# Massachusetts WIC Program 2007 Participant Satisfaction \& Shopping Survey Statewide Report of Findings 

## I. INTRODUCTION

The Massachusetts WIC Program conducted a WIC Participant Satisfaction \& Shopping Survey during a six week period, August 152007 through September 26 2007. This survey was created to determine participant preferences for both old and new food items offered through the new WIC food package to be implemented no later than October 12009.

## II. LANGUAGES

The survey was created in English and translated into four languages: Spanish, Chinese, Brazilian/Portuguese, and Vietnamese. Each local program was mailed a mix of the 5 surveys based on the ethnic/racial composition of the June 2007 WIC Participant Summary Report (MWICR508).

## III. SURVEY METHODS

Statistically valid sample sizes ( $95 \%$ confidence level, $5 \%$ margin of error) were determined for each local program based on a third of the FY08 assigned caseload that each program would be serving over the six week survey administration period.

A total of 13,807 surveys were mailed to all 35 local programs throughout the state. Surveys were completed by 9,422 participants (or parents/caregivers of participants) at all sites throughout the 35 local programs, yielding a $68 \%$ response rate.

TABLE 1:
LANGUAGE RESPONSE RATE

| Language | N | $\%$ |
| :--- | :---: | :---: |
| English | 7,110 | 75.46 |
| Spanish | 1,676 | 17.79 |
| Chinese | 245 | 2.60 |
| Brazilian/Portugues | 317 | 3.36 |
| Vietnamese | 74 | 0.79 |
| TOTAL | 9,422 | 100.0 |

## A. SURVEY TOOL

An exploratory survey tool was drafted based on proposed changes to the new WIC food package. After a few iterations, the draft survey tool was piloted with WIC participants at the following local programs: Chelsea, East Boston, Somerville, South Cove, and South End. The survey was piloted to ensure adequate comprehension by respondents, and to trim the survey due to the limited time frame participants had to complete the survey.

The final survey tool consisted of 10 quantitative and qualitative questions: questions 1 through 6 were closed-ended, multiple choice; questions 7-9 were closed-ended multiple choice, but with an open-ended response option of "other"; question 10 was open-ended.

To protect respondent's privacy and confidentiality, the survey did not require any participant identifier, such as name or WIC identification number A note to the respondent at the beginning of the survey explained this protection, briefly described the purpose of the survey, and thanked him/her for the time he/ she was taking to complete the survey.

## B. FIELD METHODS

On July 312007 a memo was emailed and mailed to all local program directors and senior nutritionists preparing them for the dissemination and administration of the survey. At the beginning of August, surveys and a cover letter from the WIC Economic Analyst were sent to each of Massachusetts WIC's 35 local programs for distribution to sites by Program staff.

Every parent, participant, guardian, or authorized shopper that came for any kind of WIC appointment during the data collection period was asked to complete a survey. The survey took about 5 minutes to complete.

## C. DATA ENTRY AND ANALYSIS

A team of two WIC state office staff and one intern numbered and coded each survey by local program. An excel spreadsheet was designed for the data output. Through an open bid process, Ardem was chosen to enter the data into the Excel spreadsheet. The completed surveys were batched and mailed to Ardem on October 17 2007. Ardem completed the data output on November 172007.

The Excel output was then analyzed by Stella Uzogara, an Epidemiologist from the Office of Data Translation. Stella completed the analysis March 3 2008.

## IV. FINDINGS

Note: Despite asking respondents to "check one" for survey questions 1 through 6, the majority of respondents checked more than one; as such, the percentages for each question will be over $100 \%$. Because the survey was exploratory in nature, i.e., state office staff wanted to know as much as possible for all participant food preferences, it is acceptable that respondents checked more than one.

## Question 1

Respondents were asked to select their milk preferences for children ages one and two. Question 1 asked specifically, "What would you buy for your CHILD(REN) BETWEEN AGES ONE AND TWO, given the following options?" Table 2 gives the percentage response for each milk option by language. Of the respondents who had children between the ages of 1 and 2 , the top three milk choices for each language are bolded. Whole milk was the top choice for all language groups. With the new food package, whole milk will be the only type of milk allowed for children ages 12-23 months. This table shows that between 21 and $32 \%$ of all language groups currently choose low or nonfat milk for this age group. Some participant education will be necessary to support the milk package change.

TABLE 2--QUESTION 1:
MILK CHOICE FOR CHILDREN AGES 1 \& 2

| Milk Option | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese $\%$ | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Whole Milk | $\mathbf{6 8 . 5 4}$ | $\mathbf{5 5 . 8 1}$ | $\mathbf{7 0 . 8 5}$ | 46.88 | $\mathbf{6 3 . 1 6}$ |
| Nonfat milk (skim) | 2.26 | 4.95 | 5.26 | 4.38 | 3.95 |
| Low fat milk (1\% or 2\%) | $\mathbf{2 1 . 5 9}$ | $\mathbf{2 8 . 6 2}$ | 17 | $\mathbf{2 0 . 9 4}$ | $\mathbf{1 8 . 4 2}$ |
| Soy Milk | $\mathbf{4 . 6 4}$ | 2.15 | $\mathbf{6 . 8 8}$ | 5.31 | 5.26 |
| Evaporated Milk | 3.57 | 4.41 | 1.21 | 1.25 | 0 |
| Long-life boxed milk | 1.95 | 1.91 | 2.02 | $\mathbf{2 4 . 3 8}$ | $\mathbf{1 1 . 8 4}$ |
| Lactaid/Lactose free milk | 2.42 | 3.52 | 1.62 | 2.50 | 7.89 |
| Powdered milk | 1.03 | 4.71 | $\mathbf{1 0 . 5 3}$ | 5 | 2.63 |
| None of the above | 0.35 | 0.30 | 0.81 | 0.94 | 0 |
| N/A: I do not have a child ages 1-2 | 9.11 | 6.62 | 8.50 | 6.56 | 2.63 |
| TOTAL | $\mathbf{1 1 5 . 4 6}$ | 113.00 | 124.68 | 118.14 | 115.78 |

## Question 2

Respondents were asked to select their milk preference for children over the age of 2 if whole milk was no longer a package option for that age group. Question 2 states, "The new food package may not include whole milk for participants over 2 years old (exceptions will be made for health conditions). What would you buy INSTEAD of whole milk, given the following options?" Table 3 gives the percentage response for each milk option by language. Of the respondents who had children over the age of 2 , the top milk choice for each language is bolded. Low fat milk ( $1 \%$ or $2 \%$ ) was the top choice for all language groups. However, on question 10, the open-ended question there were numerous comments to keep whole milk for children over two (please see question 10 for specific quotes). There will need to be some participant education in this area.

TABLE 3-QUESTION 2:
MILK CHOICE FOR CHILDREN OVER 2

| Milk Option | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese $\%$ | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nonfat milk (skim) | 6.90 | 10.14 | 15.38 | 10.94 | 14.47 |
| Low fat milk (1\% or 2\%) | $\mathbf{6 6 . 5 2}$ | $\mathbf{5 7 . 1 9}$ | $\mathbf{4 5 . 3 4}$ | $\mathbf{3 8 . 4 4}$ | $\mathbf{3 2 . 8 9}$ |
| Soy Milk | 7.17 | 3.10 | 16.19 | 7.19 | 11.84 |
| Evaporated Milk | 5.57 | 7.63 | 2.43 | 1.88 | 6.58 |
| Long-life boxed milk | 2.77 | 3.82 | 4.45 | 33.75 | 14.47 |
| Lactaid/Lactose free milk | 3.16 | 4.65 | 1.21 | 3.44 | 5.26 |
| Powdered milk | 1.98 | 7.99 | 19.03 | 7.19 | 10.53 |
| None of the above | 7.44 | 4.59 | 1.62 | 1.56 | 3.95 |
| TOTAL | 101.51 | 99.11 | 105.65 | 104.39 | 99.99 |

## Question 3

Respondents were asked to select an alternate food choice instead of a gallon of milk. Question 3 asked, "The new food package may offer soy milk and tofu in addition to milk and cheese. If you could buy one of the following INSTEAD of a gallon of nonfat or low fat milk, which would you buy?" Table 4 gives the percentage response for each food option by language. The top choice as an alternative to a gallon of milk for each language is bolded. Cheese was the top choice for English, Spanish, and Brazilian/Portuguese speaking participants. Vietnamese speaking participants preferred to still buy milk, however soy milk was a close second. Chinese speaking participants preferred to purchase soy milk instead of a gallon of milk.

TABLE 4-QUESTION 3:
ALTERNATE FOOD CHOICE INSTEAD OF GALLON OF MILK

| Food Option | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese $\%$ | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Soy Milk | 12.30 | 13.36 | $\mathbf{4 6 . 1 5}$ | 14.38 | 36.84 |
| Tofu | 3.52 | 2.21 | 8.10 | 2.19 | 13.16 |
| Cheese | $\mathbf{4 7 . 0 8}$ | $\mathbf{4 9 . 8 5}$ | 13.77 | $\mathbf{4 6 . 2 5}$ | 19.74 |
| I would still buy milk | 39.45 | 35.60 | 34.41 | 41.88 | $4 \mathbf{4 2 . 1 1}$ |
| TOTAL | 102.35 | 101.02 | 102.43 | 104.70 | 111.85 |

## Question 3A

Of the respondents in question 3 who preferred to purchase either soy milk or tofu instead of a gallon of milk, question 3A asked these respondents why they would choose the alternative. Question 3A specifically asked, "If you would choose SOY MILK or TOFU, please check the most important reason why." Table 5 gives the percentage response, with the top choice bolded. The top reason in each language group for purchasing an alternative to milk was that they just like soy milk and/or tofu, not cultural, medical or dietary reasons.

TABLE 5-QUESTION 3A:
REASONS FOR PURCHASING SOY MILK OR TOFU

| Reason for Choice | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese \% | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lactose intolerance/ <br> medical reasons | 5.16 | 5.66 | 2.02 | 5.31 | 2.63 |
| Cultural reasons | 1.59 | 3.40 | 8.10 | 3.44 | 0 |
| I prefer a non-dairy diet | 2.12 | 7.69 | 4.45 | 5.94 | 13.16 |
| I just like soy milk <br> and/or tofu | 8.97 | $\mathbf{1 0 . 8 5}$ | $\mathbf{5 2 . 2 3}$ | $\mathbf{9 . 3 8}$ | $\mathbf{3 6 . 8 4}$ |
| N/A I do not buy soy <br> milk or tofu | 18.68 | 34.35 | 4.05 | 19.06 | 7.89 |
| TOTAL | 36.52 | 61.95 | 70.85 | 43.13 | 60.52 |

## Question 4

Respondents were asked to select which legume product they would most likely buy with WIC checks. Question 4 specifically asked, "If you could buy ONE of the following with your WIC checks, which would you MOST LIKELY buy." Table 6 gives the percentage response for each language group, with the top choice bolded. Peanut butter was the top choice for English and Chinese speaking participants. Vietnamese, Spanish, and Brazilian/Portuguese speaking participants preferred dried beans/peas as a legume product.

TABLE 6-QUESTION 4
LEGUME PREFERENCE

| Legume Product | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese \% | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Peanut butter | $\mathbf{5 2 . 9 3}$ | 15.80 | $\mathbf{4 7 . 7 7}$ | 6.56 | 40.79 |
| Canned beans | 19.87 | 31.60 | 10.12 | 35.31 | 5.26 |
| Dried beans/peas | 15.31 | $\mathbf{4 2 . 5 2}$ | 35.22 | $\mathbf{4 8 . 7 5}$ | 44.74 |
| None | 4.85 | 8.94 | 7.69 | 5.94 | 3.95 |
| TOTAL | 92.96 | 98.86 | 100.80 | 96.56 | 94.74 |

## Question 5

Respondents were asked to select which whole grain product they would most likely buy with WIC checks. Question 5 specifically asked, "If you could buy ONE of the following with your WIC checks, which would you MOST LIKELY buy." Table 7 gives the percentage response for each language group, with the top choice bolded. Whole wheat/whole grain bread was the top choice for all language groups.

TABLE 7-QUESTION 5
WHOLE GRAIN PREFERENCE

| Whole grain product | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese \% | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Whole wheat/whole grain bread | $\mathbf{7 0 . 5 8}$ | $\mathbf{5 3 . 9 7}$ | $\mathbf{5 0 . 6 1}$ | $\mathbf{5 0 . 3 1}$ | $\mathbf{6 4 . 4 7}$ |
| Soft corn or whole wheat tortillas | 8.45 | 14.43 | 11.34 | 5.94 | 5.26 |
| Brown rice | 9.90 | 14.25 | 6.48 | 20.94 | 17.11 |
| Other whole grains (oatmeal, <br> barley, bulgur) | 8.20 | 17.83 | 29.55 | 19.69 | 5.26 |
| I would not buy any of these | 4.73 | 3.94 | 2.83 | 5.94 | 10.53 |
| TOTAL | 101.86 | 104.42 | 100.81 | 102.82 | 102.63 |

## Question 6

Respondents were asked to select which kind of fruits and vegetables they would most likely buy with WIC checks. Question 6 specifically asked, "If you could buy fruits and vegetables year round with a WIC check, what kind would you MOST LIKELY buy." Table 8 gives the percentage response for each language group, with the top choice bolded. Fresh fruits \& vegetables were the top choice for all language groups.

TABLE 8-QUESTION 6
FRUIT \& VEGETABLE PREFERENCE

| Fruit \& Vegetables | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese $\%$ | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fresh fruits \& vegetables | $\mathbf{9 7 . 1 3}$ | $\mathbf{9 9 . 3 4}$ | $\mathbf{9 9 . 1 9}$ | $\mathbf{9 9 . 3 8}$ | $\mathbf{1 0 0}$ |
| Frozen fruits \& vegetables | 1.29 | 0 | 0 | 0 | 0 |
| Canned fruits \& vegetables | 0.87 | 0.06 | 0 | 0 | 0 |
|  <br> vegetables | 0.14 | 0 | 0 | 0 | 0 |
| I would not buy fruits or <br> vegetables with a WIC check | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 99.43 | 99.40 | 99.19 | 99.38 | 100.00 |

## Question 7

Respondents were asked to select various types of information they may find useful for the new foods that will be offered. Question 7 specifically asked, "Considering the exciting new foods listed above that WIC may offer (whole grains, fruits and vegetables, tofu, etc.), please check any of the following information for these foods that you would find helpful." Table 9 gives the percentage response for each language group, with the top choice bolded. Recipes were the top choice for all language groups, followed by meal suggestions.

TABLE 9-QUESTION 7 INFORMATION ON NEW FOOD ITEMS

| Information | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese $\%$ | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Recipes | 56.39 | 45.56 | 48.18 | 40.31 | 48.68 |
| Storage information | 14.78 | 21.11 | 16.60 | 31.25 | 17.11 |
| Preparation tips | 22.04 | 25.46 | 27.13 | 31.25 | 18.42 |
| Meal suggestions | 49.61 | 37.81 | 46.15 | 34.69 | 22.37 |
| Shopping Tips | 20.60 | 23.32 | 13.77 | 34.69 | 17.11 |
| Other* | 1.98 | 1.55 | 3.24 | 2.19 | 3.95 |
| TOTAL | 165.40 | 154.81 | 155.07 | 174.38 | 127.64 |

[^0]
## Question 8

Respondents were given a variety of subjects and asked which they would like to learn more about. Question 8 specifically asked, "Which of the following topics would you like more information on?" Table 10 gives the percentage response for each language group, with the top 2 choices bolded. The favored topic among all language groups was how to make healthy meals with limited resources-quick and inexpensive meals; the least favored topic was growing your own vegetables. It appears that across language groups, respondents were interested in all topics offered.

TABLE 10--QUESTION 8
TOPICS WHICH PARTICIPANTS WOULD LIKE MORE INFORMATION

| Topic | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese \% | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How to have a more active family lifestyle | 21.12 | 38.34 | 39.27 | 34.69 | 38.16 |
| How to make healthy meals with limited <br> resources-quick and inexpensive meals | 49.87 | 46.57 | 35.22 | 46.88 | $\mathbf{3 4 . 2 1}$ |
| Quick foods for fast meals; meals in 30 <br> minutes or less | 44.64 | 31.19 | 22.27 | 20.94 | 13.16 |
| Tips for a healthy smile and healthy teeth | 24.75 | 32.02 | 26.32 | 38.44 | 31.58 |
| How to prepare meals in advance | 20.55 | 18.43 | 17.81 | 18.75 | 10.53 |
| How to limit TV, video games and computer | 15.90 | 24.51 | 31.58 | 21.56 | 34.21 |
| Creatine | 23.26 | 20.51 | 8.50 | 14.06 | 15.79 |
| Growing your own vegetables <br> with cooking | 14.16 | 14.25 | 4.86 | 13.13 | 6.58 |
| Dealing with child food allergies | 12.22 | 25.76 | 15.38 | 32.81 | 14.47 |
| Other* | 1.24 | 3.76 | 2.43 | 1.88 | 0 |
| TOTAL | 227.71 | 255.34 | 203.64 | 243.14 | 198.69 |

[^1]
## Question 9

Respondents were given a variety of events/demonstrations and asked which they were interested in. Question 9 specifically asked, "If WIC offered the following, which would you participate in?" Table 11 gives the percentage response for each language group, with the top 2 choices bolded. The top 2 events/demonstrations among all language groups were demonstrations on quick family meals and child-tested/kid appropriate recipes. Respondents were also interested in parent groups.

TABLE 11-QUESTION 9
EVENTS WHICH PARTICIPANTS WOULD BE INTERESTED

| Event | English <br> $\%$ | Spanish <br> $\%$ | Chinese <br> $\%$ | Brazilian/ <br> Portuguese $\%$ | Vietnamese <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cooking demonstration for quick family <br> meals | $\mathbf{4 0 . 6 4}$ | $\mathbf{4 3 . 1 7}$ | $\mathbf{2 1 . 8 6}$ | $\mathbf{3 5 . 9 4}$ | $\mathbf{3 2 . 8 9}$ |
| Cooking demonstration for child-tested/ <br> kid appropriate recipes | $\mathbf{2 9 . 0 4}$ | $\mathbf{4 0 . 3 1}$ | $\mathbf{4 2 . 9 1}$ | $\mathbf{5 3 . 1 3}$ | $\mathbf{3 0 . 2 6}$ |
| Taste-testing events | 23.63 | 11.63 | 19.03 | 10.31 | 15.79 |
| Grocery store shopping tours | 12.88 | 18.07 | 18.62 | 16.56 | 17.11 |
| Parent groups | 24.82 | 24.15 | 20.24 | 25.31 | 22.37 |
| Recipe sharing contests | 16.07 | 16.16 | 9.31 | 10.94 | 9.21 |
| Other* | 2.04 | 2.03 | 3.64 | 1.88 | 5.26 |
| TOTAL | 149.12 | 155.52 | 135.61 | 154.07 | 132.89 |

[^2]
## Question 10

The last survey question was an open-ended question that asked respondents for additional comments. There were 1,089 written comments. They fell into four broad categories.

1. Information \& Events related to questions 8 and 9.

- "Teach young children to prepare snacks and safe food without using the stove or microwave."
- "Easy snacks. Things they will love to have."
- "Special programs/group for kids."
- "Come up with real life classes, help your older mothers."
- "I would like to see some kind of new big brother or sister courses."
- "Helping moms being more organized."
- "More info about allergies to foods."

2. Areas requiring participant education. Lots of resistance about eliminating whole milk.

- "WIC should continue to offer whole milk unless the child is obese! There are studies to show certain issues w/ lowfat dairy!"
- "My children currently drink whole milk. I would be very disappointed if they stopped offering whole milk. Neither myself or my exhusband (daughter's father) have any family history of obesity. If anything my children need the extra fat and calories of whole milk."
- "What is the reason for this change? Me and my children enjoy the whole milk \& cheese. Thank you."
- "I would like to provide a healthier life style; store brand may not be healthy for families."
- "Why Nestle Nestum or Cerelac is not covered by WIC and it is an infant cereal."
- "Some people don't buy soymilk it tastes bad and tofu. They should give things that the children will eat and like. I think the things that they give now are good my kid likes it."

3. Appreciation of the WIC Program.

- "WIC is very helpful in my stressful life!"
- "I think the WIC program is excellent. It has helped my family a great deal Thank you."
- "I love the WIC Program. It is very helpful for low-income families. I love that they added baby carrots to the packages."
- "So far WIC has been the best support for families with limited resources, please, keep up the good work."
- "I love WIC employees."

4. Support for the new food package.

- "I think that these options would be a positive attribute to healthy family living."
- "I think adding bread and fruits to packages would be a great idea and helpful to parents of children on WIC."
- "Like the idea of fresh fruits and vegetables all year round."
- "Would like to use tofu or brown rice alternative if knew how to prepare meals with them."
- "A choice of canned Beans would be great! Often don't have time to soak dried beans."


## V. KEY FINDINGS

The survey and open-ended questions suggest there is participant support for the new food package. Fresh fruit and vegetables appear to be the most popular addition to the package. Of the whole grain/whole wheat additions, participants prefer bread over the other grain substitutions. Open-ended comments infer that some of the resistance is from unfamiliarity of the new foods; recipe books, cooking demos, and taste tests will be very beneficial when the food package rolls out.

The survey also shows that there will be a bit of push back regarding the elimination of whole milk for participants over 2 years of age, as well as the elimination of skim and nonfat milk for participants less than 2 years of age. This will need to be addressed as well.


[^0]:    * Suggestions written in the 'other' category are listed with Question 10.

[^1]:    * Suggestions written in the 'other' category are listed with Question 10.

[^2]:    * Suggestions written in the 'other' category are listed with Question 10.

