of marketing, which are Product, Price, Place, and Promotion to prepare for communication development in the next step.</p>	
3. Program and communication design	<p>Program and activity design follows the strategy laid out in step two and creates communication materials and activities to deliver campaign messages. Utilize behavior change theory and formative research to create communication messages. The messages should highlight the benefits and value of the targeted behavior. Identify communication channels to share campaign messages then create the communications.</p>	<ul style="list-style-type: none"> <li>• What is the behavior you want to influence for each audience? How can you encourage that audience to adopt it?</li> <li>• What are the barriers and benefits to engaging in this behavior?</li> <li>• What messages will most resonate with the audience?</li> <li>• What communication channels are best to reach the audience?</li> </ul>
4. Pretesting	<p>Test communication materials and activities with a small group from the target audience to ensure that the audience comprehends and likes the communication. Adjust communications as needed and pretest a second or third time if numerous changes are made.</p>	<ul style="list-style-type: none"> <li>• How and when will the pretesting occur?</li> <li>• Were the communications effective?</li> <li>• What adjustments are necessary and should pretesting be repeated?</li> </ul>
5. Implementation	<p>Create a budget outlining the cost of developed activities. With the funds available, develop an implementation plan. Implement and introduce communications to the target audience. Monitor implementation.</p>	<ul style="list-style-type: none"> <li>• What is the implementation plan?</li> <li>• How will you track implementation progress?</li> <li>• What are the monitoring results?</li> </ul>
6. Evaluation and feedback	<p>Evaluate the program development process and the outcome of the program. This</p>	<ul style="list-style-type: none"> <li>• How and when will you conduct evaluation?</li> <li>• What evaluation indicators will</li> </ul>

	will help improve the campaign as it is running and prepare for future campaigns. The three types of evaluation are formative, process, and summative evaluation.	you use to measure effectiveness? • How will you use the results of your evaluation?
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When comparing social marketing to a more information-focused approach, social marketing is more likely to influence behavior. A study conducted in four villages in India had two villages received social marketing campaigns promoting vitamin-A rich foods, one village received only education on vitamin-A rich foods, and the last village served as the control.<sup>14</sup> The villages that received the social marketing campaigns had a four-fold increase in consumption of vitamin-A rich foods, those in the education arm had a two-fold increase, while there was no change in the control village.

### *Nutrition Campaigns*

In Snyder's meta-analysis of the impact of health communications campaigns on behavior, she notes that nutrition campaigns that "pay attention to the specific behavioral goals of the intervention, target populations, communication activities and channels, message content and presentation, and techniques for feedback and evaluation should be able to change nutrition behaviors."<sup>15</sup> Nutrition social marketing campaigns should be structured no differently than any other social marketing campaign. The following discussion of nutrition campaigns centers on country-specific examples.

Social marketing and communications should be considered at the start of the project and be responsive to the consumer perspective, instead of being seen as a lifesaving measure when a project is struggling or failing.<sup>22</sup> Social marketing and communications are strategic tools that assist in reaching program or project goals. They are most effective when utilized from the onset of the program and can always be adjusted as needed during the program. A historical issue with iron supplementation projects is that consumers have been given technical information without any prior research into what they already know or do.<sup>22</sup> Those on the supply side are the primary drivers in these programs, and they turn to health campaigns for assistance when their product or intervention fails to reach their target.

Market research helps to discover what resonates most with the target audience and prevents the inclusion of elements that could be off-putting to the target audience. A qualitative study conducted in the US regarding the marketing of multivitamins to college-age women highlights the need to understand the audience's knowledge, beliefs, attitudes, and preferences and their complexity.<sup>23</sup> The college-age women participating in the study indicated that they wanted factual information about the health benefits that included the importance of folic acid to prevent neural tube defects (NTDs). However they wanted the information to be presented in a way that made them feel like having children was not in their immediate future, because that thought was overwhelming to them. While this was true for college-age American women, American women ages 30-45 will need different messages. College-age women in other countries will also need different messages, because in some countries women may already have children by this age.

If promoting a newly created product, product testing and pre-testing social marketing messages can improve the likelihood of success. In Tanzania, nutrition proponents developed a nutritional supplement, Evol'Nutributter, to assist with malnutrition of children 6-24 months.<sup>24</sup> Target audience testing was conducted to ensure the taste, usability, packaging, price point, and other marketing elements were favorable to audience members. Evol'Nutributter creators felt that this additional market research contributed to the success of their product. Fortified cereal grains are not a new product in the same way Evol'Nutributter is. They are more similar to a 'new and improved' product as they typically maintain the same taste, texture, and usability of the original product. However, consumers often mistakenly believe that fortified products will have a different taste, texture, and usability than unfortified products. Public product testing can help to disprove these myths. As a part of UNICEF's promotion of salt iodization in Moldova, a Moldovan celebrity, Mircea Surdu, participated in a popular cooking show where they tested iodized and uniodized salt with pickling.<sup>25</sup> "The UNICEF campaign was revolutionary for Moldovans [because myths about the bad taste and texture were numerous]. During the campaign period, consumption of iodized salt increased by about 15%... Many of them were convinced by Mircea Surdu."<sup>25</sup>

The history of grain fortification in Kazakhstan also highlights the importance of pre-testing. Before they began to fortify wheat flour nationally, UNICEF Kazakhstan pre-tested fortified flour and communications in one region of the country in 2003.<sup>26</sup> Study investigators wanted to measure the health impact of fortification within the region and

also the level of awareness of fortified flour. The study revealed that the campaign had a significant impact on the awareness of fortified flour amongst urban and rural women. The most effective modes of communication were through medical workers, TV, radio, and brochures for urban women, and brochures and medical posters for rural women. Armed with this data, national fortification was rolled out, and Kazakhstan currently has a fairly successful flour fortification program.

While strategically designing messages, the modes in which the messages are delivered should also be considered. Leaders in four cities within Heibei province in China worked with the China Center for Disease Control and Prevention (CDC) and the Global Alliance for Improved Nutrition (GAIN) to fortify soy sauce on a non-mandatory basis.<sup>27</sup> They documented their experiences with different media channels and found that television news features were cheaper but just as effective as television commercials, because they were free and commercials are expensive. Newspaper headline and story topics were difficult to influence, however newspaper advertisements were less expensive than other communication channels and allowed more in-depth treatment of the topic. Other communication channels included posters, murals, lectures, a mobile van for a road show in rural areas. In addition, promotional incentives were used, for example, a discount to those who read a flyer carefully, a free pencil case with the purchase of five bottles of fortified soy sauce, and 1 cent rebate when an empty container was returned.

Social marketing campaign designers should not assume they know the beliefs of the target audience without market research to confirm them. In the China soy sauce project,



campaign leaders feared rural Chinese consumers would not pay for the more expensive fortified soy sauce, so they conducted market research in these rural areas.<sup>27</sup> Contrary to their prior belief, rural consumers felt that the extra cost was worth the investment for its health benefit and were willing to pay more for the fortified soy sauce.

Consumers will not trust a product if it is promoted by someone or an agency that they do not trust. The level of trust consumers have for companies that fortify or governments that pass laws about fortification is important when designing a fortification campaign.

Additional research found that Chinese urban populations did not believe the health claims companies made about their fortified soy sauce.<sup>27</sup> As a consequence, the CDC began to promote the product. This gave the claims more credibility and sales improved.

### *Fortification Campaigns with Consumers*

Documentation regarding fortification social marketing and communications campaigns is scarce, and typically the reports are generated by non-governmental organizations.

Scientific studies are uncommon, and expert opinion articles are typical. In addition, organizations/companies that were contacted in preparation for this literature review were uninterested in sharing their communication failures; they only had public reports of their successes. Therefore there is a more substantial gap in the literature on failed fortification social marketing and communications campaigns.

The limited literature does suggest that social marketing and communications campaigns for food fortification – like those related to other public health interventions – tend to

improve the success of the program.<sup>28,29</sup> Even when fortification is mandated in legislation and consumers have few options to eat the foods unfortified, social marketing and communications are instrumental to success and sustainability.<sup>28,30</sup> The campaigns are what draw consumers' attention, educate them, and encourage them to take action by buying and consuming the fortified product. Marketing the enhanced health benefit alone is not always welcome or successful.<sup>29</sup> For example in a South American country, it was reported that the Ministry of Health does not want to advertise to women that folic acid can reduce neural tube defects (NTDs) on fortified flour packaging.<sup>31</sup> The Ministry of Health believes that advertising this health benefit will encourage women to shy away from eating other foods that are rich in folic acid: increased consumption of fortified flour at the expense of folate-rich vegetables would worsen their obesity problem.

Fortification also typically makes a food product more expensive. Fortification communications can help to educate and convince consumers that the health benefit is worth the additional financial cost to them. The increase in price of the fortified product is usually quite minimal at as little as US\$0.10 per loaf of bread<sup>32</sup>, yet in low-income areas, particularly in developing countries, consumers can get upset over the price increase and reject fortification. In spite of a good communications campaign, cost still remains a major constraining factor for low-income populations.<sup>28,30</sup>

Branding assists consumers in recognizing the product and its value. A brand is a set of unique promises that a product makes to its customers.<sup>33</sup> The name, logo, and marketing messages make impressions on the mind of the consumer that help them to differentiate

the product from its competitors and ultimately motivate them to avoid health risks or adapt healthier behaviors, in the case of social marketing. At the beginning of South Africa's campaign, most of their communication messages focused on educating consumers about health issues that fortification can address, and radio messages were the primary means of communication. Even though the radio scripts encouraged consumers to look for the fortification sign on products, it was difficult to associate the logo with the message because consumers could not see the logo. No brand was being created, because there was no logo and messages focused on discussing health issues instead of creating product value in the minds of the consumers. More information on South Africa's experience with fortification communications can be found in the Appendix and in the toolkit.

One of the most important instruments in brand recognition is a logo that helps create product identification.<sup>29,34-37</sup> A logo helps consumers identify which products are fortified and can assist regulators in identifying which products claim to be fortified. For example, the Enrichi logo has been used quite successfully in the region of West Africa to identify fortified products.<sup>34,35</sup> Almost all fortification communications included this logo to foster brand identity, so consumers could spot the logo amongst various products on the shelf. Ghana had a similar experience to South Africa. In Ghana, a social marketing campaign was carried out after mandatory legislation was passed for the iodization of salt and fortification of vegetable oil and wheat flour in 1996.<sup>38</sup> The Ghanaian Ministry of Health instituted a communications campaign primarily through radio and community health workers. By midterm evaluation, only "23% population had heard about the project and only 12.1% could identify the fortification logo."<sup>38</sup> They believed two factors contributed to

these low statistics: First, the use of radio and health workers meant that there was little promotion of the visual logo. Second, food manufacturers did not leverage social marketing efforts to promote their products as fortified or highlight the fortification logo on their products. The strategy was then revised to include more television commercials and visual components. There was no mention of a final evaluation to verify if these adjustments were made and what their impact was, yet this highlights the importance of utilizing a logo and centering communications on that logo.

Consumer market research and product testing are important in shaping the most effective campaigns.<sup>29</sup> Like all social marketing campaigns, food fortification social marketing campaigns should be personalized to the target audience. Target audiences are identified based on who typically buys the groceries, who cooks the meals, and who is in charge of caretaking the children. The characteristics of these audiences can vary by gender, age, occupation, cultural traditions, etc. Each group will have its own perceptions, habits, and needs,<sup>29</sup> so messaging and activities will need to be tailored accordingly. The use of mass media is often identified as one of the best ways to reach target audiences with fortification campaign messages.<sup>36,39-41</sup> Sample activities for food fortification communications campaigns include television commercials, radio jingles and shows, posters, billboards, interviews, newspaper articles, and merchandise (shirts, cups, calendars, etc.).<sup>34,37</sup>

### *Health Advocacy with Policy Makers*

Social marketing and public policy advocacy are complimentary, and together can create positive social impact.<sup>42</sup> Legislation can influence the overwhelming majority of citizens

within a country, because it can mandate that only fortified products be available to consumers. Case study literature on advocacy to policy makers is also scarce, in part because every country has its own unique government and political system and culture. There is very little empirical evidence, and most literature is an expert's opinion.<sup>43-47</sup> What is effective in one country is not generalizable. What is effective in one country is not generalizable. The Food and Agricultural Organization (FAO) outlines the process of policy making in the graphic below:<sup>48</sup>

*Retracted due to copyright infringement*  
Visit: <http://www.fao.org/docrep/014/i2195e/i2195e00.htm>

Sustainability of fortification programs is best ensured through mandatory legislation<sup>49,50</sup> and continued support by policy makers,<sup>34</sup> thus advocating for policy makers to create legislation and uphold fortification standards is a key part of any fortification communications strategy. Passing legislation takes a significant amount of time, attention to detail, education on existing evidence, advocacy, and alliance building; this process can be thwarted by the regular turnover of policy makers.<sup>34</sup> Policy makers in New Zealand were convinced of the need for fortification in 2001. When new government officials took office in 2008, fortification proponents assumed that they would also support fortification. The new government did not support fortification, and the momentum fortification once had in New Zealand halted when the Minister of Food Safety announced that New Zealand would not have mandatory fortification. More information on New Zealand's history with fortification can be found in the Appendix and in the toolkit. Consequently it is important

to engage policy makers early, strategically, and continually throughout changes in administration.

One of the first questions to ask when developing a social marketing strategy for policy makers is 'who does the decision maker answer to?' and 'how can policy makers be influenced?'<sup>43</sup> In democracies, elected officials are usually answerable to the constituents who vote them into office. Ministry officials are answerable to their superiors. Examining what motivates these decision makers will give insight into how to craft messages that will resonate with them.

Framing is how information is organized and presented, and it affects the perception, decision, and action on issues. Thus, framing messages can be critical to garnering support from policy makers as well as academics and practitioners.<sup>46</sup> There are two ways in which an issue or story can be framed: portrait and landscape.<sup>51</sup> A portrait-framed story focuses on an individual or an event with drama and depth; it is difficult to get the full context of the issue with a portrait. A landscape frame includes individuals and events, but also provides the context that connects the individuals and events to larger social and economic forces. By connecting individual issues to those larger forces, people hear a balance of hard facts and the emotional pull a single story can have leading them to take action. Careful framing of advocacy messages using the landscape format helps balance rational arguments and emotionally appeal to increase the likelihood of success in influencing policy change.<sup>47</sup>

US fortification advocates worked for years to get the Food and Drug Administration to add folic acid to the list of fortificants in flour. The March of Dimes, a non-governmental organization, finally told the FDA that if folic acid was not added to the law, they would protest with a large group of children with NTDs and their families. Shortly after, the FDA signed the legislation making fortification with folic acid mandatory in the US. This story highlights the importance of using portrait and landscape frames to connect policy makers to the personal aspects of health issues. Details on the US's experience with folic acid fortification can be found in the Appendix and in the toolkit.

Utilizing stories about children with NTDs or children with iron deficiency anemia that highlight the injustice of living with preventable illnesses is more effective, because it is rooted in social justice values. Messages that connect with values such as equity, equality, responsibility, etc. are the most important, because they connect with people in the deepest way.<sup>52</sup> Messages that deal with other parts of the public health problem, such as the issue being addressed (environment, schools, housing, etc.) or the details of strategy or policy, do not resonate as deeply.<sup>52</sup>

“Effective messages meld specific policy demands with value statements that are delivered by strategically chosen messengers to specific targets.”<sup>45</sup> Three questions are recommended for structuring messages: “(1) What’s wrong? (2) Why does it matter? (3) What should be done about it?”<sup>45</sup> The first question raises the concern. The second question shows the value of the issue; this question is often overlooked completely.<sup>44,53</sup> The third question outlines the policy goal. The goal is often not articulated well, and it

needs to be a “specific, feasible solution, even if it is an incremental step towards a larger goal.”<sup>45</sup> Structuring communications for policy makers around these three questions will help the case for mandatory cereal grain fortification be more effective.

Finding the right proponent or champion to deliver the communications messages is just as important as the messages themselves. The champion is usually someone outside of the government,<sup>48</sup> frequently an inter-governmental or non-governmental partner such as UNICEF, FFI, or Project Healthy Children. Further studies are needed to determine the importance of having a champion within the government who will help lead the charge, talk to the media, and encourage other policy makers to vote for mandatory legislation. More research will also be needed to determine what characteristics make a champion more successful.

### *Conclusion*

Social marketing methodology literature outlines how to best formulate a social marketing campaign, and case studies are helpful in increasing understanding of what is effective within a fortification social marketing campaign. Yet it is challenging to draw inferences or conclusions from these case studies as target populations and their campaign needs vary and case study literature is limited, not thorough, and may lack scientific rigor. A successful campaign in one place may not work in another. Comprehensive case studies that include monitoring and evaluation results are limited. However there are commonalities in fortification social marketing methodology including the use of a fortification logo, building a brand identity around the logo, and the effective use of mass



media. By utilizing these methods, a social marketing fortification campaign will be optimized for success.

## **Chapter 3: Fortification Advocacy Toolkit**



**Food Fortification Initiative**

Enhancing Grains for Healthier Lives

# Fortification Advocacy Toolkit

A guide to creating a social marketing  
campaign for grain fortification

[www.ffinetwork.org](http://www.ffinetwork.org)

This resource was created by the Food Fortification Initiative (FFI). Through an international network of multi-sector partners, FFI offers technical support and advocacy to countries interested in fortifying cereal grains. For more information on FFI's work, please visit [www.ffinetwork.org](http://www.ffinetwork.org).

## Introduction

Effective grain fortification programs require multiple stakeholders to work towards fortification, and it can take a lot of time, energy, and money to make that happen. Different stakeholders must be brought on board: Millers to fortify the flour or grain; policy makers to create legislation making fortification mandatory for industrial millers; industry and government authorities to monitor for compliance with the legislation; bakers to accept and bake with fortified flour; and consumers to purchase and consume fortified products. An effective way to garner support and foster action for cereal grain fortification is through a social marketing campaign. Utilizing social marketing procedures will increase the impact and effectiveness of fortification advocacy.

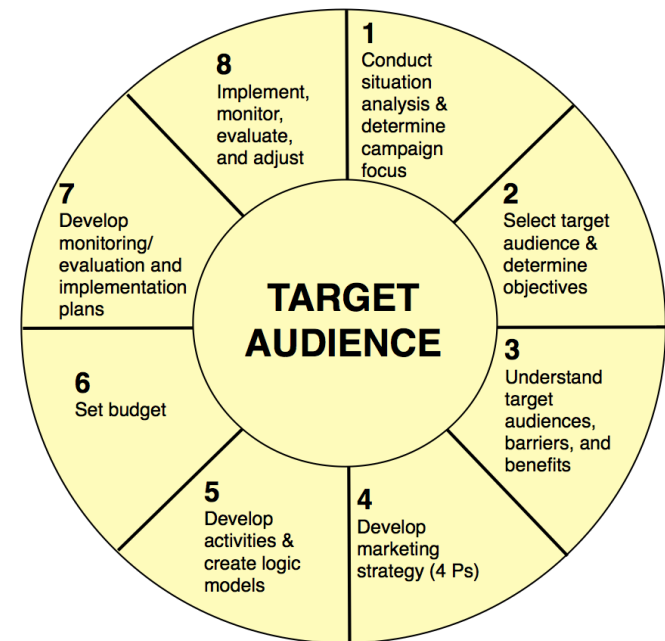
It is often presumed that education is enough to move key decision makers to action. Yet this is typically not the case as competing interests, forgetfulness, and lack of motivation keep individuals from taking action to move forward with grain fortification. It has been scientifically shown that the use of social marketing techniques can improve the impact of a health campaign. Thus a well-designed social marketing campaign can increase the likelihood of success of a grain fortification program.

### *Defining Social Marketing*

Social marketing uses traditional marketing principles to influence voluntary behavior to improve the health and well being of individuals and populations. In other words, instead of trying to sell a product, social marketing focuses on changing a behavior. In this case, the subject of the social marketing campaign is grain fortification to improve individual and societal health. The components of a social marketing campaign can be found in the graphic to the right. The entire campaign centers on the target audience. The numbers on the wheel indicate the different phases of a social marketing campaign.

This toolkit will walk you through steps two through eight. Step one is discovering vitamin deficiencies in your region or country and identifying whether cereal grain fortification is an effective intervention for those health issues. For help with step one, contact the Flour Fortification Initiative (FFI) at [info@ffinetwork.org](mailto:info@ffinetwork.org).

The following pages will walk you through the remaining seven steps to create an effective grain fortification campaign. It is important to note that developing a social marketing campaign is often not a linear process as it is laid out in this toolkit. For example, budget constraints might impact which campaign activities you can do,



while evaluation indicators and activities will need to be identified prior to campaign implementation. Please feel free to jump to different sections in the toolkit as needed.

### *Defining the Purpose of this Toolkit*

This toolkit is designed for proponents of fortification of wheat and maize flour and rice. However it can be used as a basis for developing a social marketing strategy for other types of food fortification as well.

This toolkit will:

1. Provide a framework for structuring a social marketing campaign.
2. Supply templates for strategic planning and implementation of multimedia activities.
3. Offer examples of previous social marketing campaigns from a variety of countries.
4. Suggest ways to focus on key target audiences.
5. Outline steps to determine which behaviors need to be performed by these individuals and groups for a fortification program to be successful.
6. Help you obtain information about your target audience.
7. Guide you to select and develop materials and activities to carry fortification messages.

The Fortification Advocacy Toolkit Workbook is a separate document containing the blank templates found in this toolkit, so you can easily print and complete them.

This toolkit assumes that your country or region is beginning to consider grain fortification as an intervention to address vitamin and mineral deficiencies, but that no actions towards a fortification program have begun. However, you may be in a different situation. For example there may already be a law making fortification mandatory, but for some reason fortification is not happening. If this is the case, you will need to examine the situation (i.e. what is keeping fortification from happening) and adjust the behaviors you need to change accordingly. A discussion of how to determine which behaviors to target will be presented in the first chapter.

Fortification can be expected to have a health impact if at least 80 percent of the target population is consuming foods made with fortified grains. The cost of a social marketing campaign may not be justified if this threshold is not expected to be met when the program is fully implemented. Small mills, imports, and the black market typically account for the unfortified grains in a mandatory environment. In a voluntary environment, manufacturers determine which products are fortified.

It is important to note that this toolkit outlines a strategy to promote mandatory legislation. Mandatory legislation is preferred because it creates a business environment where all millers must fortify and thus incur similar costs. It also makes it much more likely for fortified products to reach the majority of the population. Voluntary fortification has been tried in many countries, but countrywide access to fortified foods is rarely reached in this way. Thus the health benefits are not broadly distributed.

### ***Identifying who should lead fortification efforts***

When considering and/or planning for grain fortification, it is highly recommended that your country form a national alliance to help build consensus for fortification. Seek participation and commitment from national leaders representing public, private, and civic sectors.

Examples of partners to include in a national food fortification alliance are:

- Relevant government ministries
- Public institutions that oversee food quality and safety
- Business and industries providing staple foods
- Health groups and consumer associations
- United Nations or other multilateral agencies
- Scientific and academic groups involved in nutrition

A national alliance can help foster commitment from these key stakeholders and move fortification forward in your country. For more information and assistance in forming a national food fortification alliance, visit <http://www.ffinetwork.org/plan/index.html>.

### ***Identifying who should lead this social marketing campaign***

Any dedicated group, including the national alliance, can lead the social marketing campaign. Past campaign leaders have included ministries of health, UNICEF country offices, civic groups, and international non-governmental organizations.

### ***Using the Armenian Example***

In 2013, the UNICEF Armenia staff requested FFI assistance with creating a social marketing strategy for wheat flour fortification. Throughout this toolkit, you will find many examples from the FFI-UNICEF Armenia collaboration. Armenia had been working towards a mandatory policy on wheat flour fortification for a few years to address vitamin and mineral deficiencies within the country. The Armenian president approved a concept note on the issue and created several subcommittees to work on drafting laws, but the process stalled. After identifying key audiences, the campaign sought to lead policy makers to take the final steps in creating flour fortification legislation, bring flour millers on board with the agenda, and educate people on what flour fortification is and how it benefits them.

## Chapter 1: Framework Development

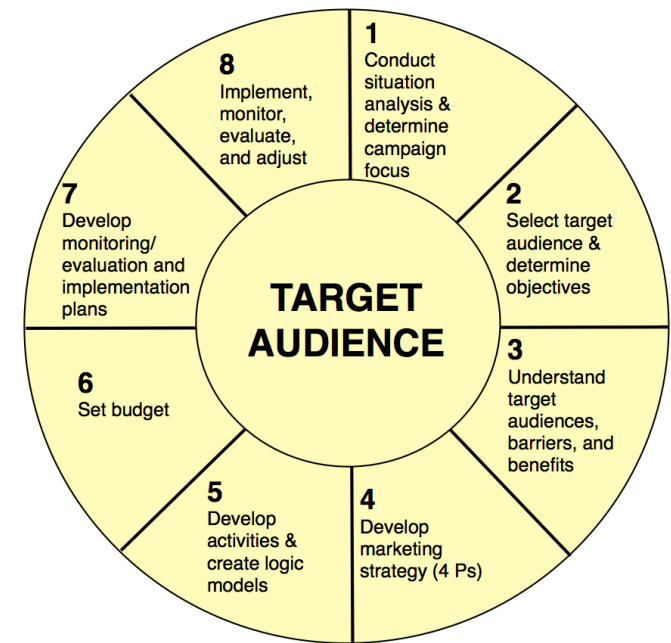
If your country or region is interested in grain fortification, then the advocacy campaign's overarching goal has already been defined. The goal is:

*To encourage target audiences to accept, support, and take action to support fortified grain products.*

The rest of this chapter will assist you in identifying target audiences and formulating objectives that will help you reach this broader goal. Once campaign activities have been implemented, you want to see mandatory legislation in place, grains being fortified and consumed, and micronutrient deficiencies being diminished. This chapter will assist you in creating a framework for your campaign by identifying target audiences and identifying behaviors your audiences will need to adopt to facilitate fortification. These will become your campaign objectives. This chapter will discuss step two on the marketing wheel to the right.

### Identifying Target Audiences

The focus of every grain fortification campaign is to add vitamins and minerals to grains to improve the population's nutrition, and identifying the people who are instrumental in this process is the first step in a social marketing campaign. The next step is to set objectives for each target audience. Grain fortification campaigns typically target the following five audiences:



- **Policy makers** – primarily responsible for creating mandatory legislation and later for monitoring and evaluating fortified grain or flour to ensure the correct amount of vitamins and minerals are added. Key players are ministries of health, agriculture, economy, business, trade, and finance.
- **Millers** – primarily responsible for fortifying the grain and monitoring the process to ensure correct amounts of vitamins and minerals are added. Millers will also need to change their packaging to indicate that fortification is occurring, but that is a one-time change.
- **Consumers** – primarily responsible for accepting, purchasing, and consuming fortified products. While their acceptance may seem inconsequential when fortification is mandated, consumers can disrupt fortification if they are unhappy, for example, with increased bread prices or with anything being added to their food.
- **Health Providers** – primarily responsible for distributing information about fortification to patients. Health providers are often trusted in their community to provide accurate information on health topics and can help educate patients about fortification and associated health issues.



- Bakers – primarily responsible for baking goods with fortified flour. Some countries or areas even have an association of bakers that can organize to support the campaign. Bakers can also assist in educating consumers about fortification with materials in their shops or special packaging. On the other hand, bakers can organize against fortified flour, so it is important to engage them and bring them on board if you suspect there is potential for resistance. (Note: this group is most likely not relevant if fortifying rice.)

This is by no means an exhaustive list of target audiences. Other target audiences may include international non-governmental organizations such as UNICEF or Helen Keller International, civic groups, consumer protection associations, etc. List other key decision makers who need to be included as target audiences in your country:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

In the following section, you will narrow these broad audience categories by identifying specific groups within each audience. This will help minimize resources used and maximize impact. The chart below highlights examples of typical actions taken by the typical five target audiences, from learning about fortification to maintaining successful programs. It is included to give you an idea of the process that each of these groups goes through as it moves towards fortifying grains. These steps are based on the Stages of Change Model, which is a behavior change theory that emphasizes the steps in the process of behavior change – from precontemplation all the way through to action and maintenance.

### Actions Needed for Each Group per Stages of Change Model

(Please note that not all steps happen for each group simultaneously. In addition, these groups work together at various points in the process. However, for simplicity sake, they are separated here.)

	<b>GOVERNMENT OFFICIALS</b>	<b>MILLERS</b>	<b>BAKERS</b>	<b>CONSUMERS</b>	<b>HEALTH PROVIDERS</b>
<b>Precontemplation</b> ↓	Identify micronutrient deficiency as an issue and grain fortification as a solution.	Hear that government is considering mandatory grain fortification legislation.	Hear that millers will be fortifying their flour.	Receive media messages on the issue of micronutrient deficiencies and benefits of fortified flour/rice.	Hear that a new law may require grain fortification.
<b>Contemplation</b> ↓	Create multi-sectorial committee to investigate fortification as an option to address micronutrient deficiency.	Hold preliminary planning meetings to plan for eventual fortifying of grains.	Hold preliminary planning meetings to plan for eventual baking with fortified flour.	View educational materials and begin to understand the health benefit of fortified grains.	Attend nutrition workshop where fortification and nutrition are discussed.
<b>Preparation</b> ↓	Receive presidential and prime minister approval. Draft legislation.	Hold workshops on how to implement fortification technologies. Buy premix (blend of vitamins and minerals added to flour). Add equipment if needed.	Prepare to receive fortified flour from millers. Have a test run baking with fortified flour.	Receive media messages that wheat flour, maize products, and/or rice will be fortified.	Become knowledgeable on fortification by attending workshops, reading materials, etc.
<b>Action</b> ↓	Pass mandatory grain fortification legislation.	Fortify wheat flour, maize products, and/or rice.	Bake with fortified flour.	Accept policies and consume fortified rice and/or food made with fortified flour.	Discuss and promote fortified grains with patients.
<b>Maintenance</b>	Continue to enforce fortification laws.	Continue to fortify grains. Monitor and evaluate.	Continue to bake with fortified flour.	Continue to accept, purchase, and consume fortified grain products.	Continue to discuss and promote fortified grain products with patients.

## Case study: New Zealand

The story of fortification in New Zealand highlights the need to identify key audiences and to target them with a campaign. Attempts for mandatory fortification legislation in New Zealand began in the early 1990's. All political parties in New Zealand announced their support of fortification in 2001, but they did not advocate for immediate implementation. During the delay, bakers argued that if 98% of bread is fortified, then consumers no longer have a choice about whether they want to eat fortified products. The issue went back and forth as stakeholders argued about safety and consumer choice. Elections in 2008 brought a different political party to power, and the new government was not as favorable towards mandatory fortification. Civic groups, such as the New Zealand Food and Grocery Council, then launched a commercial campaign against mandatory fortification.

In 2012, after much debate in the media, the Minister of Food Safety announced that New Zealand would not have mandatory fortification legislation. She stated that the decision was not based on science or research. Rather, the government chose to reject mandatory legislation for the following reasons: New Zealand consumers were worried about potential health risks, government officials thought only a portion of the country would benefit, and consumers wanted to have a choice in fortified or unfortified products. Fortification supporters were frustrated because they felt claims about potential health risks and lack of countrywide benefit were unsubstantiated. The bakers' association and the New Zealand Food and Grocery Council led the charge against flour fortification.

We cannot know for sure how a social marketing campaign could have changed the outcome of this situation. Nevertheless, addressing the opponents of fortification as target audiences in a communication strategy could have helped to minimize the misinformation they spread in the media about fortification and safety. Though the government leaders in 2001 were convinced of the need for fortification, advocacy needed to begin again following the delay in legislation as a new set of government officials were in power in 2008.

More information on fortification in New Zealand can be found here:

[http://www.ffinetwork.org/about/stay\\_informed/publications/documents/IrelandNewZealand.pdf](http://www.ffinetwork.org/about/stay_informed/publications/documents/IrelandNewZealand.pdf)

### *Narrowing Target Audiences*

Start to think about how to narrow each of these target audiences into smaller, more manageable groups. It is important to do this because it can increase your campaign effectiveness and success. A campaign that is trying to reach everyone is likely to reach no one. To craft messages that people will relate to, you need to learn as much as you can about them and incorporate that information into your messaging. Please note that the examples below are not all-inclusive. Specific audiences that are relevant to your campaign may not be mentioned here.

Policy makers: Not every member of government is relevant to grain fortification. For instance, the Ministry of Culture most likely would have nothing to do with grain fortification. Instead, target your advocacy efforts towards the Prime Minister or President, Ministry of Health, Ministry of Agriculture, the Ministry of Economy/Finance, and the legislative members who will pass the legislation. Important people to

target within ministries may include ministry leaders and divisions of nutrition, national/international commerce, agricultural industry, fortification subcommittees, etc.

Millers: Grain fortification typically targets large, industrial mills. It may not be necessary to have smaller mills fortifying to have countrywide impact. In Armenia, the eight largest mills produce flour that reaches 80% of the country. The remaining mills are much smaller and numerous. Getting them to fortify is not worth the investment in time and money when the largest eight mills are already reaching the vast majority of the population. If you need assistance with an industry analysis to determine the number of mills in your country, their capacity, and their market saturation, please contact FFI at [info@ffinetwork.org](mailto:info@ffinetwork.org).

Consumers: Every single person does not need to be targeted and educated for grain fortification to be effective. While grain fortification can benefit children immensely, children rarely purchase their food. Their caregivers usually do that; thus caregivers of children are a good example of a more specific target audience.

One aspect to consider for consumers is their shopping habits. Who typically buys groceries in your country? Are they men or women? Target this group in consumer messaging.

Another aspect to consider is that the health benefits are greatest for women and children (although men still benefit from eating fortified grains products). Women of childbearing age are a good group to target, as well as newlyweds or new parents, because women have more nutritional requirements when they conceive and bear children.

Health Providers: Examples of the most relevant health providers can include family doctors, pediatricians, nurses, health providers who conduct family planning sessions with patients, etc. The most relevant health providers will vary depending on the healthcare system in your country and whether consumers trust information they receive from health providers.

To narrow your target audiences, think about the most important individuals or people who will help you reach your campaign goals. They become your specific target audience. Within each specific target audience, you can use the following characteristics to group people into even more precise audiences:

- Demographics – people with the same age, gender, income, residence, language, education level, etc.
- Common behaviors – people who do similar things (e.g. the people who typically buy groceries)
- Common desires – people who want the same thing (e.g. mothers who want healthy children)
- Common barriers – people who are held back by similar challenges (ex: segments of the population that are more prone to iron-deficiency anemia)
- Common willingness, awareness, or ability to do the desired behavior

The more detailed you can be, the better! With more precise target audiences, you can make your communications messages more specific, which will in turn resonate more with the audience. For example, consider newlyweds as a potential specific target audience since they

might be starting a family. After conducting focus groups and researching this audience more, you can design messages on the importance of getting enough folic acid before pregnancy and how fortified flour products contain the folic acid that is good for mother and child.

Go back to your list of audiences on page 6. Within each group, identify a specific target audience who is most likely to help reach the campaign goals.

### ***Determining Behaviors to Change & Setting Objectives***

After you have selected the specific target audiences, the next step is to identify what you want to accomplish with each of them. This will help keep all those involved in campaign creation work toward the same ends. Because grain fortification is a long-term intervention, it is best to make short-term, mid-term, and long-term objectives. These will help drive and focus your campaign design and implementation. The mid-term objective is the behavior(s) that you want that audience to adopt. The short-term objectives are factors that will influence their ability to perform the action. The long-term objective is the sustained targeted behavior.

As an example, the next page contains the goals for UNICEF Armenia's campaign for fortified wheat flour. Notice that each of these objectives is written from the perspective of the target audience. Bakers were not included as a target audience, because UNICEF Armenia felt that Armenian bakers do not have an association and therefore were not likely to reject fortified flour as a group.

Objectives	Target Audiences			
	<b>Policy Makers</b> Focus: Parliament members and the Ministry of Economy: men and women ages 30-55	<b>Millers</b> Focus: Mill owners/operators: men ages 40-60	<b>Consumers</b> Focus: Women of childbearing age (ages 25-49); parents and caregivers	<b>Health Providers</b> Focus: Physicians (doctors, nurses, obstetricians, pediatricians, etc.): men and women
<b>FACTORS THAT INFLUENCE (Short-term objectives)</b>	<ul style="list-style-type: none"> <li>• Understanding flour fortification and need for it</li> <li>• Motivation to create legislation</li> <li>• Belief that flour fortification is something Armenia can and should do</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding how to fortify wheat flour and monitor for quality assurance</li> <li>• Motivation to fortify</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding flour fortification</li> <li>• Accepting flour fortification</li> <li>• Motivation to purchase fortified products</li> <li>• Understanding relevant health issues</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding flour fortification</li> <li>• Motivation to discuss fortification with patients</li> <li>• Confidence in ability to counsel patients</li> </ul>
<b>BEHAVIOR (Mid-term objectives)</b>	<ul style="list-style-type: none"> <li>• Voting to approve the law mandating flour fortification</li> <li>• Establishing measures to monitor quality of fortified flour</li> </ul>	<ul style="list-style-type: none"> <li>• Fortifying flour on a regular basis</li> <li>• Monitoring fortification process on a regular basis</li> <li>• Changing packaging to indicate fortification is happening</li> </ul>	<ul style="list-style-type: none"> <li>• Accepting, buying, and consuming fortified flour and byproducts</li> </ul>	<ul style="list-style-type: none"> <li>• Supporting and promoting fortified flour</li> </ul>
<b>SUSTAINED BEHAVIOR (Long-term objectives)</b>	<ul style="list-style-type: none"> <li>• Not repealing fortification law</li> <li>• Monitoring and evaluating fortified flour on a consistent basis for quality control</li> </ul>	<ul style="list-style-type: none"> <li>• Continue fortifying and monitoring</li> </ul>	<ul style="list-style-type: none"> <li>• Continue buying and eating fortified flour and byproducts</li> </ul>	<ul style="list-style-type: none"> <li>• Continue supporting and promoting fortified flour</li> </ul>

Use the blank table below to write campaign objectives for your target audiences. Copy the list as needed if you have more target audiences. For now, list as many as you can now. When we discuss the budget later in the toolkit, we will narrow these audiences.

<b>Objectives</b>	<b>Target Audience 1:</b>	<b>Target Audience 2:</b>	<b>Target Audience 3:</b>	<b>Target Audience 4:</b>
	Focus:	Focus:	Focus:	Focus:
<b>FACTORS THAT INFLUENCE</b> <b>(Short-term objectives)</b>				
<b>BEHAVIOR</b> <b>(Mid-term objectives)</b>				
<b>SUSTAINED BEHAVIOR</b> <b>(Long-term objectives)</b>				

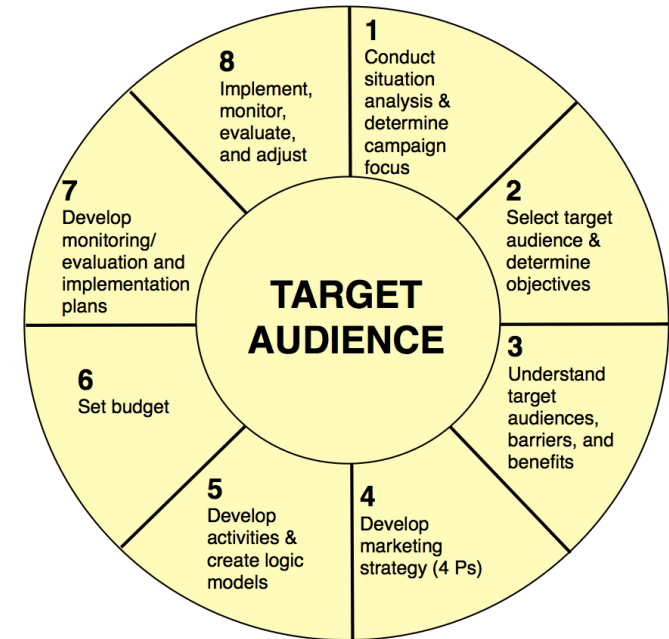
## Chapter 2: Market Research & Strategy Development

Now that you have identified target audiences and behaviors, it is time to learn more about the specific audiences. By learning more about their motivations and barriers to performing the desired behavior, you can leverage what you know to more effectively reach them through communications. This chapter will begin by discussing market research and then end with strategy development. This chapter will cover steps three and four on the social marketing wheel to the right.

### *Determining Strengths, Weaknesses, Opportunities, and Threats*

Before trying to understand your target audiences, it is helpful to document what you already know. An easy way to organize information on each of your target audiences is through a Strengths, Weakness, Opportunities, and Threats (SWOT) chart. This chart will also be helpful later in Chapter 3 Section *Testing Logos, Messages, or Activities*. The SWOT chart can help identify where you might need more information and identify areas of the campaign that may be challenging. This should be written from your perspective, but throughout the rest of the toolkit, try to see everything from your audience's point of view. The Strengths are things that can help promote grain fortification, while the Weaknesses are things that could work against grain fortification. Opportunities are areas with potential to be a Strength. Threats are things that could possibly derail the entire grain fortification program.

Below are samples of SWOT charts and more specific target audiences from UNICEF Armenia's campaign.





## ARMENIAN POLICY MAKERS SWOT

Focus: parliament members and the Ministry of Economy; men and women age 30-55

(Please note: The Armenian Ministry of Health and Ministry of Agriculture were already involved in fortification discussions and were therefore not included)

<p style="text-align: center;"><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• Have a champion in the prime minister</li> <li>• Health issues are well documented in Armenia (National surveys and other sources show high rates of anemia and spina bifida)</li> <li>• Benefits of flour fortification are well documented in scientific studies</li> <li>• Associate with iodized salt success (people understand the benefit of iodine in salt and see salt fortification as positive)</li> <li>• Armenian mills supply 85% of Armenia's total flour needs</li> <li>• Over 80% of Armenian population expected to have access to fortified flour</li> <li>• Articulated commitment of millers</li> <li>• Articulated commitment from related ministries</li> <li>• "Probably no other technology available today offers as large an opportunity to improve lives and accelerate development at such low cost and in such a short time." -World Bank (World Food Programme Case Studies)</li> </ul>	<p style="text-align: center;"><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• Legislation delayed twice</li> <li>• Need a second champion who will be knowledgeable on the topic and available to media</li> </ul>
<p style="text-align: center;"><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• Study tour</li> <li>• Success of flour fortification in other countries well documented</li> </ul>	<p style="text-align: center;"><b>THREATS</b></p> <ul style="list-style-type: none"> <li>• Increases in bread prices</li> <li>• Myths that may sway beliefs</li> <li>• Comments from concerned ministries</li> </ul>

### ARMENIAN MILLERS SWOT

Focus: Mill owners/operators; men age 40-60

<p style="text-align: center;"><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• Articulated commitment to fortify flour after law is passed</li> <li>• Health issues are well documented in Armenia (Surveys and other sources show high rates of anemia and spina bifida)</li> <li>• Associate with iodized salt success (people understand the benefit of iodine in salt and see salt fortification as positive)</li> <li>• Benefits of flour fortification well documented</li> <li>• Feeders (equipment to add nutrients to flour) already in country</li> </ul>	<p style="text-align: center;"><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• Premix (blend of vitamins and mineral to add to flour) not yet secured</li> <li>• Necessary lab equipment not yet secured</li> <li>• Need equipment, capacity building, monitoring and evaluation, and continuous technical support</li> </ul>
<p style="text-align: center;"><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• Have knowledge of flour fortification and its benefits</li> </ul>	<p style="text-align: center;"><b>THREATS</b></p> <ul style="list-style-type: none"> <li>• Impatience with lawmakers' timeline</li> <li>• Will not fortify without a law</li> <li>• Uncertainty of sustainability</li> </ul>

### ARMENIAN CONSUMERS SWOT

Focus: Women of childbearing age (25-49); Parents & Caregivers

<p style="text-align: center;"><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• Health issues are well documented in Armenia (Surveys and other sources show high rates of anemia and spina bifida)</li> <li>• Associate with iodized salt success (people understand the benefit of iodine in salt and see salt fortification as positive)</li> <li>• General trust of healthcare providers</li> </ul>	<p style="text-align: center;"><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• Little or no knowledge of what flour fortification, anemia, and neural tube defects are</li> <li>• Concern that flour fortification causes obesity (insight gained from consumer focus group)</li> <li>• Concern that fortified flour has a different taste (insight gained from consumer focus group)</li> </ul>
<p style="text-align: center;"><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• Benefits of flour fortification well documented in scientific studies</li> <li>• Use parental education centers in health clinics to education parents on fortification</li> <li>• Find a physician as a spokesperson</li> </ul>	<p style="text-align: center;"><b>THREATS</b></p> <ul style="list-style-type: none"> <li>• Increases in bread prices</li> <li>• Myths that may sway beliefs</li> </ul>

Below is a blank template. Complete a SWOT chart for each of your target audiences as you go through this chapter. You can continue to add to your SWOT charts as your audience research gives you more information on new strengths, weaknesses, opportunities, and threats.

**SWOT CHART FOR** \_\_\_\_\_

Focus:

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
<b>OPPORTUNITIES</b>	<b>THREATS</b>

### ***Learning More About the Audience***

While the SWOT analysis is written from your perspective, you now need to shift to look at fortification from the audience's point of view. You need to figure out the barriers and benefits to the behavior change, as they perceive it. This will help you create communications messages that speak to their motivations and address (if appropriate) their concerns. While you may list what some of these barriers and motivations might be, it is also very beneficial to hear from members of the target audience themselves. Often times you may get answers that you were not expecting, so having these conversations is highly recommended.

Qualitative and quantitative methods can be used to discover more about your target audience. The box on the right provides a brief explanation of these methods. Common qualitative methods are, above all, interviews or focus groups. You could conduct a quantitative survey or refer to past surveys, but a qualitative forum where members of the target audience are able to speak more freely has advantages. It can give a better understanding of target audiences, because it goes more in-depth, asks questions of participants about what they do/think and why, and is not limited to rigidly defined variables. Qualitative studies are also typically cheaper to conduct, because they require fewer research participants.

You may have to adapt your methods with each audience. For instance it may be difficult to gather a group of policy makers at the same time, so one-on-one interviews might be better than a focus group discussion for this audience. On the other hand, you might be able to get better information in a shorter period of time from a group of consumers in a focus group than from one-on-one interviews. A focus group is a moderated group discussion. You prepare a list of questions for a group to discuss. Gather the group, ask your questions, and allow participants time to respond to you and each other. The idea is not to interview focus group

#### **Quantitative Methods**

Quantitative methods are generally used to gather statistical information on *what* people think. They help to gather numerical data that can be generalized across a group of people. These methods can identify beliefs or feelings and how strong these are (i.e. whether people strongly agree with, agree with, are neutral toward, disagree, or strongly disagree with an idea) amongst the study population, but it is difficult to understand from a survey why people think or feel that way. The most common type of quantitative method is a survey where numerical questions are asked, such as how often you do something, how you would rank something on a scale of 1 to 5, or how many things you have sold, bought, etc.

#### **Qualitative Methods**

While quantitative methods rely on numerical data, qualitative methods seek to explain the *why* or *how* of that numerical data. Qualitative methods are generally used to understand how people think and feel (e.g. thoughts and feelings, motivations, challenges, core values, etc.). These methods produce a description of how participants experience an issue and can help the researcher to then define a problem or develop an approach to a problem. In a social marketing campaign, you would most commonly use qualitative methods to better understand the target audience's mindset or to test reactions to campaign messages or concepts. The most common types of qualitative methods are one-on-one interviews and focus groups where open-ended questions are asked allowing for participants to respond in their own words.

participants one-by-one, but rather to allow them to talk with one another and respond to each other's ideas.

When you use qualitative methods, include open-ended questions allow your audience to tell you about their experiences and interests. For example: Ask consumers what they know about vitamin and mineral deficiencies. You can then ask more direct follow-up questions, such as "what have you heard about anemia?" or "what have you heard about neural tube defects?", if these vitamin and mineral deficiencies do not come up in the participant's response. Another example would be to ask policy makers how they would prefer to learn about fortification and ask them to explain why. Their answers will help you plan which activities or communication channels will be best for your target audience.

### **Sample questions to ask your audiences:**

(Note: Questions used will vary by audience, and this list is not exhaustive. You will also need to adapt these questions to your specific fortified grain. You may want to follow these questions with probing questions. The sample question guides below have examples of probing questions.)

- What do you know about vitamin and mineral deficiencies?
- What can someone do to prevent or treat vitamin and mineral deficiencies?
- What do you know about grain fortification?
- How do you feel about grain fortification?
- Where do you get credible advice about health problems?
- What do you think would motivate people to buy and eat fortified products?
- What would motivate you to promote fortified grains and products?
- What is the best way to communicate messages about fortification? (Television, billboards, radio, pamphlets, posters, etc.)
- What would make messages about fortified products trustworthy to you?
- What might people think are the hidden motives of the people communicating these messages?
- Why might someone dislike fortified products? What can be done to prevent this?

Data on how many people own a television/radio, their demographics, and how often they watch/listen to it will also be very helpful. Communications companies may already have this data. Look to see if they are available, and if not, incorporate questions about audience access to communication channels into your research methods.

With a focus group, you will need people to act as a moderator and a note taker. You will also need a tape recorder or video camera to record the discussion. Focus groups should ideally have 6-8 participants. If the focus group is too large, it is difficult to moderate. A typical focus group is about 90 minutes long. It is not usually less than an hour and should not go over two hours. You can vary the types of participants by focus group, i.e. have a focus group for young women of childbearing age, another one for newlyweds or new parents,

another one for the typical grocery shoppers in your country, etc. A nearby university or public health school may be able to assist you in conducting focus groups. For instance, the American University of Armenia conducted nine focus groups with 58 consumers. Their findings were summarized in a report that was prepared for UNICEF Armenia. For more information on how to conduct a focus group, go to <http://www.fhi360.org/sites/default/files/media/documents/Qualitative%20Research%20Methods%20-%20A%20Data%20Collector's%20Field%20Guide.pdf>

Below are example discussion guides that can be used for all audiences related to grain fortification. Use them as a reference in creating your own questions for target audience members. The first is a focus group discussion guide. The italics are pieces that you can ad-lib, but plain text should be read verbatim. Following the icebreaker are sample questions for specific audiences. In the questions for consumers, main questions are numbered. The alphabetical questions below are follow-up or probing questions to help foster discussion. There are also two interview guides for policy makers and millers.

### **Grain Fortification Focus Group Discussion Guide Consumers**

**Place** \_\_\_\_\_

**Date** \_\_\_\_\_

**Time** \_\_\_\_\_

**Moderator** \_\_\_\_\_

**Recorder** \_\_\_\_\_

#### **Introduction**

##### Welcome

*Welcome the participants and thank them for agreeing to participate.*

##### Introduction of moderator and recorder

*Introduce yourself.*

##### Confidentiality

This discussion will be confidential. We will not tell anyone that you participated in this focus group discussion. We would ask that all participants ensure that what is said in this room be kept in this room. However, there is no way for us to strictly enforce this, so you should avoid making any comments that you would not want shared outside this group. Your name and position will not appear in reports and presentations. All your comments will be used for research purpose only. We will take notes throughout the session. Also with your

permission we will tape record the discussion to make sure that all of your ideas are correctly included in the analyses. Can we proceed with tape recording?

### Review of the program and participation

We are conducting an assessment of people's knowledge, perceptions and attitudes in relation to food fortification. Your sincere participation and practical suggestions will help us develop useful ideas for recommendations to the government on ways to implement food fortification in the future.

### Icebreaker

You are involved in this study as a key decision maker. Please introduce yourself and briefly tell us about yourself.

### Introduction of topic

Now we would like to ask questions about food fortification.

1. What do you know about food fortification in general?
  - a. What is the purpose of food fortification?
  - b. What kind of food do you know is fortified here?
2. What is your attitude toward food fortification, for example such as your attitude towards iodized salt?
  - a. Is it a positive or a negative thing? Please explain why.
  - b. What do you think about other food fortification?
  - c. What would make you more likely to purchase fortified foods?
3. What kind of salt do you prefer to use, iodized or not iodized?
  - a. Would you use other fortified foods?
  - b. For what reason would you use fortified foods and for what reason would you not use fortified foods?
4. In what format (oral, written, cartoon, posters, etc.) should nutritional information be presented to the general population?
  - a. What means of communications for effective dissemination of such information could be used (TV, radio, newspapers, printed materials, etc.)?
  - b. Why do you think these means of communications would be effective?
  - c. Which persons would most effectively disseminate the information? (Specialists, famous persons, government representatives, community leaders, etc).
5. Do you know anything about grain fortification?
  - a. What do you think about flour or rice fortification?

6. What would be an effective short message that would grab the attention of the general population to stress the importance and benefits of flour or rice fortification?
7. Do you think that fortified food should be identified in the markets? If yes, how should it be identified?
8. What other ideas or suggestions do you have?

*Try to sum up what has been said to get a consensus of general themes and trends from the conversation.*

Thank you for participating in our study – your answers were very useful, interesting and helpful!

## **Interview Guide for Policy Makers**

### Logistics

- Where are we in the legislative process of getting fortification passed as legislation?
- What are the next steps to making this become law?
- Are there any current roadblocks?
  - If so, what are they? How can we address them?
- If the legislation is passed, what else needs to be done in terms of implementation and maintenance?
- Have you decided what the fortification standards will be (i.e. what micronutrients you will fortify with and how much of each)?
- What government branch will monitor fortification?
  - Do you believe they will monitor effectively? Why?

### Thoughts & Attitudes

- Do you believe fortification is important? Why?
- How can fortified grains have an impact on health?
- Is the health benefit worth the cost of fortifying? Why?
- Do you think people will appreciate fortification? Why?
- Do you think the president/prime minister believes flour fortification is important? Why?
  - Can he or she see how fortified grains can have an impact on health?
- Do you think the president/prime minister believes the health benefit is worth the cost of fortifying? Why?
- Do you think the president/prime minister believes the people will appreciate fortified products? Why?



## Interview Guide for Millers

### Logistics

- Have you heard about fortification and the processes involved?
- Have you heard about a potential law for mandatory grain fortification?
- Do you know how to fortify?
- Is this something you have discussed with other mills?
- Is your mill currently equipped to begin fortifying?
- Have you identified a premix supplier?
- Do you foresee any issues with quality assurance?
- Where do you get information about changes in your industry?
- What challenges do you anticipate with fortification?

### Thoughts & Attitudes

- How do you feel about fortification? What will it mean to you?
- How do other large industrial millers feel about fortification?
- Do you believe fortification is important? Why?
- What motivates you to fortify?
- Can you see how fortified flour or rice can have an impact on health?
- Is the health benefit of fortifying worth the cost of premix?
- Do you think your customers and the population will appreciate fortified products?

### *Identifying Barriers & Benefits*

After conducting your research, the next step is to identify the competition, barriers, and benefits for all of your audiences, which will help you to craft messages for them. Go back to the notes and transcriptions from your interviews and focus groups, and look for themes within each target audience. The competition is what the audience sees as the alternative to performing the target behavior. Your target audience has the choice of performing the targeted behavior or choosing the competition and not performing that behavior. Barriers and benefits are what the audience will weigh in their minds before deciding what to do. Barriers are the things that keep your audience from doing your targeted behavior, and benefits are the things that could act as an incentive or motivation to your audiences to perform the targeted behavior. It may take time to think of all of the non-monetary barriers. In your messages, you will want to emphasize benefits and either minimize or offer ways to overcome barriers.

Listed below are elements that can influence a person to perform or not perform a behavior.

- Positive or negative consequences the person thinks the action will have
- Not wanting to deviate from the thoughts or actions that are thought to be typical within a social group

- Whether they are confident that they can do the behavior
- Whether they believe that fortification can be an effective intervention for micronutrient deficiencies
- Perceived severity of micronutrient deficiency health issues in the country
- Whether or not a person can remember to do the behavior or the steps involved in doing the behavior
- Where or not they are capable of performing the behavior
- Having a policy in place that would mandate action or no action

These elements involve the audience's motivations, opportunities for action, and ability to conduct the desired behavior. The aim with social marketing is to make fortification seem fun, popular, and easy, so that the behavior will be adopted quickly, performed often, and continued. Consider each of these elements as you identify barriers and benefits for all of audiences.

Included are some examples from Armenia.

### **Armenian Policy Makers Barriers & Benefits**

Targeted behaviors: Passing a law to make fortification mandatory and monitoring flour fortification for quality control

Competition: Not passing a mandatory fortification law; focusing on competing areas of attention

<b>BARRIERS for adopting new behavior</b>	<b>BENEFITS for adopting <u>new</u> behavior</b>	<b>BENEFITS for keeping the <u>old</u> behavior</b>
<ul style="list-style-type: none"> <li>• Fear of unpopularity with the public for increasing the bread price</li> <li>• Feeling that the science of fortification isn't strong enough</li> </ul>	<ul style="list-style-type: none"> <li>• Saving the government's money from hospital costs associated with neural tube defects</li> <li>• Improving economic productivity because anemia rates are lowered</li> <li>• Improving citizens' lives</li> </ul>	<ul style="list-style-type: none"> <li>• Avoiding consumer outrage over the bread price increase</li> <li>• It is one less thing to do</li> </ul>

### Armenian Consumers Barriers & Benefits

Targeted behaviors: Accept, buy, and consume fortified products

Competition: Continuing to buy and consume unfortified products

<b>BARRIERS for adopting new behavior</b>	<b>BENEFITS for adopting <u>new</u> behavior</b>	<b>BENEFITS for keeping the <u>old</u> behavior</b>
<ul style="list-style-type: none"> <li>• Anger over increased cost of bread</li> <li>• Fear from myths about fortified flour say that it can make people fat or doesn't taste good</li> </ul>	<ul style="list-style-type: none"> <li>• Eagerness to improve the health of themselves and their families</li> <li>• Potentially improve family productivity if someone has iron-deficiency anemia</li> <li>• Make Armenia healthier and more prosperous</li> </ul>	<ul style="list-style-type: none"> <li>• Saving money by buying unfortified flour, which is cheaper</li> <li>• Guaranteeing that the quality of flour/bread doesn't change, if that is a fear</li> </ul>

List barriers and benefits *from the perspective of the audience* for each of your target audiences with the template below. Remember to refer to the list of elements that influence behavior.

**Barriers & Benefits for \_\_\_\_\_**

Targeted behavior(s):

Competition:

<b>BARRIERS for adopting new behavior</b>	<b>BENEFITS for adopting <u>new</u> behavior</b>	<b>BENEFITS for keeping the <u>old</u> behavior</b>

### *Determining the Four Ps of Marketing*

A central model in marketing is the four Ps: Product, Price, Place, and Promotion. Using this model will help you design your activities to connect your audience to the desired behavior change. The Product is the desired behavior change, and you want to Promote it at the right Price, in the right Place, and at the right time. Although fortified grains are an actual product, behavior changes are still necessary for fortified grains to be produced and consumed. The four Ps of social marketing are defined as follows:

Product is a behavior in social marketing. Instead of trying to convince people to buy an actual product, like soap, you are trying to change a behavior. The behavior must be something the audience can *do*. It is not just knowledge or awareness. The behavior should be something that will further the agenda of fortifying grains.

Price is the cost of the behavior. It is what the audience has to give up by doing this behavior. Price can be monetary or non-monetary (e.g. increased time or effort). Use the barriers and benefits list you just created to determine what the new behavior will cost the audience.

Place is the location where the behavior can be performed by your target audience. This is not clear-cut, because behavior change is an intangible product. Place is not simply the town or country of the audience: it is where your target audience is, where they perform the behavior, where they access products or services, or where they are thinking and hearing about a health issue. Place is where the audience lives, works, shops, prays, gathers, etc. By determining where your audience is, you can make decisions about the channels you will use to reach your audience. You want your campaign to be where your audience is.

Promotion is how you get your message to your audiences. Various kinds of communication channels include advertising (paid or unpaid), newspaper articles, promotional items, signage, word of mouth, special events, etc. It is important to keep in mind what your method can and cannot do. For example, a poster detailing the prevalence and challenges of iron deficiency anemia can raise awareness and educate, but knowledge will not change behavior on its own. An element of motivation or a call to action should be incorporated into the message, such as “Talk to your doctor about iron deficiency anemia if you think you have these symptoms.”

By defining these elements for each target audience, you will be able to further synthesize the information gathered in your market research and begin to think about what types of activities are best suited to reach your target audiences.

Two examples of four Ps from Armenia's campaign are below.

#### Armenia Policy Makers 4 Ps

<b>Product</b>	A. Pass a law making flour fortification mandatory B. Monitor and evaluate fortification process
<b>Price</b>	A. Unpopularity due to flour/bread cost increase B. Time required for monitoring and evaluating
<b>Place</b>	Parliament where the law will be passed
<b>Promotion</b>	Fact sheets, meetings with key stakeholders, study tour, public hearings

#### Armenia Health Providers 4 Ps

<b>Product</b>	Promote fortified flour with patients
<b>Price</b>	Time and effort to remember to discuss fortified flour with patients
<b>Place</b>	Health clinics
<b>Promotion</b>	Factsheet, toolkit, posters for health clinic

Write the 4Ps for each of your target audiences. Copy this page as needed. In the exercise below, use 'Promotion' as a place to brainstorm ideas for activities. Instructions on developing activities further and examples from past fortification campaigns are in the next chapter.

4 Ps for \_\_\_\_\_  
(Target Audience)

<b>Product</b>	
<b>Price</b>	
<b>Place</b>	
<b>Promotion</b>	

## Chapter 3: Activity Development

This chapter will focus on how to design communications activities to reach your target audiences effectively. You will set a budget and begin to create a logic model that you will finish it in the next chapter. This chapter covers steps five and six on the social marketing wheel to the right.

### *Creating a Logo & Developing a Brand*

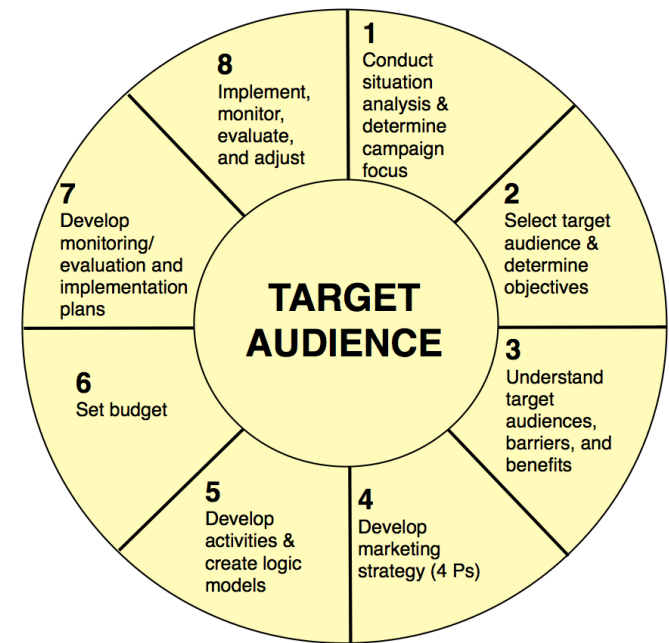
One of the most important tools in a fortification campaign is a logo because it creates an identity for your brand; meaning that when people see the logo, they will know that it means that product is fortified. Grains can be fortified by any number of milling companies, and each mill has its own packaging. A logo helps consumers identify which products are fortified regardless of the company brand. In addition, a logo can assist regulators in identifying which products claim to be fortified. Your logo will be included in almost all campaign activities, so it is important to develop it first. Examples of how the logo is incorporated into television commercials and other activities are later in this chapter.




When designing a logo, base your design on something that will easily communicate the message that this product is fortified. The colors and images should appeal to the target audience who will purchase the product. Design several possible logos then test them with your target audience to get feedback on what appeals to them and what does not.

The logo should go on all fortified grain products. Keep in mind where your logo will be placed. If your logo is printed on woven plastic flour sacks, then very fine details (e.g. the Nepal logo below) may not print very clearly. Often times flour sacks are printed in one or two colors. Adding colors will be more expensive for millers. Consider using only one or two colors. The simpler the design, the easier it will be to print and be understood.

The logo should be used in all aspects of your campaign, such as posters, television commercials, etc. Any time fortification promotional work is happening, the logo should be visible somewhere. This will help consumers identify the logo they see in the store with your campaign messages.

Below are examples of logos used in campaigns around the world. Armenia created three logos to test among consumer and policy maker audiences. All three logos Armenia considered are presented on the next page.



<p style="text-align: center;"><b>Kenya</b></p>  <p style="text-align: center;"><i>Translation: More nutrients added for better health</i></p>	<p style="text-align: center;"><b>Nepal</b></p>  <p style="text-align: center;"><i>Translation: Iron, Folic Acid, Vitamin A added. Nutritious food. Healthy family.</i></p>	<p style="text-align: center;"><b>West Africa Region</b></p>  <p style="text-align: center;"><i>Translation: Enriched</i></p>
<p style="text-align: center;"><b>Armenia #1</b></p>  <p style="text-align: center;"><i>Translation: Fortified flour for a healthy family</i></p>	<p style="text-align: center;"><b>Armenia #2</b></p>  <p style="text-align: center;"><i>Translation: Fortified flour for a healthy family</i></p>	<p style="text-align: center;"><b>Armenia #3</b></p>  <p style="text-align: center;"><i>Translation: Fortified flour for better health</i></p>



### Case Study: South Africa

After having voluntary fortification for some years, South Africa passed a law mandating that all who manufacture, import, or sell wheat flour and maize meal must fortify with iron, zinc, vitamin A, thiamin, riboflavin, niacin, folic acid, and pyridoxine. The law also stated that fortified shelled goods should be labeled properly with the fortification logo (see right) and provide a statement of the added vitamins and minerals in the nutrition declaration table. This logo was tested with various consumer groups and agreed upon as the best for consumers.

Prior to the legislation, advocacy campaigns were conducted in 2000 and 2001 to educate and encourage consumers to buy and eat voluntarily fortified products. However in subsequent evaluations, many consumers were still unaware of fortification. After the law was passed in 2003, social marketing was seen as an important component going forward.



South Africa's Department of Health used market research to analyze which methods were most effective in reaching their consumers. Radio, television, and billboards were found most effective. A campaign was launched in 2003 consisting mostly of radio spots and limited television spots targeting low-income consumers. In 2004, another campaign was introduced that had radio and print media components. A third campaign was launched in 2006 that had a 13-week radio program on all South African radio stations. Each week the show was a 30-minute discussion with provincial nutrition representatives from South Africa's Department of Health. The shows covered a range of nutritional issues, such as maternal nutrition, food fortification, healthy eating as a part of a healthy lifestyle, folic acid, healthy and economical food choices, etc. Listeners were able to call with questions, which helped the Department of Health representatives understand consumers' concerns. These were addressed in subsequent messages. In 2007 a fourth campaign was launched with radio and television spots. Currently fortification messages are incorporated into other nutrition messages sent out by the Department of Health.

In evaluating the entire program, campaign leaders identified creating awareness and value for the logo as one of the most important lessons learned. Most of South Africa's campaigns focused on educating consumers about health issues that fortification can address, and radio messages were the primary means of communications. Even though the radio scripts encouraged consumers to look for the fortification sign on products, it was difficult to associate the logo with the message because consumers could not see the logo. A similar situation occurred in Ghana when they used radio as their primary communication channel. Ghana eventually revised its strategy to include more visual pieces with posters and television spots to highlight their logo.

Radio can be a valuable tool for sharing information in countries where radio is popular, but it needs to be balanced with channels that employ visuals that create awareness of the logo. The campaign logo is placed on all fortified products and all visual fortification marketing materials; if consumers do not know what it means, then it has no value. Creating a reputation for the logo is key to an effective social marketing campaign.

Examples from South Africa's social marketing campaign:

*Radio advertisement South Africa fortified food 1*

This is an important announcement from the Department of Health.

Fact: Vitamins and minerals are essential for everyone's good health.

Fact: One out of two children gets fewer vitamins and minerals than they need. This could cause them to become weak and suffer from serious illnesses.

The Department of Health has passed laws that require some food be strengthened with vitamins and minerals. This is called fortification. Look for the fortification sign on maize meal, bread flour, and bread and ensure a healthier future for you and your children.

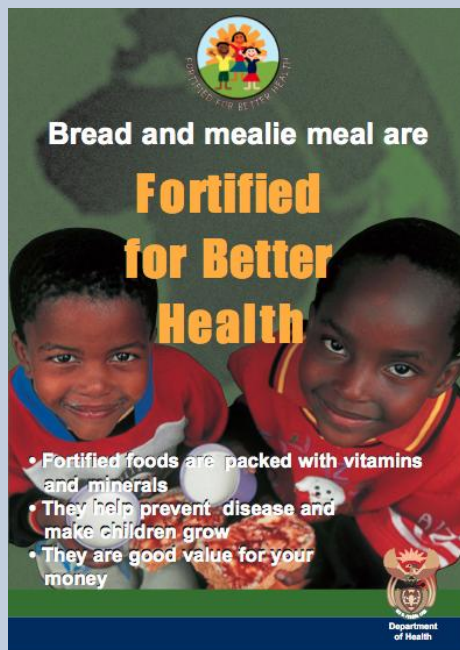
*Radio advertisement South Africa Fortified food 2*

This is an important announcement from the Department of Health.

Fact: Children do not always get all the vitamins and minerals they need even if they get enough to eat.

Fact: Children need these vitamins and minerals on a daily basis to grow healthy and strong.

The Department of Health has passed laws that have required certain foods to be strengthened with added vitamins and minerals. This is call fortification. Look for the fortification sign on maize meal, bread flour, and bread and ensure a healthier future for you and your children.



**Bread and mealie meal are Fortified for Better Health**

- Fortified foods are packed with vitamins and minerals
- They help prevent disease and make children grow
- They are good value for your money

Department of Health



# FOOD FORTIFICATION

means *strengthening* food with vitamins and minerals

**Choose fortified mealie meal, white and brown bread flour and bread baked from fortified flour with this sign on the package**

**FORTIFICATION HELPS:**

- Keep our bodies healthy
- Give strength and energy
- Fight certain diseases
- Children grow better
- Prevent certain birth defects

health  
Department of Health  
REPUBLIC OF SOUTH AFRICA

gain

unicef

### *Developing a Positioning Statement*

A positioning statement outlines how the desired behavior is perceived by the target audience when compared to other similar products. While it is not the final message for your audiences, the positioning statement will help you develop messages that emphasize a key selling point that differentiates your product from the competition. It can highlight specific behaviors, showcase benefits, overcome barriers, and overshadow the competition. Again, this is for internal use only and is not to be shared with your audiences.

A positioning statement has four components: target audience, targeted behavior, competition and point of differentiation. You identified the first three in previous chapters. The point of differentiation addresses the audience's perception of what they will gain by adopting the desired behavior. It reflects what they truly desire, such as the pride in being a good parent and doing everything possible to ensure their children stay healthy. The point of differentiation is rarely the actual scientific benefit. Many health communication messages do not lead to behavior change because they seek to teach the medical truth rather than to address the audience's ideas and perceptions. To find the target audience's benefit, you must go beyond the obvious to identify what they truly desire.

To help develop a positioning statement, fill in the blanks in this sentence with your specific information:

For [TARGET AUDIENCE], [TARGETED BEHAVIOR] is the [POINT OF DIFFERENTIATION] and is more important and beneficial than [COMPETITION].

The template does not need to be followed exactly, but each of the four components (target audience, targeted behavior, point of differentiation, and competition) must be there. Here are some examples:

- For Armenian mothers, buying fortified products is an investment in the health of their family, a way to ensure the best health for their family, and more important and beneficial than buying cheaper, unfortified products.
- For Armenian millers, the process of fortifying flour is three easy steps (getting equipment, procuring premix, and mixing premix into the flour) that would improve the health of Armenians. It is so simple that it makes no sense not to put vitamins and minerals in flour.
- For Armenian policy makers, creating mandatory fortification legislation is a way to save the government money and increase productivity, and it outweighs the benefits of not creating a law.

Use your previous research to help create positioning statements for each target audience. Also look at the list of statements below for ideas that support the motivational key benefit messaging. Iron and folic acid are the two most common fortificants added to wheat flour, thus nutrition information regarding these fortificants is included. The support statements have been divided by topic and can be used with a variety of audiences according to their barriers and benefits. Please note that these are ideas only and are not intended to be used directly with your target audience. If you want to use them, you will need to ensure that they are in line with the barrier and benefit research you did earlier and adapt them to your audience.

## Fortification Support Statements

Focusing on health problems:

- *Health problems from vitamin and mineral deficiencies, such as iron-deficiency anemia (IDA) and neural tube defects (NTDs), can be easily prevented.*
  - Women with insufficient folic acid levels have a higher risk of having children with NTDs.
  - Weakness and fatigue are the most common signs of anemia, which can be caused by not consuming enough iron and folic acid in the diet.
  - Fortifying grain products can lower the risks of iron deficiency anemia, folic acid deficiency anemia, and having a baby with certain birth defects.
  - Even if you do not have iron deficiency anemia or are not a woman of childbearing age, it is still important to consume adequate amounts of vitamins and minerals, and foods made with fortified flour or rice can help accomplish that.

Focusing on fortified grains (the product):

- *Buy and consume fortified flours and fortified rice to prevent iron and folic acid deficiencies.*
  - Consuming fortified grains can prevent health problems associated with iron and folic acid deficiency. It is not, however, a medicine or a cure for anemia or NTDs.
  - Appropriately fortified grains are safe for everyone, including very young children, pregnant women, or ill persons.
  - Fortified foods do not taste, look, or feel any different than unfortified foods. The quality of a product (for example, bread, pasta, etc.) made with fortified flour or rice is the same as if the flour were unfortified.
  - People do not need to eat more fortified flour or rice than usual to experience the health benefits. The amount of vitamins and minerals added in each country is based on the normal eating patterns.
  - To make sure flour and rice are fortified, read the label on the package or look for the fortified logo.

Focusing on women:

- *Women who have IDA or do not get enough folic acid during pregnancy have an increased risk for an NTD-affected pregnancy, miscarriages, perinatal death, and maternal death.*
  - Consuming fortified grains is good for the mother's and the baby's health.
  - IDA in pregnancy is a risk factor for preterm delivery and low birth weight.
  - Children who are born prematurely are at increased risk for health complications such as breathing problems, intellectual disabilities, and hearing loss.
  - A mother's IDA can put the child at risk for having anemia later in life.

Focusing on children:

- *Children can be greatly affected by IDA, because their bodies are growing and developing.*
  - School children with IDA may have increased weakness and fatigue.

- Iron deficiency can impair the development of children, affecting them mentally, emotionally, and physically.
- Children can have their school achievement impaired by IDA.

Focusing on general population:

- *Men, women, and children who do not get enough vitamin and minerals can have serious health problems.*
  - IDA causes increased fatigue and thus lower productivity.
  - Spina bifida, the most common NTD, has no cure. Children with spina bifida have some degree of paralysis. They often need multiple surgeries and therapy, which adds to the family's and the government's healthcare costs.

Focusing on national impacts:

- *The hidden effects of IDA, NTDs, and other vitamin and mineral deficiencies can impact the social and economic progress of nations.*
  - Adults with anemia have fatigue and diminished strength, which reduces their ability to work and provide for their families.
  - Babies born with NTDs can increase healthcare costs for families and for the country.
  - High anemia rates can affect a country's productivity and economic status.

### ***Creating Messages and Activities***

The are four main components to developing messages and activities:

1. Messages – what you want to communicate to your audience, based on your targeted behavior
2. Messengers – who will deliver or sponsor your messages
3. Creative strategy – how you communicate your messages or the words you actually say (e.g. the slogans, scripts, or headlines used)
4. Communication channels – where and when your messages will appear

Before creating your communications, revisit your research and work with the four Ps and barriers and motivations from the last chapters, as they will help you design messages and activities. Below are suggestions of how to prepare.

- To help you think about messaging, go over your barrier and benefits research and the Price section of the four Ps. Remember to choose messages that are simple, clear, and speak to audience members' perceived benefits, which are probably not the medical facts. Strategically select health and economic information about fortification, because it supports the key benefit rather than functioning as the key benefit itself.
- To help you think about messengers, go over the Place and Promotion sections of the four Ps. Consider people of influence in the identified Places. These are individuals who can persuade your target audience. For example if mothers trust doctors above others for good health information, the doctor is an influencer who might be used in part of a commercial.
- To help you think about creative strategy, look for suggestions from your interviews and focus groups. Begin brainstorming sample slogans and images. Do not forget to highlight the campaign logo in all activities to create visual brand identification!



- To help you think about communication channels, refer to the Promotion section of the four Ps and the sample activities included later in this chapter. Feedback from your focus groups and interviews will identify which communication channels the target audiences preferred. Examples include publicity events, factsheets, posters in stores or health clinics, television commercials or news spots, billboards, radio shows, signs on bread or flour delivery trucks, newspaper articles, etc. To be the most cost-effective, maximize the number of people exposed to your communications. Therefore consider timing and location. For example, if you are producing a factsheet for policy makers, deliver it when their inbox will be less full to reduce the chance it getting lost among competing messages. If you are producing a commercial for consumers, find out what shows your segmented audience is most interested, what time of day the shows air, what channel they are on, and run your commercial during that time frame.

Also think about other organizations or groups that can support campaign efforts. Armenia's campaign incorporated UNICEF, various ministries (especially the Ministry of Health), regional health departments, the Association for Protection of Consumer Rights, and others. Empowering partner groups to educate audiences on fortification can be very effective. For example, you can increase the capacity of health providers by helping them know when to discuss fortification with their patients and how they can address potential concerns from their patients.

A creative brief is a tool that can further help you establish what messages, messengers, creative strategy, and communication methods are best for your campaign and help organize your thoughts. It will help ensure that your messages are simple and clear, messengers are credible, creative strategy is effective, and communication methods are best suited to your target audience. The creative brief is an integration of all of previous research. In addition, a creative brief can help keep multiple team members in agreement with their various parts of the process, especially if you are working with a creative team to design posters or write and film a commercial. The elements of a creative brief are explained on the next page.

<b>Creative Brief</b>
<b>Background:</b> <i>A brief statement about the purpose and focus of the campaign.</i>
<b>Target Audiences:</b> <i>Describe the audiences that you want reached with the communication. Be specific with your audience segmentation and include insights about them you learned in your research.</i>
<b>Communication Objectives:</b> <i>Describe what you want your target audience to know, believe, or do after they see, hear, or experience this communication.</i>
<b>Positioning Statement:</b> <i>The positioning statement you developed earlier goes here.</i>
<b>Key Benefit:</b> <i>Describe the main benefits – from the audience’s perspective - that the target audience will receive from adopting this new behavior.</i>
<b>Support Statements:</b> <i>Describe the reasons why the benefits outweigh the costs.</i>
<b>Style and Tone:</b> <i>Describe the feeling that this communication should have. Authoritative, light, emotional, etc. Note any existing graphic standards that need to be considered.</i>
<b>Media:</b> <i>List what communication channels that should be addressed. For example, posters, factsheets, television commercials, radio spots, etc.</i>
<b>Creative considerations:</b> <i>Write anything else the creative team should know, such as what languages should be used, what images you would like depicted, different nationalities that should be represented, etc.</i>

An example creative brief for the Armenia campaign is below.

<b>Creative Brief</b>
<b>Background:</b> Increase the amount of fortified products purchased to improve nutrition in Armenia.
<b>Target Audiences:</b> Mothers (women age 25+), as they are most likely to purchase flour and handle the family's healthcare needs, low and middle-income
<b>Target Behaviors:</b> To purchase and consume fortified flour and by-products
<b>Positioning Statement:</b> For Armenian mothers, buying fortified products is an investment in the health of their family, a way to ensure the best health for their family, and more important and beneficial than buying cheaper, unfortified products.
<b>Key Benefit:</b> A healthier, more productive family.
<b>Support Statements:</b> <ul style="list-style-type: none"> <li>• Health problems from vitamin and mineral deficiencies, such as iron-deficiency anemia (IDA) and neural tube defects (NTDs), are widespread in Armenia and can be easily prevented with fortified flour.</li> <li>• Fortified flour is essentially the same as unfortified flour except that it has added vitamins and minerals for better health.</li> <li>• Buy and consume fortified flour to prevent iron and folic acid deficiencies.</li> </ul>
<b>Style and Tone:</b> Tone should be authoritative, but light. Not very serious. Must include logo.
<b>Media:</b> Television news stations should be a primary target because 39% of Armenians say they watch news more than any other content. The three TV channels that should be used in this campaign are Shant TV, H1, and Armenia TV. News shows on these channels should be targeted to carry news stories of the campaign. Also, commercials should be played most during the most popular soap operas on these channels. This will help focus the campaign on two viewing consumer audiences and split costs most effectively.
<b>Creative considerations:</b> Commercial should be in Armenian. Perhaps depict a mother with whom the target audience can relate.



Create your own creative briefs using the template below for each target audience and communicational channel you would like to use.

<b>Creative Brief</b>
<b>Background:</b>
<b>Target Audiences:</b>
<b>Target Behaviors:</b>
<b>Positioning Statement:</b>
<b>Key Benefit:</b>
<b>Support Statements:</b>
<b>Style and Tone:</b>
<b>Media:</b>
<b>Creative considerations:</b>

### Pros & Cons of Different Communications Channels and Activities

Communications Method	Pros	Cons
Factsheet	<ul style="list-style-type: none"> <li>Easily shares scientific or in-depth information (good for policy makers and health providers)</li> <li>Good to answer frequently asked questions or provide how-to information</li> <li>Inexpensive</li> </ul>	<ul style="list-style-type: none"> <li>Can be difficult to reach large groups</li> <li>Audience must have interest and desire to read it</li> <li>Difficult for less literate audiences</li> </ul>
Poster/Billboard	<ul style="list-style-type: none"> <li>If placed well, can reach lots of people</li> <li>Can reach larger than intended audience</li> <li>Can be placed where fortified products are sold</li> <li>Inexpensive</li> </ul>	<ul style="list-style-type: none"> <li>Only provides a small amount of information</li> <li>Might be difficult to get businesses to hang posters</li> <li>Audience usually must be literate</li> </ul>
Television commercial	<ul style="list-style-type: none"> <li>Can reach many people</li> <li>Can reach beyond immediate target audience</li> <li>Repetition of messages</li> <li>Can show visuals and model behaviors visually</li> </ul>	<ul style="list-style-type: none"> <li>Expensive</li> <li>Message can be obscured by commercial messages</li> <li>Audience may skip over commercials</li> </ul>
Radio commercial or spot	<ul style="list-style-type: none"> <li>Inexpensive</li> <li>Has a large reach</li> <li>Opportunity for audience involvement if they call in</li> </ul>	<ul style="list-style-type: none"> <li>Hard to communicate the logo part of the brand due to lack of visuals</li> <li>Often reaches smaller group of consumers than television</li> </ul>
Study tour	<ul style="list-style-type: none"> <li>Shows how effective and simple fortification can be</li> <li>Can act as a final push for policy makers to pass the law</li> </ul>	<ul style="list-style-type: none"> <li>Expensive</li> <li>Takes a lot of time to plan the schedule, and you are dependent on others for the schedule</li> </ul>
Events (town hall meetings, parties, etc.)	<ul style="list-style-type: none"> <li>Can be inexpensive</li> <li>Can reach beyond immediate target audience</li> <li>Can be an opportunity to share the experience of those with micronutrient deficiencies</li> </ul>	<ul style="list-style-type: none"> <li>Can be expensive</li> <li>Harder to provide tailored messages</li> </ul>
Newspapers, television news, or other news media	<ul style="list-style-type: none"> <li>Coverage can be free</li> <li>Has a large reach</li> <li>Can reach larger than intended audience</li> <li>Can provide detailed information</li> </ul>	<ul style="list-style-type: none"> <li>Often little control over the content of the story shared</li> <li>Print media not good for less literate audiences</li> </ul>

### *Testing Logos, Messages, or Activities*

It is easy to think that after all of your research, you can easily create effective communication materials. However, it is the target audience who will make this campaign successful or unsuccessful, so gaining their insight again is very valuable. Audiences often will not react to communication activities and materials the way creators expected. Testing materials will help determine the most effective concepts, logos, and other communication materials. Testing allows people from your target audience to offer feedback on what aspects of the concept or communication material they like and what they do not like. After showing several concepts or material drafts to your target audiences, refine your work based on their feedback.

There are two types of testing: concept testing and pre-testing. Concept testing can help you assess the target audiences' reaction to the campaign concepts or ideas. It can help identify problems with messages so you can improve them and also give you new ideas. Pre-testing allows you to test communication material drafts before releasing them to your target audience and general population. It will help you avoid expenses, ineffective materials, and public embarrassment if something is inadvertently offensive.

There are six steps in the testing process:

1. Review research about target audiences and look for any similar campaigns conducted (e.g. iodized salt campaign) to see if messages can be adapted to your goals
2. Brainstorm and develop concepts to test
3. Test your concepts with audience members
4. Finalize concepts then brainstorm and develop communication material drafts
5. Pre-test communication materials
6. Finalize, produce, and release communication materials
7. If your pre-test finds that many changes need to be made, retest your concept or a material a second time before finalizing.

During the brainstorming in steps two and four above, come up with as many ideas as possible. Then narrow that to two or three to use during testing. More than that will overwhelm the people being tested.

Below is a list of testing methods, but this list is not exhaustive.

- Focus groups
- Interviews
- Survey
  - Facebook poll
  - Stand outside a grocery store and ask customers which logo or poster they like best

During tests, ask about seven characteristics of the communication material. The characteristics are listed below along with sample questions for each. Add any other questions that you think may be relevant.

**Questions you can use in testing:**

- Comprehension
  - Tell me in your own words what \_\_\_\_\_ (logo, poster, etc.) says.
  - What is the \_\_\_\_\_ (logo, poster, etc.) about?
- Attractiveness
  - What captures your attention about this \_\_\_\_\_?
  - What do you like about this message?
  - In comparison to other messages you see these days, how attractive do you find this message?
- Acceptability/Credibility
  - Does this message contain anything that might be distasteful or offensive? If so, what is it?
  - Does this message say anything that isn't true? If so, what is it?
- Involvement
  - Do you think this message is intended for someone like yourself? Someone different? Who?
- Persuasion
  - Does this message ask you to do something in particular? What?
- Alternate versions
  - Of the two or three versions you see here, which do you like the best? Why?
- Recommendations
  - What is missing in this message? What could we do to improve it?

It is important to note that not all activities can or should be pretested. For example, it may be difficult to pre-test a live event or expensive to pre-test a complete commercial. Use your best judgment to determine what does or does not need to be tested.

### Case Study: The United States of America

*[Note: The following events are based on the recollection of Dr. Godfrey P. Oakley Jr. who was the Director of the Division of Birth Defects and Developmental Disabilities at the U.S. Centers for Disease Control and Prevention from 1985 to 1998. He is now Director of the Center for Spina Bifida Research, Prevention, and Policy at Emory University, Atlanta, Georgia, USA.]*

Wheat flour has been fortified in the United States (U.S) since 1941. Folic acid was added to the mandated list of fortificants in 1996, but the process of the addition was not simple despite sound scientific evidence for it. In 1991, results of a randomized controlled trial, the most rigorous of scientific research methods, gave irrefutable evidence that folic acid could prevent the vast majority of neural tube defects (NTDs). When this discovery was made, Dr. Godfrey Oakley, the Director of the Division of Birth Defects and Developmental Disabilities with the U.S. Centers for Disease Control and Prevention (CDC) at the time, felt that folic acid would be added to fortification legislation relatively quickly. Dr. Oakley felt confident because the scientific evidence was strong, the potential to reduce the number of children with NTDs was significant, and the amount of money that could be saved in medical bills was high. However, it took more than five years for the US fortification law to be amended to include folic acid.

For folic acid to be added to the legislation, the Food and Drug Administration (FDA) needed to approve the change. In the summer of 1992, the FDA wrote an official recommendation that women of childbearing age should get 400 micrograms of folic acid daily to reduce the risk of neural tube birth defects. Dr. Oakley and other supporting parties thought this meant that folic acid would be added to fortification legislation shortly. Yet the addition stalled as multiple parties argued about folic acid's efficacy despite the published study.

After years without legislative action, folic acid eventually fell off of the agenda of the FDA's meetings. This prompted the March of Dimes, a large American non-governmental organization, to get involved. March of Dimes leaders ultimately told the FDA that if folic acid was not added to the law, they would protest with a large group of children with NTDs and their families on the premises of the FDA. Shortly after, the FDA signed the legislation in 1996 making fortification with folic acid mandatory in the US.

Dr. Oakley said this experience illustrates that sometimes to gain political will, science alone is not helpful. The human toll of not fortifying was an important factor in making folic acid fortification a mandate in the US. People with NTDs are productive members of society, though they often spend their entire lives in wheelchairs and deal with an array of health issues that cannot be cured.

Although many more scientific studies since 1991 have shown the benefit of fortification with respect to preventing birth defects, convincing lawmakers to pass legislation requiring fortification was challenging and a slow process. While the scientific studies and economic information on fortification can assist in persuading policy makers, it is often the connection to people that struggle with these health issues that pushes them to action.

*...continued on next page...*

*...continued from last page...*

Try to make the consequences of not fortifying real to policy makers who may have no experience with a person with an NTD such as spina bifida. Invite people with spina bifida and their families to your meetings with policy makers. Or ask someone who has had anemia caused by a nutritional deficiency to describe the level of fatigue this caused. Such personal stories will help make the health issue more real. Exposing policy makers to people who deal with these health issues (and not just the health issue discussed through a Power Point presentation or scientific report) helps them feel the consequences of these preventable health problems. Touching that emotional nerve with policy makers may encourage them to take action.

Next, prioritize the activities to include in your campaign. Estimate a budget for each, consider the appropriate timing, and determine who will oversee that activity. Reference your SWOT charts to help identify which target audiences are priorities so you can capitalize on the strengths and address threats. More information about budget can be found at the end of this chapter.

The example from Armenia on the next page is the priority list for the consumer audience, but the priority list does not have to be divided by target audience. A blank template is included for your use.

### Armenia's Flour Fortification Communications Action Plan for Consumers

Priority Level	Audience	Communication Method/Activity	Timing	Approx. Cost	Ownership
1	<u>Consumers:</u> Women as they are usually in charge of buying groceries and family health	TV commercials	When fortification begins Duration: First 2 years	5,000 USD to create (+ additional costs for airing commercials)	UNICEF, Ministries, TV Stations
2	<u>Consumers:</u> Women as they are usually in charge of buying groceries and family health	TV news coverage	When fortification begins Duration: First 2 years	Depends on frequency and type of coverage	UNICEF, Ministries TV Stations
3	<u>Consumers:</u> Women as they are usually in charge of buying groceries and family health	Billboards – large signs and/or an advertisement placed on flour mill delivery trucks	When fortification begins Duration: First 3 months	10 billboards 1,800 USD (180 USD for one) for 6 months	UNICEF, Millers
4	<u>Consumers:</u> Women of childbearing age and families with young children	Community based education initiatives – events that focus around flour fortification and related health issues	When fortification begins Duration: First 2 years	Depends on type of initiatives and activities	UNICEF, Health centers
5	<u>Consumers:</u> Grocery buyers, predominantly women	Posters in bakeries and store fronts	When fortification begins Duration: First 2 years	2000 posters 300 USD	UNICEF, Ministries, possibly Peace Corps volunteers
6	<u>Consumers:</u> Families with young children	Leaflets/factsheets distributed through schools or placed in shops	When fortification begins Duration: First 2 years	2000 leaflets 180 USD	UNICEF, Ministry of Education, possibly Peace Corps volunteers

## Fortification Communications Action Plan for \_\_\_\_\_

<b>Priority Level</b>	<b>Audience</b>	<b>Communication Method/Activity</b>	<b>Timing</b>	<b>Approx. Cost</b>	<b>Ownership</b>
1					
2					
3					
4					
5					
6					



### *Sample Activities*

Below are examples of fortification activities from around the world.

#### Flour fortification slogans:

Slogans are the short, memorable phrases used in your communications. Generally these will revolve around health and family.

- KENYA: “LOOK FOR THIS LOGO TO OPTIMIZE YOUR HEALTH. You will find this symbol on packets of porridge, wheat, cooking oil, and sugar.”
- KOSOVO: “Enriched Flour. Flour fortification for better health.”
- YEMEN and UZBEKISTAN: “Bread for iron health.”

#### Factsheets:

Using factsheets or brochures is a simple way to communicate the fortification health and economic benefits. While it may be difficult to have a wide reach with consumers, factsheets are best for smaller groups such as policy makers or health providers.

If you are creating fact sheets, keep the following tips in mind.

- The audience is most likely not composed of specialists in fortification, so use language that a non-specialist can understand.
- Present clear, simple arguments in favor of passing the law.
- People are also busy and will probably not have time to read a long report. Present the information in a succinct format. Using bullet points instead of full sentences will help. Consider using infographics or other visuals.
- Give a brief education on micronutrient deficiencies and what fortification is, then highlight why mandatory grain fortification is the recommended intervention. A helpful framework is to answer the questions: What is wrong? Why does it matter? What should be done about it?
- Include contact information or a website for more information.

### *Working with Policy Makers*

After legislators pass mandatory legislation, they often become advocates and spokespeople regarding the issue. If possible, try to identify someone within the government who will act as a champion and be the person within the government who speaks to the news media to promote fortification. This person could be a part of the parliament or assembly, Ministry of Health, the prime minister/president, or the spouse of the prime minister/president.

If no one from the government is available, designate another advocate as the media spokesmen. This will help ensure that consistent messages are presented. Develop key talking points to help media spokesmen remember to cover all relevant information. Three talking points are ideal, because a small number of talking points is easier for the audience to remember later. If the spokesmen have not had experience talking to the news media, practice a mock interview to make sure they are comfortable. Examples of frequently asked questions and answers can also help.



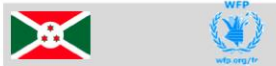
# Burundi

## LEGISLATION

L'enrichissement obligatoire des farines a plus de chances d'engendrer l'impact souhaité sur l'état nutritionnel et la santé que l'enrichissement volontaire. En d'autres termes, l'adoption d'une loi instituant l'enrichissement de la farine est une étape déterminante.

La législation identifie aussi qui va payer les taxes et les fonctions liées au coût de l'enrichissement des farines, y compris frais de douane et les taxes du gouvernement sur les fortifiants et l'équipement. Certains pays éliminent ces frais pour permettre aux meuniers d'enrichir la farine à moindre coût.

## Exemples de produits à enrichir: la farine de maïs et de manioc

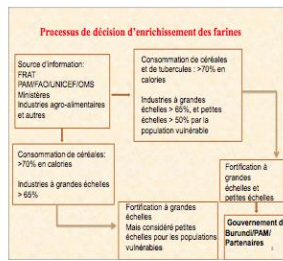


Janvier 2013



Les pays de la Communauté de l'Afrique de l'Est ayant adopté une loi sur l'enrichissement de la farine:

Pays	Enrichissement de la farine
Kenya	Obligatoire
Tanzanie	Obligatoire
Ouganda	Obligatoire
Rwanda	Planifié (FRAT)1
Burundi	Planifié (FRAT)



1FRAT: Fortification Rapid Assessment Tool (Outil d'évaluation rapide des aliments à fortifier)

## ENRICHISSEMENT DE LA FARINE AU BURUNDI



MEILLEURE SANTE



PRODUCTIVITE ACCRUE



REUSSITE SCOLAIRE

## Pourquoi enrichir la farine?

Une grande partie de la valeur nutritionnelle des céréales ou tubercules est perdue au cours de la mouture. Cette perte peut être facilement résorbée par l'enrichissement de la farine, une pratique qui consiste à incorporer à la farine des vitamines et minéraux, principalement le fer et le zinc ainsi que l'acide folique et d'autres vitamines B telles que la thiamine, la riboflavine, la niacine et B12. La farine peut être enrichie aussi en vitamines A et D.

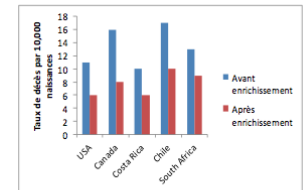


En utilisant cette farine enrichie, les aliments de consommation courante à base de farine, comme le pain, les pâtes et la bouillie deviennent plus nutritifs et les consommateurs en viennent à améliorer leur santé, sans être contraints de modifier leurs habitudes d'achat ou leurs habitudes alimentaires. Les aliments à base de farine sont largement consommés, et la technologie de fortification de la farine est bien établie. L'intégration des pratiques d'enrichissement de la farine dans la stratégie nutritionnelle globale d'un pays est prônée par des organisations mondiales telles que l'UNICEF, l'OMS, FAO et le PAM.

## Bénéfices tirés de l'enrichissement de la farine

**1. Améliorer la santé publique et lutter contre la malnutrition:** l'enrichissement de la farine est une stratégie efficace, sûre et économique pour faire prendre des vitamines et des minéraux essentiels manquants dans le régime quotidien et éviter des problèmes de santé publique tels que :

- ◆ **Carence en fer chez les femmes et les jeunes enfants :** le fer est indispensable à la santé d'une femme enceinte et de son enfant à naître et au développement physique et mental de l'enfant. Au Burundi, les taux de prévalence de l'anémie chez les enfants de 6 à 59 mois et les femmes en âge de procréer ont été respectivement estimés à 45% et 19% selon l'Enquête Démographique et de Santé, 2010 (EDS 2010). Enrichir la farine en fer pourrait aider à réduire ces taux conformément au Plan National de Développement Sanitaire (PNDS) 2011-2015 ;
- ◆ **Carence en acide folique,** une vitamine B, chez la femme enceinte qui provoque des malformations congénitales, voire des décès à la naissance, dus à des lésions irréversibles du tube neural, telles que le spina-bifida. Les pays qui assurent le suivi des malformations à la naissance ont vu la prévalence des malformations du tube neural tomber à moins de 10 pour 10,000 naissances vivantes après avoir commencé à enrichir la farine avec de l'acide folique. Au Burundi le taux de décès néonatal est de 310 pour 10,000 naissances. Enrichir la farine en acide folique peut contribuer à réduire considérablement ce taux.



Prévalence des malformations du tube neural dans cinq pays après l'introduction de l'enrichissement de la farine en acide folique (Zimmerman S., 2011)

**2. Augmenter la productivité et le développement économique:** Outre leurs effets visibles et directs sur la santé humaine, les carences en micronutriments ont des répercussions profondes sur le développement économique et sur la productivité, notamment en termes de coûts potentiellement élevés pour la santé publique et de pertes au niveau de la formation du capital humain. La nutrition améliorée prévient les maladies, renforce le système immunitaire et se traduit par des gains de productivité. La carence en fer est une des causes principales de l'anémie qui provoque:  
 ⇒ 17% de productivité en moins pour les travaux durs ;  
 ⇒ 5% de productivité en moins pour les travaux manuels légers.  
 En comparant aux autres interventions nutritionnelles, telle que la supplémentation, l'enrichissement des aliments est l'intervention la moins dispendieuse. Le coût de l'enrichissement de la farine est inférieur à 3 dollars des Etats-Unis par tonne, soit moins de 20 centimes de dollar par personne et par an. Les avantages économiques qu'un pays peut tirer de cet investissement peuvent être considérables .



## Packaging:

A country's fortification legislation may outline packaging requirements for fortified products. It is usually the millers' responsibility to comply. The most common changes in packaging are the inclusion of a fortified logo, writing on the front that indicates fortification, and nutrition facts on the contents.

### United States



Nutrition Facts	
Serving Size 1/4 cup (30g)	
Serving per Container 30	
Amount Per Serving	
Calories	100
Calories from Fat	0
% Daily Value*	
Total Fat	0g
Saturated Fat	0g
Trans Fat	0g
Sodium	0mg
Total Carbohydrate	22g
Dietary Fiber	less than 1g
Sugar	less than 1g
Protein	3g
Iron	8%
Thiamine	10%
Riboflavin	8%
Niacin	8%
Folic Acid	12%

Not a significant source of cholesterol, vitamin A, vitamin C, and calcium.  
\* Percent Daily values are based on a 2,000 calorie diet.

Ingredients: Bleached wheat flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid, alpha amylase fungi.

Elaborado y empaçado por



### Tanzania





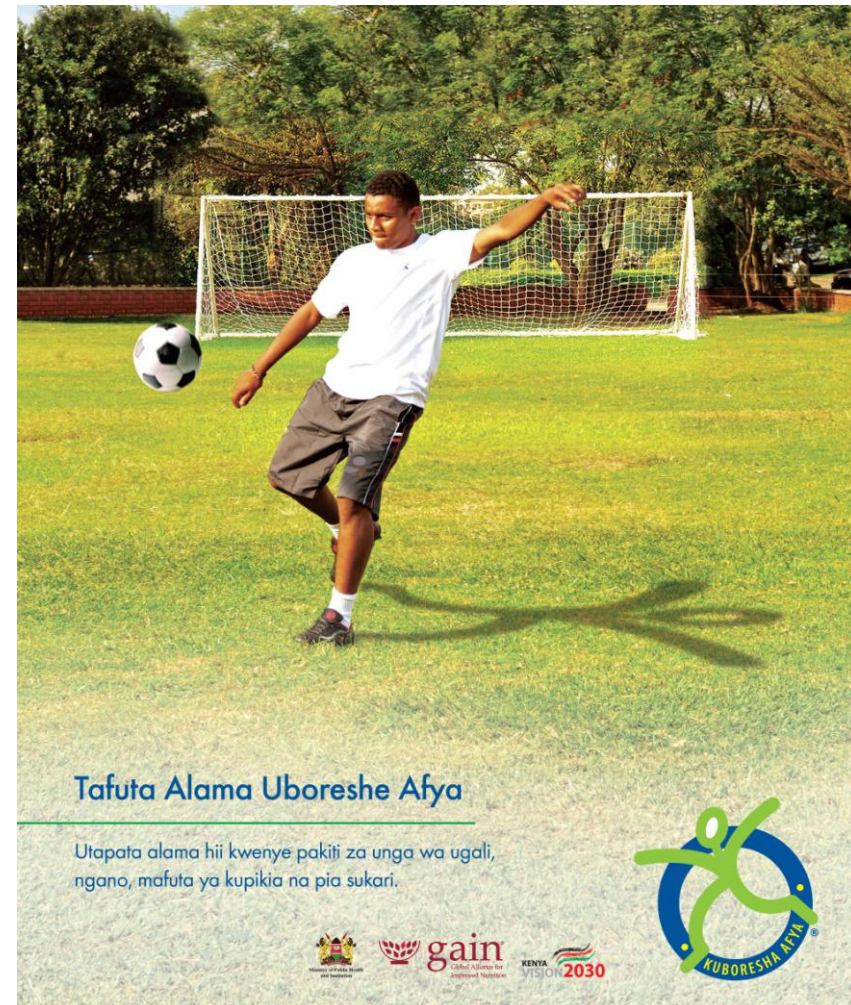
### Posters:

Posters are a quick visual way to get the fortification message across. They are most commonly placed in shops and health clinics. Consider how you will distribute the posters. Ask partners to help with distribution. For example, the Ministry of Health may be able to assist in delivering posters to hospitals and clinics.

#### Georgia



#### Kenya



## Turkey



### Television commercials:

Television commercials can be played during popular shows. While they are one of the more expensive activities, they can have a wide reach if shown during peak times.

### **Senegal**

<http://www.youtube.com/watch?v=0pfWhj-BdX8>

The English translation of the script from this commercial is below.

Boy: "Mommy, tell me a story"

Mother: "In the kingdom of food, once upon a time, there was bread and oil. The bread told the oil, 'I am made of baking flour fortified in iron and B9 vitamin. Because of this iron, I will give strength to those who will eat me.'"

Boy: "Strong like Daddy!"

Mother: "The oil replied, 'Because I am fortified in vitamin A, I will give a better health, and I will help all the children to grow up healthy.'"

Boy: "Like (name of soccer player)!"

Mother: "Yes, and like you my son and her [pointing to the pregnant mother's stomach] too."

Narrator: Today, flour and vegetable oil made in Senegal are fortified to bring you every day the strength and vitality that you need to make beautiful babies and help your children to grow up well and flourish. Fortified foods, better eat them for your health.

This commercial was used in Ivory Coast: <http://www.youtube.com/watch?v=F1zvl4TqrjU>

In English, the text on the billboard is translated "When I am on the packaging, well-being is inside." The translated script for the animated logo is: "My name is Fortified. I am here to add vitamins to foods that you eat every day. Before buying foods, carefully look at the packaging. If I am on it, then your well-being is inside. To keep healthy and be strong, eat better, and eat fortified foods.

### **West Africa (in French)**

<http://www.youtube.com/watch?v=nFifptP4uo>

<http://www.youtube.com/watch?v=OqGnhvdIybU>

### **Kenya**

[http://www.youtube.com/watch?v=Zab\\_Rme2-14](http://www.youtube.com/watch?v=Zab_Rme2-14)

### Study tour:

A study tour is a trip that key fortification stakeholders make to a country that is already fortifying successfully. The purpose of a study tour is to encourage decision makers to pass a law making fortification mandatory. They are most worthwhile in two circumstances:

1. Your country is close to passing the law and leaders need a final push to convince various parties to vote yes.
2. Your country has fortification legislation, but needs help convincing people to implement.

The study tour is a final push to action rather than a catalyst to start the process of developing a national fortification plan. Study tours are expensive and an investment in time for the host country. These resources should not be used unless you feel that your country is close to passing legislation and fortifying.

Study tour participants should be a diverse group, including representatives from all involved ministries, a member of the milling industry, a member of the community affected by a related health issue like spina bifida (this can help make the health issues more real), and a member of any other key stakeholder group. The group should be no larger than eight people as it can be difficult to manage a larger group.

The ideal study tour would be four to five days with an itinerary that includes:

- A welcome meeting that gives an introduction to the experience in the host country, what the milling process is like, and the goals of the study tour attendees.
- A tour of a mill to see the fortification process and quality control in action. Also meet with leaders of the milling association if the country has one.
- A visit with the Ministry of Health and food protection agency to hear about their experiences with fortification and quality control of the fortified food at the government level.
- A meeting with people with spina bifida or with doctors who treat people with spina bifida to hear how fortification has impacted the number of children born with this birth defect.

Conducting a survey before and after the study trip that asks attendees about their thoughts, attitudes, and questions about fortification is highly recommended. One of the first objectives of surveying participants is to measure an increase in knowledge and motivation as well as satisfaction with the study tour. Other objectives are to gain insight into what issues participants have with flour fortification in the baseline survey to ensure that those issues are addressed during the tour.



Other activities:

### Bangladesh - Community Theater



### Azerbaijan - T-shirt



## Turkey - Promotional Events in Bakeries



Turkey - Poster on a Truck



India - Parade Float





## Utilizing News Media

Using newspapers, blogs, television/radio news spots, magazines, etc. is often an easy way to spread the word about fortification. News coverage is free in most cases and provides a wide reach, but be careful because you may have little control over the story. The first step is selecting your news methods and getting access to them. Journalists evaluate potential stories based on newsworthiness. If you cannot imagine reading your story in a newspaper or hearing it on the news, then the writer is not likely to consider it either.

Ways to use the media include:

- Press release
- Op-ed (opinion) pieces
- Writing a letter to the editor
- Call-in to talk radio (You can do this even if fortification is not the topic of discussion, but try to make it relate. For example, if the topic of discussion is education, talk about how low levels of iron can affect a child's cognitive development.)
- Interview
- Media event
- Self-publishing interviews and news releases on your website

A significant challenge with news media is articulating the issue simply. The designated media spokesman should practice answering questions about fortification in one or two sentences. Focus on two problems - nutritional anemia and neural tube birth defects – and one solution - fortification as one way to help prevent these problems. Even though the country may have multiple strategies for addressing these problems, the spokesman should focus on fortification during an interview. A factsheet for journalists is a good way to present simple information that they can take with them.

For more assistance designing a media advocacy campaign, visit these sites:

<http://www.phaiwa.org.au/component/attachments/download/259>

<http://www.thcu.ca/infoandresources/publications/ma%20workbook%20v104.pdf>

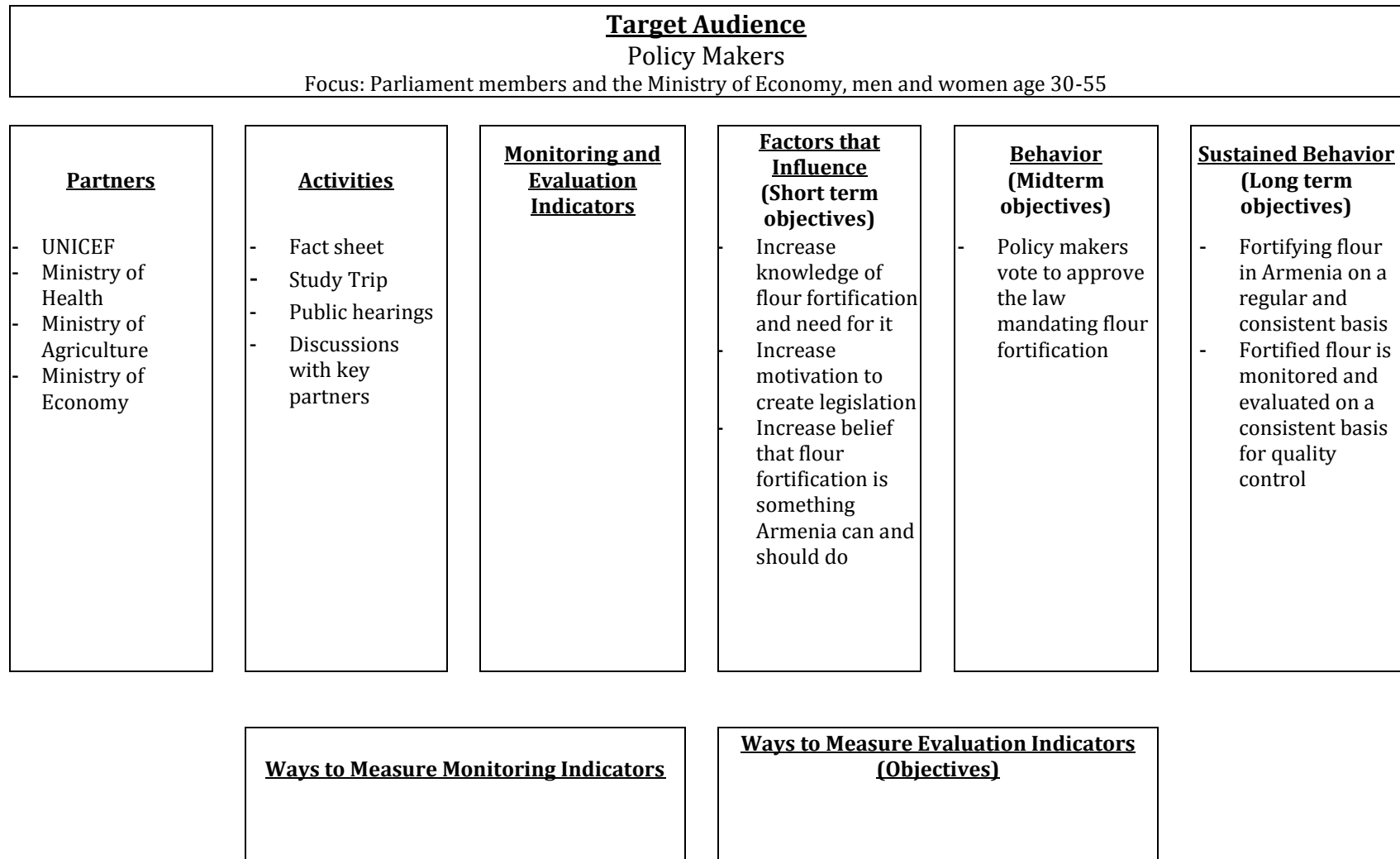
For more information on how to create a news release, write a letter to the editor, or design other media, visit here:

[http://www.apha.org/NR/rdonlyres/A5A9C4ED-1C0C-4D0C-A56C-C33DEC7F5A49/0/Media\\_Advocacy\\_Manual.pdf](http://www.apha.org/NR/rdonlyres/A5A9C4ED-1C0C-4D0C-A56C-C33DEC7F5A49/0/Media_Advocacy_Manual.pdf)

## Mapping the Campaign

To keep plans for the advocacy campaign organized, use a logic model to map audience objectives, activities, evaluation measures, etc. At the end of the toolkit, you will have a logic model for each target audience. It will be especially helpful to have these to share with stakeholders or use in a grant proposal for communication campaign funds.

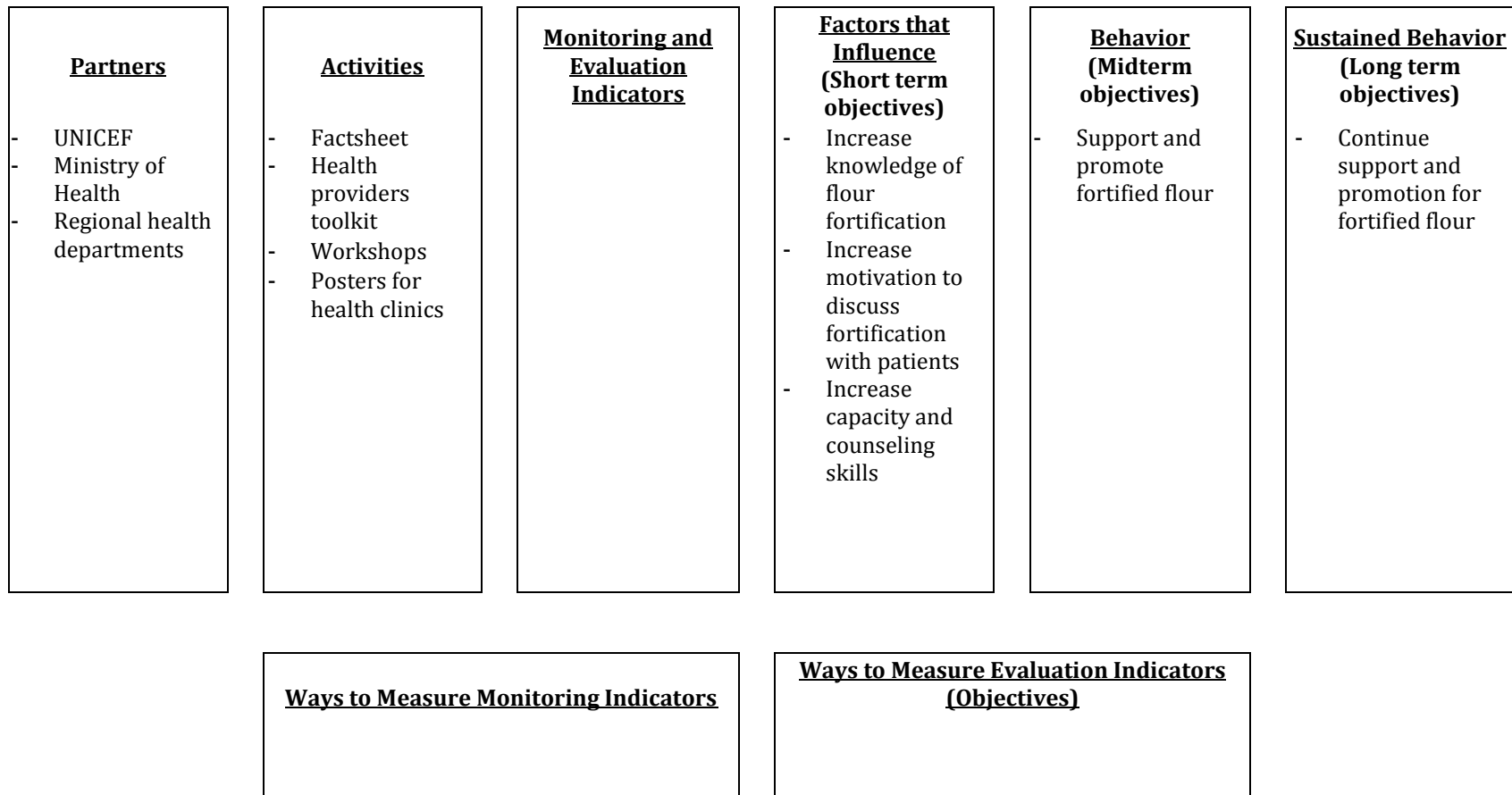
Below are two examples of a logic models created for UNICEF Armenia's campaign. These include monitoring and evaluation indicators, which will be discussed in the next chapter.



**Target Audience**

Health Providers

Focus: Physicians (doctors, nurses, obstetricians, pediatricians, etc.), men and women



Below is a blank template for you to fill in. Begin logic models for each of your target audiences, using information you have collected in this toolkit. The “Partners” column is for the assistants in your campaign that you identified earlier in this chapter. Activities were also developed in this chapter. Short-term, mid-term, and long-term objectives are the audience objectives you developed in chapter one. The rest of the logic model is about evaluation and will be completed in the following chapter.

<b><u>Key Audience</u></b>					
Focus:					
<b><u>Partners</u></b>	<b><u>Activities</u></b>	<b><u>Monitoring and Evaluation Indicators</u></b>	<b><u>Factors that Influence (Short term objectives)</u></b>	<b><u>Behavior (Midterm objectives)</u></b>	<b><u>Sustained Behavior (Long term objectives)</u></b>
<b><u>Ways to Measure Monitoring Indicators</u></b>			<b><u>Ways to Measure Evaluation Indicators (Objectives)</u></b>		

### *Thinking About Budget*

With activities planned, estimate how much your ideal campaign will cost. Include funds for audience research, message testing, creative development and testing, distribution of materials (including buying media time) a campaign evaluation, and any other incidental fees. If you do not have funds for the entire campaign, use your prioritized list from earlier in the chapter to determine the best way to use available funds. Some grant funds may also be available for communications projects.

Some resources may be available at no cost. Some suggestions are:

- Use existing market research. Universities or agencies often conduct research on the television channels and shows people watch, the types of social media people use, etc. Ask for free access to that data for this campaign.
- Adapt messaging from other campaigns. Learn from messages from other fortification campaigns in your country or region.
- Use quick message testing methods instead of formal focus groups. Paying a facilitator or participants for formal focus groups can be expensive, but this research is vital. For quick message testing, any public venue might work. Look for low-cost communications methods. While television commercials may reach a large portion of the population, they are expensive. Posters and billboards are significantly cheaper. If these are placed throughout the country, they will reach a large number of people.
- Look for free media coverage. In some countries, newspapers and television journalists will feature fortification at no cost, however you may not have the option of approving the final content.



## Chapter 4: Monitoring, Evaluation, and Implementation

This chapter focuses on how to develop a monitoring and evaluation plan to ensure that your target audiences are receiving your messages and taking action. It also includes a short discussion on implementation. This chapter covers the remaining steps on the wheel (steps seven and eight).

### *Developing an Evaluation Plan*

Some indicators of an effective grain fortification campaign are that mandatory fortification legislation is in place and enforced, grain is being fortified, and consumers are purchasing and eating fortified products. While those things can tell you if your campaign goal was reached, they cannot tell you if the activities you undertook for your campaign were successful. Evaluation will help you determine the impact of your campaign. Monitoring is important because it allows you to find and correct any issues with the campaign while it is in progress, and it will help you prepare for future social marketing campaigns on other topics.

Remember the example of South Africa mentioned in the last chapter? The campaign began with a number of radio spots and community health workers sharing information. After conducting a mid-term evaluation, campaign organizers learned that few people had heard of fortification and even fewer could identify the fortification logo. They revised their activities to include more television commercials and visual components to raise recognition of the logo. This is an excellent example of how evaluation saved this campaign from wasting resources and/or being ineffective.

Two approaches are used to assess communication progress and effects: monitoring and evaluation. Monitoring is the assessment of how well your campaign's activities are adhering to their design and the extent to which they are reaching the target audience. It should occur while the campaign is in progress. If areas of the campaign are identified as ineffective, you can adjust them before the campaign has ended. Evaluation examines whether your campaign goal and objectives were reached and if the behavior of your audience changed. It generally occurs after the campaign is over.

Before designing your monitoring and evaluation plan, determine what you need to evaluate in accordance with the campaign objectives. Refer to the objectives you wrote in chapter 1. To illustrate, here are the objectives for flour millers in Armenia again (on the next page).

<b>Target Audience:</b>	
<b>Objectives</b>	<b>Millers</b> Focus: Mill owners/operators, men age 40-60
<b>FACTORS THAT INFLUENCE (Short-term objectives)</b>	<ul style="list-style-type: none"> <li>• Understanding how to fortify wheat flour and monitor for quality assurance</li> <li>• Motivation to fortify</li> </ul>
<b>BEHAVIOR (Mid-term objectives)</b>	<ul style="list-style-type: none"> <li>• Fortifying flour on a regular basis</li> <li>• Monitoring the fortification process on a regular basis</li> <li>• Change packaging to indicate fortification is happening</li> </ul>
<b>SUSTAINED BEHAVIOR (Long-term objectives)</b>	<ul style="list-style-type: none"> <li>• Continue fortifying and monitoring</li> </ul>

The targeted behavior for millers includes fortifying grain on a regular basis, monitoring fortification processes, and changing packaging to include fortification information. Therefore key evaluation questions are created for each of these behaviors. These questions drive your evaluation. Fortifying and monitoring are ongoing processes, whereas changing the packaging is a one-time action. Therefore there will be fewer evaluation questions regarding the packaging change. Targeted behaviors may also include sustained behaviors (long-term objectives), for example, ongoing fortification. See evaluation questions for millers below. Additional examples of evaluation questions can be found in the sample logic models later in this chapter.

<b>Audience: Millers</b>	
<b>Targeted Behavior (Objective)</b>	<b>Evaluation questions</b>
1. Fortifying grain on a regular basis	<ul style="list-style-type: none"> <li>• Do millers have the knowledge and capacity and motivation to fortify?</li> <li>• Are they fortifying?</li> <li>• Do they have the capacity and motivation to continue fortifying? <ul style="list-style-type: none"> <li>○ If not, why not? How can this be addressed?</li> </ul> </li> <li>• What measures are in place to help them do so?</li> </ul>
2. Monitoring fortification process	<ul style="list-style-type: none"> <li>• Do millers have the knowledge and capacity and motivation to monitor?</li> <li>• Are they monitoring?</li> <li>• Do they have the capacity and motivation to continue monitoring?</li> <li>• What measures are in place to help them do so?</li> </ul>
3. Changing packaging	<ul style="list-style-type: none"> <li>• Has the packaging been changed</li> </ul>

Write evaluation questions for each target audience and their objectives. Copy this table as necessary.

<b>Audience:</b>	
<b>Targeted Behavior (Objective)</b>	<b>Evaluation questions</b>
1.	
2.	
3.	

These questions can be answered by looking at indicators. Indicators will be different for monitoring and evaluation. Monitoring indicators help you see if you are getting the responses and reach that you want with each activity. Indicators for these are more readily available because they are typically numerical, for example the number of times a mill performs quality control tests for the added premix of vitamins and minerals, the number of posters distributed to shops and health clinics, how many bags of fortified flour were sold, etc. Conversely, evaluation indicators go into more depth to understand the knowledge, attitude, and practice of audience members before and after your campaign. These indicators measure the change in behavior in your target audience and why it did or did not occur.

For example, one campaign objective for health providers may include increasing patient knowledge of fortification. Activities are to post flyers in hospitals or health clinics, conduct workshops for health providers, and create a flyer with answers to questions that patients frequently ask about fortification.

Monitoring indicators could include:

- Number of posters placed in hospitals/health clinics
- Number of workshops provided for health providers
- Number of attendees at the workshops provided for health providers
- Location of workshops for health providers within an area
- Number of frequently asked questions flyers distributed

Evaluation indicators could include:

- Health provider attitudes and knowledge towards fortification
- Patient attitudes and knowledge of fortification
- How often health providers discuss fortification with patients

Determine how you will gather information about your monitoring and evaluation indicators. To get the most accurate picture of the process and impact of your activities, use multiple methods to gather data. For instance if you want to evaluate a training:

- Observe: How many attended compared to how many were invited? Did they seem to be paying attention to the speaker? Did they ask questions for more information?
- Use a pre/post survey to measure the participants' gain in knowledge. Conduct follow-up surveys six months later to see if the material is remembered and being used.

Ideas for gathering data:

- Written survey (handout, read over the telephone, e-mail, internet, etc.)
- Personal interview (individual or group; formal or informal)
- Observation
- Analysis of existing documents and reports (for example, television consumer reports and other market research)
- Logs or activity forms (for example, mill fortification logs on frequency of adding premix, how much premix was added and monitoring for quality assurance)
- Debriefing sessions
- Focus group discussion

Evaluation helps demonstrate the value of your project and can be useful to show to your campaign funders. After your evaluation, you will be able to say things like “After a healthcare provider campaign activity, we saw \_\_\_% more doctors talked to their patients about fortification and its health benefits compared to a previous monthly average of \_\_\_.” or “From the time we started social marketing activities, the percentage of healthcare patients who were knowledgeable about fortification increased by \_\_\_%. We have used the following data to measure this...”

### *Revisiting the Budget*

It is easier and less expensive to conduct monitoring than evaluation. Evaluation often requires surveys that are large investments in time, energy, and resources. If your budget is tight, then you can choose which audiences or activities you would like to evaluate.

Armenia only included monitoring because campaign leaders did not have the time or the resources to do proper evaluations. This approach may be necessary, but it is not recommended. Monitoring can improve the likelihood of success of your social marketing campaign by providing periodic updates on campaign procedures and allows for adjustment if needed. Monitoring and evaluation can help improve future campaigns by indicating which methods and messages were most effective.

### *Revisiting Logic Models*

In the last chapter, you started logic models but left the evaluation pieces blank. Now you can complete the logic model with the evaluation questions and indicators. In the “Ways to Measure...” boxes, write how you will gather information on your evaluation indicators. The “Ways to Measure Outcome Indicators” should correspond to how you will measure whether your objectives are being met. See the completed examples from Armenia on the next page.

## Target Audience

Policy Makers

Focus: Parliament members and the Ministry of Economy, men and women age 30-55

<u>Partners</u>	<u>Activities</u>	<u>Monitoring and Evaluation Indicators</u>	<u>Factors that Influence (Short term objectives)</u>	<u>Behavior (Midterm objectives)</u>	<u>Sustained Behavior (Long term objectives)</u>
<ul style="list-style-type: none"> <li>- UNICEF</li> <li>- Ministry of Health</li> <li>- Ministry of Agriculture</li> <li>- Ministry of Economy</li> </ul>	<ul style="list-style-type: none"> <li>- Fact sheet</li> <li>- Study Trip</li> <li>- Public hearings</li> <li>- Discussions with key partners</li> </ul>	<ul style="list-style-type: none"> <li>- # of factsheets distributed</li> <li>- # of government officials on study tour</li> <li>- # of public hearings and # of attendees</li> <li>- # of discussions with key partners and # of people involved with discussions</li> </ul>	<ul style="list-style-type: none"> <li>- Increase knowledge of flour fortification and need for it</li> <li>- Increase motivation to create legislation</li> <li>- Increase belief that flour fortification is something Armenia can and should do</li> </ul>	<ul style="list-style-type: none"> <li>- Policy makers vote to approve the law mandating flour fortification</li> </ul>	<ul style="list-style-type: none"> <li>- Fortifying flour in Armenia on a regular and consistent basis</li> <li>- Fortified flour is monitored and evaluated on a consistent basis for quality control</li> </ul>

### Ways to Measure Monitoring Indicators

Tracking grid, observation, study tour pre/post survey

### Ways to Measure Evaluation Indicators (Objectives)

Key informant interviews, observation, measuring fortification levels at flour mills

### Target Audience

#### Health Providers

Focus: Physicians (doctors, nurses, obstetricians, pediatricians, etc.), men and women

<u>Partners</u>	<u>Activities</u>	<u>Monitoring and Evaluation Indicators</u>	<u>Factors that Influence (Short term objectives)</u>	<u>Behavior (Midterm objectives)</u>	<u>Sustained Behavior (Long term objectives)</u>
<ul style="list-style-type: none"> <li>- UNICEF</li> <li>- Ministry of Health</li> <li>- Regional health departments</li> </ul>	<ul style="list-style-type: none"> <li>- Factsheet</li> <li>- Health providers toolkit</li> <li>- Workshops</li> <li>- Posters for health clinics</li> </ul>	<ul style="list-style-type: none"> <li>- # of factsheets distributed</li> <li>- # of toolkits distributed</li> <li>- # of workshops conducted</li> <li>- # of workshop attendees</li> </ul>	<ul style="list-style-type: none"> <li>- Increase knowledge of flour fortification</li> <li>- Increase motivation to discuss fortification with patients</li> <li>- Increase capacity and counseling skills</li> </ul>	<ul style="list-style-type: none"> <li>- Support and promote fortified flour</li> </ul>	<ul style="list-style-type: none"> <li>- Continue support and promotion for fortified flour</li> </ul>

#### Ways to Measure Monitoring Indicators

Publication-provided metrics, distribution-provided metrics, observation, tracking grid

#### Ways to Measure Evaluation Indicators (Objectives)

Key informant interviews with providers and patients, observation, attendance

### ***Developing the Implementation Plan***

Your implementation plan is a timeline of when to conduct certain activities. Timing is important because you do not want to begin advertising fortified products to consumers when they are not yet available in stores. Your activities for policy makers and millers will come first to get the legislation in place and begin the fortification process. If media in your country cover government proceedings, use that opportunity to educate consumers on fortification, related health issues, and its benefits. You will want to wait to begin distributing messages promoting the fortification logo and brand until the products are available.

As you create your implementation plan, be flexible because the timing of some events is out of your control. Recruit partners to help with pieces of the plan, assign them tasks, and ensure that they carry out the jobs they are assigned. Avoid dates that conflict with holidays in your country so that the implementation campaign does not compete for attention with these events. Also, develop the plan with your other responsibilities in mind to ensure you can manage multiple activities at the same time.

One of the most challenging pieces of fortification programs is ensuring that fortification and quality control continue. Millers and policy makers may need encouragement after fortification begins. Meeting with millers periodically to provide updates on how fortification is impacting the country or region can encourage them to continue with their efforts. Sometimes policy makers get distracted or new people come into those positions. Plan periodic activities to encourage government officials who are responsible for quality control to continue supporting fortification.

Future steps will be to implement, begin your evaluations, make any adjustments if needed, and continue to monitor fortification in your country. Do not forget that this is an iterative process. You may need to jump to different areas within the toolkit. That is okay. If you have any questions or need assistance, please contact FFI at [info@ffinetwork.org](mailto:info@ffinetwork.org) and visit [www.ffinetwork.org](http://www.ffinetwork.org). Best of luck with your fortification social marketing campaign!

### **Additional Resources:**

Making Health Communications Work: A Planner's Guide

[http://www.cancer.gov/cancertopics/cancerlibrary/pinkbook/Pink\\_Book.pdf](http://www.cancer.gov/cancertopics/cancerlibrary/pinkbook/Pink_Book.pdf)

CDCynergy: Gateway to Health Communications & Social Marketing Practice

Note: Folic acid examples are available in this tool

<http://www.cdc.gov/healthcommunication/cdcynergy/index.html>



## **Chapter 4: Discussion & Conclusion**

FFI has been providing technical assistance and advocacy to key decision makers and fortification proponents around the world for over ten years. In the past FFI has had limited ability to assist with country fortification communications or social marketing campaigns due to its small number of staff. This fortification social marketing and advocacy toolkit allows FFI to increase its capacity to assist countries in designing strategies to encourage key stakeholders to take action in support of fortified grains and in turn help ensure program sustainability. The toolkit provides a framework for creating a social marketing campaign for fortification proponents. It is based on social marketing best practices and contains activities for the reader and examples from past grain fortification campaigns around the world. The toolkit will be housed electronically on FFI's website and promoted by staff members to countries interested in starting a grain fortification program.

### *Public Health Implications*

A successful fortification program can reduce micronutrient deficiencies and improve nutritional health. Though nutritional impact depends on fortificants used and population reached, nutritional impact can also be indirectly affected by social marketing campaigns; social marketing messages encourage consumers to eat fortified products. This social marketing and advocacy toolkit can assist in the development or strengthening of a grain food fortification program.

Should this toolkit become widely used for grain fortification campaigns, it has the potential to increase the effectiveness of grain social marketing and communications campaigns and encourage more decision makers and millers to take action to begin a fortification program. Occasionally, fortification legislation is passed and fortification does not begin or millers begin fortifying but then lose momentum and stop. This toolkit can also help improve the sustainability of fortification programs by encouraging sustained behavior.

There is also potential for this toolkit to be expanded to include other fortified foods. FFI has partnerships and connections to other groups that promote the fortification of salt, oil, milk, and other foods. They may be interested in collaborating to expand the scope of this toolkit.

### *Recommendations*

The toolkit will be pilot tested at the Micronutrient Forum in Ethiopia during the summer of 2014 with international participants. An instructional session will be held to instruct fortification proponents on how to use the toolkit. However it should be pilot tested further with a country to locate sections within the toolkit that may not be optimally clear to users and to identify areas where staff may need coaching on how to best collaborate with country fortification proponents. Problem areas can then be addressed. If Armenia passes a mandatory fortification law and their social marketing campaign is enacted, then amendments should be made to the Armenian examples used throughout the toolkit.

Additionally, a short survey could be used to gain feedback from fortification proponents who utilize the toolkit and create a social marketing campaign.

Marketing of the toolkit should be undertaken to increase its visibility and usage.

Educating the FFI staff on the toolkit and how to present it will increase the likelihood that they will promote it with international fortification stakeholders. When FFI participates in conferences or meetings, it may be helpful to have a printed version to showcase to interested parties. FFI representatives can then direct them to the website or hand out a CD with the toolkit on it.

There is also limited empirical evidence on the topic of food fortification social marketing and communications campaigns. Further research is needed. Future research could compare countries that use the toolkit or compare and contrast a country that uses the toolkit with one that does not.

### *Conclusion*

Fortification proponents recognize the potential benefit fortifying cereal grains can have in their country. Approximately 30% of the world's population suffers from micronutrient deficiencies,<sup>1</sup> and additional vitamins and minerals in their diet can help prevent and ease their symptoms. The Fortification Advocacy Toolkit will help proponents create a strong social marketing campaign to support a successful fortification program. It also expands FFI's communications technical capacity and will help them to reach and support proponents of fortification in a new way.

## References

1. World Health Organization, World Food Program, UNICEF. Preventing and controlling micronutrient deficiencies in populations affected by an emergency. 2006; [http://www.unicef.org/nutrition/files/Joint\\_Statement\\_Micronutrients\\_March\\_2006.pdf](http://www.unicef.org/nutrition/files/Joint_Statement_Micronutrients_March_2006.pdf). Accessed March, 2014.
2. World Health Organization. Micronutrient deficiencies: Iron deficiency anaemia. 2013; <http://www.who.int/nutrition/topics/ida/en/>. Accessed May 30, 2013.
3. Youngblood ME, Williamson R, Bell KN, Johnson Q, Kancherla V, Oakley GP, Jr. 2012 Update on global prevention of folic acid-preventable spina bifida and anencephaly. *Birth Defects Res. A Clin. Mol. Teratol.* Oct 2013;97(10):658-663.
4. Copenhagen Consensus Center. Copenhagen Consensus 2012. 2013; <http://www.copenhagenconsensus.com/projects/copenhagen-consensus-2012/outcome>. Accessed Nov 10, 2013.
5. Flour Fortification Initiative. Why Fortify? Economic Progress. 2013; [http://www.ffinetwork.org/why\\_fortify/economics.html](http://www.ffinetwork.org/why_fortify/economics.html). Accessed May 30, 2013.
6. Flour Fortification Initiative. About Us. 2013; <http://www.ffinetwork.org/about/index.html>. Accessed May 30, 2013.
7. Johnson Q. Oral personal communication ed2013.
8. Handforth B, Luopa L. Roadblocks to Progress. 2012; [http://www.ffinetwork.org/about/stay\\_informed/publications/documents/IrelandNewZealand.pdf](http://www.ffinetwork.org/about/stay_informed/publications/documents/IrelandNewZealand.pdf). Accessed May 31, 2013.
9. Andreason AR. *Marketing Social Change: Changing Behavior to Promote Health, Social Development, and the Environment*. San Francisco, CA: Jossey-Bass; 1995.
10. Hastings G, Angus K, Bryant C, eds. *The SAGE Handbook of Social Marketing*. London: SAGE; 2011.
11. Weinreich NK. *Hands-on social marketing: A step-by-step guide to designing change for good*. Sage Publications; 2010.
12. Lee NR, Kotler P. *Social Marketing*. Fourth ed. Thousand Oaks, CA: SAGE; 2011.
13. Andreason AR. Marketing social marketing in the social change marketplace. *Journal of Public Policy & Marketing*. 2002;21(1):3-13.
14. Nayak MU, Vazir S, Vijayaraghavan K, Chandralekha K. Nutrition communication using social-marketing techniques to combat vitamin A deficiency: Results of summative evaluation. *Food & Nutrition Bulletin*. 2001;22(4):454-465.
15. Snyder LB. Health communication campaigns and their impact on behavior. *Journal of Nutrition Education and Behavior*. 2007;39(2):S32-S40.
16. The World Bank. Nutrition Toolkit Tool #9 Appendix A: Examples of Nutrition Communication that Had Measurable Impact. 2011; <http://siteresources.worldbank.org/NUTRITION/Resources/Tool9-appenda.pdf>. Accessed Nov 27 2013.
17. Rao GS. Nutrition communication thus far and further: A critical examination of research and practice. *Indian Journal of Science Communication*. 2009;8(2):3-13.

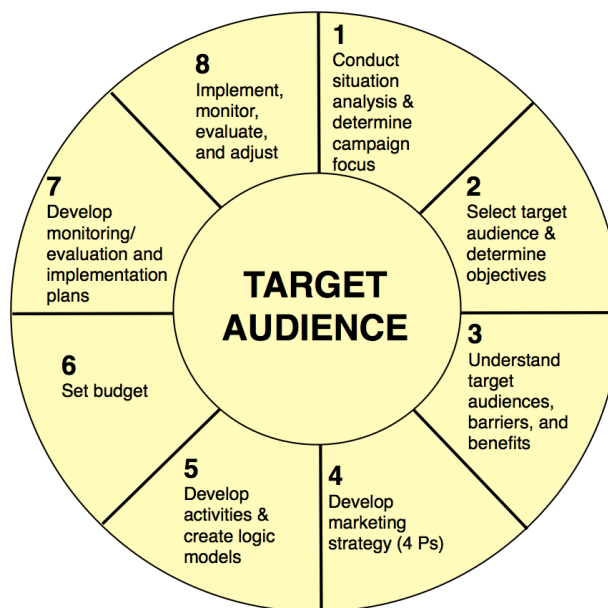
18. Gordon R, McDermott L, Stead M, Angus K. The effectiveness of social marketing interventions for health improvement: what's the evidence? *Public Health*. 2006;120(12):1133-1139.
19. Stead M, Stead M, Stradling R, et al. Implementation evaluation of the blueprint multi-component drug prevention programme: fidelity of school component delivery. *Drug and alcohol review*. 2007;26(6):653-664.
20. Stead M, Gordon R, Angus K, McDermott L. A systematic review of social marketing effectiveness. *Health Educ*. 2007;107(2):126-191.
21. Cheng H, Kotler P, Lee NR. *Social Marketing in Public Health: Global Trends and Success Stories*. Sudbury, MA: Jones and Bartlett Publishers; 2011.
22. Griffiths M. Communication strategies to optimize commitments and investments in iron programming. *The Journal of nutrition*. 2002;132(4):834S-838S.
23. Lindsey LLM, Silk KJ, Von Friederichs-Fitzwater MM, Hamner HC, Prue CE, Boster FJ. Developing effective campaign messages to prevent neural tube defects: a qualitative assessment of women's reactions to advertising concepts. *Journal of health communication*. 2009;14(2):131-159.
24. Claeyssens V, Taha O, Jungjohann S, Richardson L. Social marketing in public-private partnerships as a tool for scaling up nutrition: a case study from Tanzania. *UN SCN News*. 2011;39:45-50.
25. Tibuleac T. Moldovan TV star Mircea Surdu promotes iodized salt. 2006; [http://www.unicef.org/ceecis/reallives\\_4264.html](http://www.unicef.org/ceecis/reallives_4264.html). Accessed March, 2014.
26. Ainur B, Akio N, Katsuki I, Junichi S. Effectiveness of communication campaign on iron deficiency anemia in Kyzyl-Orda region, Kazakhstan: a pilot study.
27. Lane D, Isabel-Knoop C. *Two Wheels Turning: Partnership in China's Soy Sauce Fortification Program*. World Bank Institute; 2008.
28. Dijkhuizen MA, Wieringa FT, Soekarjo D, Van KT, Lailou A. Legal framework for food fortification: Examples from Vietnam and Indonesia. *Food & Nutrition Bulletin*. 2013;34(Supplement 1):112S-123S.
29. Griffiths M. Communicating the benefits of micronutrient fortification. *Food & Nutrition Bulletin*. 2003;24(Supplement 2):146-150.
30. Darnton-Hill I, Nalubola R. Fortification strategies to meet micronutrient needs: successes and failures. *Proc. Nutr. Soc*. 2002;61(02):231-241.
31. Ministry of Health Official. Oral personal communication ed2014.
32. Initiative FF. Wheat Flour Millers' Toolkit. 2013; <http://www.ffinetwork.org/implement/toolkit.html>. Accessed January 13, 2014.
33. Evans WD, Longfield K, Shekhar N, Rabemanatsoa A, Reerink I, Snider J. Social Marketing and Condom Promotion in Madagascar: A Case Study in Brand Equity Research. In: Obregon R, Waisbord S, eds. *The Handbook of Global Health Communication*. West Sussex, UK: Wiley-Blackwell 2012:330-347.
34. Sablah M, Klopp J, Steinberg D, Touaoro Z, Lailou A, Baker S. Thriving publicprivate partnership to fortify cooking oil in the West African Economic and Monetary Union (UEMOA) to control vitamin A deficiency: Faire Tache d'Huile en Afrique de l'Ouest. *Food & Nutrition Bulletin*. 2012;33(Supplement 3):310S-320S.
35. GAIN. Lessons Learned From 10 Years of Experience in Africa: Sharing Experiences in Food Fortification. 2012;

- [http://www.gainhealth.org/sites/www.gainhealth.org/files/EA Workshop Lessons.pdf](http://www.gainhealth.org/sites/www.gainhealth.org/files/EA%20Workshop%20Lessons.pdf). Accessed October, 2013.
36. Rustam Haydarov; UNICEF Uzbekistan. Global Alliance for Improved Nutrition National Flour Fortification Program of Uzbekistan: Communication and Marketing Component Progress Report. 2005; [http://www.unicef.org/ceecis/uzbekistan flour fortification progress report.pdf](http://www.unicef.org/ceecis/uzbekistan_flour_fortification_progress_report.pdf). Accessed October, 2013.
  37. Department of Health South Africa USA. A Reflection of the South African Maize Meal and Wheat Flour Fortification Programme (2004-2007). 2008; [http://www.unicef.org/southafrica/SAF resources wheatfortificationn.pdf](http://www.unicef.org/southafrica/SAF_resources_wheatfortificationn.pdf). Accessed July, 2013.
  38. Nyumuah RO, Hoang T-CC, Amoaful EF, et al. Implementing large-scale food fortification in Ghana: Lessons learned. *Food & Nutrition Bulletin*. 2012;33(Supplement 3):293S-300S.
  39. Çan G, Ökten A, Green J. The role of local mass media in promoting the consumption of iodized table salt. *Health Educ. Res.* 2001;16(5):603-607.
  40. Paoletti A, Iannaccone A. *Annali dell'Istituto Superiore di Sanita*. 1982.
  41. Pfaff G, Hesse V, Oehler K, Georg T, Boeing H. Status of alimentary iodine supply in the Potsdam area]. *Z. Ernahrungswiss.* 1997;36(3):225.
  42. Novelli WD, Workman B. Social Marketing and Advocacy. In: Hastings G, Angus K, Bryant C, eds. *The SAGE Handbook of Social Marketing*. London, UK: SAGE; 2011:377-390.
  43. Chapman S. Advocacy for public health: a primer. *J. Epidemiol. Community Health*. 2004;58(5):361.
  44. Dorfman L, Cohen L, Chavez V, Chehimi S. Using media advocacy to influence policy. *Prevention is primary: Strategies for community well-being*. 2007:181-203.
  45. Dorfman L, Wallack L, Woodruff K. More than a message: Framing public health advocacy to change corporate practices. *Health Educ. Behav.* 2005;32(3):320-336.
  46. McGrath C. Framing lobbying messages: defining and communicating political issues persuasively. *Journal of Public Affairs*. 2007;7(3):269-280.
  47. Titley S. How political and social change will transform the EU public affairs industry. *Journal of Public Affairs*. 2003;3(1):83-89.
  48. FAO. Food Security Communications Toolkit. 2011; <http://www.fao.org/docrep/014/i2195e/i2195e00.htm>. Accessed July, 2013.
  49. UNICEF Nutrition Section, UNICEF Programme Division, UNICEF Division of Communications. *Sustainable elimination of iodine deficiency: progress since the 1990 World Summit for Children*. UNICEF; 2008.
  50. Gradl C. Building a Strategic Alliance for the Fortification of Oil and Other Staple Foods (SAFO). 2012; [http://www.food-fortification.com/files/pdf/SAFO Case v4LR.pdf](http://www.food-fortification.com/files/pdf/SAFO_Case_v4LR.pdf). Accessed December 8, 2013.
  51. Dorfman L. Using Media to Influence Policy. In: Cohen L, Chavez V, Chehimi S, eds. *Prevention Is Primary: Strategies for Community Well Being*. 2 ed. San Francisco, CA: Jossey-Bass; 2010.
  52. Lakoff G, Morgan P. Framing social issues: Does "the working poor" work? (Report to the Ford Foundation; Rockridge Strategic Analysis Paper 2001-01). *Public obligations: Giving kids a chance (Report from a conference on the state role in early*

- education, Innovations in American Government, Kennedy School of Government, Harvard University*). Cambridge, MA: Harvard University Press; 2001:16-38.
53. Woodruff K, Dorfman L, Berends V, Agron P. Coverage of childhood nutrition policies in California newspapers. *J. Public Health Policy*. 2003;24(2):150-158.
54. Taylor M. "Strategic Marketing Planning" Class Lecture Emory University. Jan 24 2014.

## Appendix: Methods & Results

The Fortification Advocacy Toolkit, the primary product of this research, is based on social marketing best practices. A literature review was conducted to inform the format and content of this toolkit. This included a review of social marketing methodologies, expert opinions, and fortification communications case studies. These best practices were demonstrated through the Center for



*Adapted social marketing process wheel*

Disease Control and Prevention's Communication Planning Wheel model.<sup>54</sup> This model goes through the steps of creating a social marketing campaign: conducting a situational analysis, identifying target audiences, determining goals, developing a marketing strategy, and creating an evaluation and implementation plan. The model was adapted for this campaign (as shown above) and used throughout the toolkit as a guide.

Although there have been limited evaluations of fortification campaigns, the findings of these evaluations are discussed in the literature review and have been incorporated into the toolkit. In addition, four case studies are included in the toolkit as examples of social marketing campaigns. The most significant of these case studies is Armenia. Other abbreviated case studies include South Africa, New Zealand, and the United States of



America. These examples highlight the successes and failures of past communications and are utilized as lessons learned. Information was gathered primarily through secondary research.

### *Case Study: Armenia*

To address the worsening situation in regard to micronutrient deficiency, in 2008 UNICEF Armenia initiated a national discussion on the need for and feasibility of introducing flour fortification with iron and folic acid as a public health intervention. As a result of UNICEF's intensive advocacy, a Steering Committee under the authority of the Prime Minister with high representation from concerned ministries, the National Assembly and international organizations, was established to coordinate all activities related to flour fortification. A Concept Note and a Plan of Action Budget on Implementation of Flour Fortification Program in Armenia was approved by the Government as a legal basis for implementing a flour fortification program. The needs of eight major milling companies (which supply about 85% of the total flour needs in the country) were assessed, and UNICEF procured the required equipment to be installed in the mills. The millers at these major milling companies pledged their support for fortification in preliminary meetings and said they would begin fortifying after the law was passed. In addition, the country drafted a legislative framework, which includes legislation and technical standards for production.

The proposed law was then raised and tabled a couple of times because of elections. It was raised again to parliament in August 2013. UNICEF Armenia staff members are hopeful that the law will be passed before the end of 2014 as the President and Prime Minister are

supportive. Armenia still needs to encourage legislators to pass the fortification law, educate millers on how to fortify, encourage consumers to buy and consume fortified products, and increase the capacity of health providers to discuss fortification with their patients. I spent the summer of 2013 in Yerevan, Armenia, working with UNICEF Armenia to develop a social marketing strategy for flour fortification for these target audiences.

Prior to my arrival, I read as much as I could about Armenian culture and flour fortification best practices. I met with several people to discuss this project, including: Sarah Zimmerman, FFI Communications Coordinator; Becky Handforth, FFI Europe Associate; Helena Pachón, FFI Senior Nutrition Scientist; Bob Baldwin, FFI Senior Advisor; and Quentin Johnson, FFI Technical Coordinator. I continued to consult with those listed during my time in Armenia. I also prepared a preliminary marketing campaign for Armenian flour millers as a part of a social marketing class I took in Spring 2013.

In Armenia, I worked primarily with UNICEF Armenia's Health & Nutrition Program Officer, Liana Hovakimyan, and the Assistant Health and Nutrition Program Officer, Mihran Hakobyan. To conduct a situation analysis, I did a literature review of all materials related to flour fortification in Armenia and visited a flour mill and several bakeries to learn more about how flour is made, acquired, and used by Armenians. Since I was unable to meet with policy makers or health providers, I interviewed the UNICEF staff that had worked with them. Then, in order to map out the current situation of flour fortification amongst target groups, the Nutrition and Health UNICEF staff assisted me in creating Strengths, Weaknesses, Opportunities, and Threats (SWOT) charts for each audience.

From there, we developed logic models that detail the activities, goals, and indicators of the campaign for each target audience. We applied the 4 Ps of Marketing (Product, Price, Place, Promotion) to each of the target audiences and their goals. This helped identify the challenges and motivations of each audience. With help from a friend who is a graphic artist, I designed three fortification logos that will be voted on by the government ministries to determine which will be best for the campaign. The selected logo will be placed on all fortified wheat flour products and byproducts. I also developed a communications action plan, a television media strategy, and a health providers' toolkit amongst other materials to be used in the campaign. Campaign methods, activities, and messages were based on social marketing best practices.

The toolkit includes a number of activities for readers to undertake as they plan their campaign using Armenia social marketing materials as examples. The process of designing tools and resources for the Armenia campaign helped inform how the instructions for each toolkit activity were written. Completed examples of these communications activities are primarily taken from the Armenia campaign. The most substantial limitation of the Armenia example is that many of the communications activities have not been implemented. Thus far, Armenia has only been implementing the campaign with policy makers, because the law needs to be passed before they can implement for other target audiences. If/when Armenia begins to fortify and these activities are undertaken, the toolkit will be updated to reflect evaluation findings.

### *Case Study: South Africa*

After having voluntary fortification for some years, South Africa passed a law mandating that all who manufacture, import, or sell wheat flour and maize meal must fortify with iron, zinc, vitamin A, thiamin, riboflavin, niacin, folic acid, and pyridoxine. A series of advocacy and social marketing campaigns were conducted for consumers. In evaluating these activities, campaign leaders identified creating awareness and value for the logo as one of the most important lessons learned. Most of South Africa's campaigns focused on educating consumers about health issues that fortification can address, and radio messages were the primary means of communications. Even though the radio scripts encouraged consumers to look for the fortification sign on products, it was difficult to associate the logo with the message because consumers could not see the logo. South Africa's experience with fortification social marketing is included in the toolkit as an example of the importance of brand development and evaluation.

The South Africa case study was compiled through desk review of available literature and campaign documents. Some materials were available to the public, and others were obtained through the South African Department of Health. Several questions arose during the review of campaign materials, so I spoke with a South African Department of Health representative to gain clarity on campaign events. The limitation of this case study is that I was unable to speak to anyone who played an active role in the design and implementation of the campaign.

### *Case Study: New Zealand*

Fortification advocates in New Zealand tried to pass mandatory fortification legislation for two decades. Efforts began in the early 1990's, and fortification was debated until the Minister of Food Safety announced in 2012 that the government would not pass the legislation. The bakers' association and the New Zealand Food and Grocery Council led the charge against flour fortification. New Zealand had no social marketing campaign, so it is impossible to know whether and how a social marketing campaign could have changed the outcome of this decision. Nevertheless, addressing the opponents of fortification as a target audience and seeking to educate them could have helped minimize the fallacies they spread in the media about fortification and safety. Though the government leaders in 2001 were convinced of the need for fortification, advocacy needed to begin again with new government officials in 2008. The story of fortification in New Zealand highlights the need to identify key audiences and to target them with a campaign.

The New Zealand case study was compiled from FFI's written account of the story fortification in New Zealand and related news articles.

### *Case Study: United States of America*

Wheat flour has been fortified in the United States since 1941. Folic acid was added to the list of fortificants in 1996, but this was not a simple addition despite sound scientific evidence to support it. In 1991, results of a randomized controlled trial, the most rigorous of scientific research methods, gave irrefutable evidence that folic acid could prevent the vast majority of neural tube defects (NTDs). When this discovery was made, Dr. Godfrey

Oakley, the Director of the Division of Birth Defects and Developmental Disabilities at the US CDC at the time, thought that folic acid would be added to fortification legislation relatively quickly. Dr. Oakley felt confident because the scientific evidence was strong, the potential to reduce the number of children with NTDs was significant, and the amount of money that could be saved in medical bills was high. However, it took over five years for the US fortification law to be amended to include folic acid.

After years without legislative action, folic acid eventually fell off of the agenda of the Food and Drug Administration's (FDA) meetings. This prompted the March of Dimes, a large American non-governmental organization, to get involved. March of Dimes leaders ultimately told the FDA that if folic acid was not added to the law, they would protest with a large group of children with NTDs and their families. Shortly after, the FDA signed the legislation making fortification with folic acid mandatory in the US. This story highlights the importance of connecting policy makers to the personal aspects of health issues. Exposing policy makers to people who deal directly with these health problems (as opposed to scientific data), helps them feel the consequences of these preventable health problems.

The American case study was compiled from an interview FFI conducted with Dr. Godfrey P. Oakley, Jr.

*Ethical Considerations*

This project was submitted to Emory's IRB and was determined to not meet the definition of "research" involving "human subjects" as this was secondary data analysis. No personal information was collected.