



Agenda Item 9

Conference Room Document 16
<u>English only</u>

FAO/WHO Regional Conference on Food Safety for the Americas and the Caribbean

San José, Costa Rica, 6-9 December 2005

REPORT ON CAMPAIGN TO INCREASE FOOD SAFETY AWARENESS AMONG CONSUMERS IN BELIZE

(Prepared by Belize Agricultural Health Authority)

EXECUTIVE SUMMARY

During the period May to July 2002, an extensive survey on food safety awareness among Belizean consumers was conducted with support from the Caribbean Food and Nutrition Institute, (CFNI) and the Chemistry Department, University of the West Indies in collaboration with Ministry of Health partners and with funding by the Organization of American States Inter-American Agency for Co-operation and Development (OAS/IACD). The objective of the survey was to provide information on the current food safety knowledge, attitudes and practices of household consumers in Belize and was part of a wider survey also conduced in Barbados, Jamaica and St. Vincent and the Grenadines. The results of the survey would then be used to further develop comprehensive and effective food safety public education programmes. In the Belize survey the greatest problem identified were those associated with the misconceptions or lack of knowledge for the requirements for refrigeration of leftover meat, fish or poultry. Some of the problems identified in relation to environmental health included domestic animals entering the kitchens, pests and rodents in households and uncovered garbage bins. Most respondents selected street food vendors, followed by restaurants and canteens as the top-ranked locations where food safety problems were most likely to occur and over three-quarters of respondents were unaware that certain population groups e.g. the elderly, the young and the immuno-compromised are especially vulnerable to food-borne illness. The public's main source of information on food safety was discovered to be friends and family but other sources included news programmes on television and radio followed by educational institutions. Food labels were ranked as the sixth most important source. Overall responsibility for food safety was perceived to lie chiefly with the consumer, but it was felt that the responsibility of setting and regulating standards rested with the Ministry of Health.

The findings of the Belizean survey was used as the basis for the development of a food safety campaign "Safe Food Handling Awareness Campaign 2005." conducted during the period February/June 2005 by the Belize Agricultural Health Authority in collaboration with the Ministry of Health and with funding provided by the Caribbean Food and Nutrition Institute (CFNI). The purpose of the food safety campaign was to correct wrong perceptions and promote better practices, especially among housewives and school children - who, together, do most of the food handling in the Belizean home. The Food Safety Awareness Campaign, 2005 also sought to promote better food handling practices through a coordinated campaign of school visits, community forums, public service announcements on radio and TV, talk show discussions, the distribution of educational materials, posters, brochures and refrigerator magnets that Belizeans were encouraged to carry into their homes and schools. The campaign included a nationwide

essay competition for upper division primary students with "Safe Food Handling: How I can make a difference" as the topic for a 500 word essay to be judged by a panel of food safety regulatory personnel and school educators. A monetary prize of \$500 (BZD) was offered to the winning student and food items from local producers to be given to the school feeding programme of the school that produced the wining student. The announcement of the winner of the essay was revealed during the official activities of the World Food Day 14 October 2005.

A team of BAHA food safety personnel and Ministry of Health Public Health Officers along with Fer de Lance productions, hired as the media consultants that the team chose to develop the printed and video media after the concepts were formulated by team, were the executers of the campaign.

The results and feed back obtained by BAHA and the Ministry of Health on the effectiveness of the campaign has been very positive. Members of the team were able to give interviews and discuss food safety practices on the major talk show programmes of 4 of the 5 Radio and TV media houses in Belize City, which has the widest population coverage and with the stations expressing interest in the team members returning to give updates and to discuss other food safety issues in Belize. Many of the talk shows were call-in programmes which gave the general public opportunities to ask specific questions about food safety and what issues they saw as needing attention in Belize.

A "inspected and passed" label for retail meats was introduced during a food safety fair held in the parking lot of one of Belize's major supermarkets and surveys were conducted both at the fair and at the annual National Agriculture and Trade Show held 29 April - 1 May 2005 in Belmopan with the aim of evaluating the publics' response to this initiative. More than 200 respondents gave their views on the "Inspected and Passed" label. The analysis of the results of the survey showed that most (80%) of the consumers interviewed were aware of the media campaign as they had heard of the BAHA label which was only announced over the media during the time the food safety awareness campaign was being conducted. The majority of consumers (73%) stated that the "Inspected and Passed" label made them think about safety in how the food is prepared, and was willing to pay a bit more(68%) for the product with the label vs the same product without the label, as they felt that the label gave an indication of the safety of the product. This is a crucial finding as many producers and processors often complain that institution of food safety programmes is costly, and consumers were not willing to pay for it. The survey showed that consumers were willing to pay a bit more for a product if it meant that it was produced under a safer environment. The School education component was presented to primary schools throughout Belize (18 schools in 3 districts - Belize, Orange Walk and Cayo). The targeted audiences in these schools were those students in the last two years at the primary level (Standard 4-6). Brochures, posters and refrigerator magnets with the food safety message to remember to wash hands when handling food were distributed to the students.

Two professional videos that promoted food safety in the home were developed by the Campaign. These multimedia productions were aired at all the TV stations during the months of April/May 2005 and was very well received. Footage from the videos were used by the Belize Chamber of Commerce for the Chambers' national and international promotional campaign extolling the virtues of the quality of Belizean food and to showcase the benefits of investing in Belize. A very popular promotional material developed and promoted during the campaign was the refrigerator magnets with the food safety message reminding food handlers to wash their hands. These were widely distributed in Belize.

The Food Safety Awareness Campaign of 2005 which has been a collaborative effort between the Belize Agricultural Health Authority, (BAHA), the Ministry of Health and PAHO/CFNI has allowed regulatory agencies responsible for food safety in Belize, to address the food safety issues identified in the food safety awareness survey of 2002 by delivering key safe food handling messages to consumers through

multiple media sources, some of which would otherwise be very difficult to achieve given the financial resource constraints faced by these regulatory agencies.

The consensus about the campaign is that it has been successful, with very positive responses from the public. The challenge now is developing the sustainable mechanisms that will make food safety education programmes an ongoing activity, and a key component in the delivery of effective food control systems. The Food Safety Services of the Belize Agricultural Health Authority would like to acknowledge the contribution of the following persons and organizations that assisted in the organization and conduction of this Campaign

The Managing Director of The Belize Agricultural Health Authority and the Director of Health Services of the Ministry of Health for their support in executing the campaign.

1. Introduction

1.1 Background Information

As early as 1983, a joint FAO/WHO Expert Committee on Food Safety concluded in its report "The Role of Food Safety in Health and Development" that disease caused by contaminated food is one of the most widespread threats to human health, and an important cause of reduced economic productivity. It is estimated that up to 30% of the population in *developed* countries may be affected from food-borne disease each year and the incidence in less developed countries remain largely unknown. Food-borne disease outbreaks and food contamination has caused food safety to become a major focus of public health policy, making regulatory authorities revisit their food control systems to ensure that the programmes instituted to ensure food safety, are effective and sustainable. A major driving force for the implementation of effective food safety control programmes are consumers who expect *governments* to operate effective food control systems and to provide them with a safe, nutritious, high quality, abundant, affordable and varied food supply.

However, consumers are often unaware of the major role they place in effecting prevention and control of food-borne illness. Many consumers are unaware or misinformed about how they can protect themselves from chemical and physical hazards. Educating the public can quickly and significantly reduce the chances of contracting food-borne illnesses and the effects of outbreaks, improve public health and safety and reduce financial drainage of the health sector. To protect human health from food-borne diseases and contribute to sustainable development in developing countries, the World Health Organization (WHO) in its report of the meeting of Interested Partners of the Food Safety Programme held in Geneva in June 2000³, stated that WHO will increase its technical cooperation with Member States in areas including:

- Development of a formal national food safety policy
- Upgrading of food control systems
- Improving laboratory infrastructure
- Improving food safety education programmes
- Strengthening programmes for surveillance, investigation and control of food-borne diseases.

Initiatives to improve the safety of foods produced in the CARICOM region that have been implemented by international agencies and national governments has largely focused at the regulatory level (development of standards, inspection, surveillance and monitoring etc) rather than on food safety education programmes for consumers⁴.

However, educating the public can quickly and significantly reduce the chances of contracting foodborne illnesses and the effects of outbreaks, improve public health and safety and reduce financial drainage of the health sector.

Research has shown that a vast majority of all food-borne illnesses are caused by improper handling, storage and cooking of food either at home or when dining out. While there is a need for vigilance in all spheres of activity relating to food selection, purchasing, preparation and consumption, it is in the home context that consumers are most frequently able to exercise the most significant amount of control. According to the Pan-American Institute for Food Protection and Zoonoses (INPPAZ), in the period 1995-1999, 41% of outbreaks could be traced to the homes of the victims, while only 6% were attributed to restaurants, 18% to other eating places and 4% to street vending⁵.

In 1997 WHO recommended that householders, especially those with the principal responsibility for purchasing, storage and preparation of food in the homes, should be well informed about the possible health hazards presented by foods they consume⁶. Common mistakes identified include serving contaminated raw food, cooking or heating food inadequately, obtaining food from unsafe sources, cooling foods inadequately, allowing several hours between preparation and eating, and having infected persons handle implicated food or practice poor hygiene.^{7,8,9}. Further to this, it has been suggested that a portion of foodborne illnesses in the home result from voluntary behaviours that are entirely avoidable. These include eating raw foods of animal origin or engaging in unsafe food preparation practices in the home.¹⁰

The above observations formed the basis of an extensive survey¹¹ conducted by the Caribbean Food and Nutrition Institute, (CFNI) and the Chemistry Department, University of the West Indies in collaboration with Ministry of Health partners and with funding by the Organization of American States Inter-American Agency for Co-operation and Development (OAS/IACD). The objective of the survey was to provide information on the current food safety knowledge, attitudes and practices of household consumers in Barbados, Belize, Jamaica and St. Vincent and the Grenadines. The results of the survey would then be used to further develop comprehensive and effective food safety public education programmes.

1.2 Food Safety Awareness Survey Results (Belize)

The survey was conducted in Belize during the period May to July 2002 and the main objectives were to determine:

- The level of consumer knowledge about correct food safety practices.
- What consumers perceive as risk as it pertains to food.
- Consumer awareness of food-borne illnesses and how they and others are affected.
- Current sources of food safety information available to consumers.

A total of 800 households in Belize were selected and a pre-tested questionnaire was administered by trained interviewers to one person in each household, targeting the individual who prepared most of the meals for the family. The questionnaire used a combination of closed and open-ended questions to investigate the respondents' knowledge, awareness and practices of food safety including knowledge of correct food handling and sanitation practices; awareness of current issues in food safety; perceptions of food hazards and risks to population groups. Information was also collected on the household's consumption of raw or rare foods from animals and on recent experience of food-borne illness. In the Belize survey the greatest problem identified were those associated with the misconceptions or lack of knowledge for the requirements for refrigeration of leftover meat, fish or poultry. For 62.9% of respondents this was done neither immediately nor within two hours of cooking. Almost one third (32.7%) of the sample thought

cooked meat left unrefrigerated overnight was safe to eat or were uncertain if it were safe. A smaller percentage (27.1%) was uncertain or thought unrefrigerated fish was safe to eat. Some of the problems identified in relation to environmental health included domestic animals entering the kitchens of 15.8%, rats or mice in 33.1% of households, 28.6% reporting seeing cockroaches in the kitchen and 34.0% reporting seeing houseflies on tables or countertops in the kitchen. For 13.6% of the sample garbage bins in the kitchen were left uncovered. Garbage storage areas outside were often left uncovered for 33.6%.

Most respondents selected street food vendors (50.9%), followed by restaurants and canteens (18.7%) as the top-ranked locations where food safety problems were most likely to occur and over three-quarters of respondents (76.4%) were unaware that certain population groups e.g. the elderly, the young and the immuno-compromised are especially vulnerable to food-borne illness.

The public's main source of information on food safety was discovered to be friends and family (51.0%). Other sources included news programmes on television and radio (8.6%) followed by educational institutions (7.9%). Food labels were ranked as the sixth most important source. Overall responsibility for food safety was perceived to lie chiefly with the consumer, but it was felt that the responsibility of setting and regulating standards rested with the Ministry of Health.

1.3 Food Safety Awareness Campaign

The findings of the Belizean survey was used as the basis for the development of a food safety campaign "Safe Food Handling Awareness Campaign 2005." conducted during the period February/June 2005 by the Belize Agricultural Health Authority in collaboration with the Ministry of Health and with funding provided by the Caribbean Food and Nutrition Institute (CFNI). The purpose of Food safety campaign was to correct wrong perceptions and promote better practices, especially among housewives and school children - who, together, do most of the food handling in the Belizean home.

The Food Safety Awareness Campaign, 2005 also sought to promote better food handling practices through a coordinated campaign of school visits, community forums, public service announcements on radio and TV, talk show discussions, the distribution of educational materials, posters, brochures and refrigerator magnets that Belizeans were encouraged to carry into their homes and schools. The campaign included a nationwide essay competition for upper division primary students with "Safe Food Handling: How I can make a difference" as the topic for a 500 word essay to be judged by a panel of food safety regulatory personnel and school educators. A monetary prize of \$500 (BZD) was offered to the winning student and food items from local producers to be given to the school feeding programme of the school that produced the wining student.

1.4 Objectives

The general objectives of the campaign were to correct the wrong perceptions of food safety practices identified by the survey, to increase food safety awareness among consumers, students, street food vendors and the general public and to educate Belizean consumers on safe food handling practices which would allow them to play a more significant role in recognizing and implementing those food handling practices that can protect their health.

The specific objectives of the campaign were to educate and dialogue with consumers on:

- 1. The official food safety programmes in effect in Belize
- 2. To correct consumers' perception of health risk as it pertains to food
- 3. To present basic food handling guidelines to school children

- 4. To assess consumers response to new food safety initiatives offered by food safety authorities in Belize
- 5. To promote food safety education programmes.

1.5 Targets for Intervention

Some targets for intervention were identified from the findings of the survey and formed the basis of the issues to be addressed for the implementation of the food safety awareness campaign. These include improving certain behaviours, knowledge and perceptions:

1.5.1 Food Handling and Consumption Practices

- Handwashing (with soap) before the start of meal preparation
- Handwashing (with soap) before continuing meal preparation, after handling raw meat, fish, poultry or egg
- Proper disinfection of cutting board after use for raw meat, fish or poultry
- Use of different cutting boards for different types of food
- Proper and timely refrigeration of leftover food, especially meat, chicken and fish
- Reduced consumption of raw egg in any form

1.5.2 Environmental Health Practices

- Barring of domestic animals from the kitchen
- Covering of garbage bins indoors and bins/storage areas outdoors
- Improved pest control measures

1.5.3 Perceptions

- Increased understanding that the home can often be a source of food-borne illness
- Additional understanding of the risk of getting ill from poor food-handling practices
- Increased awareness of pesticides, hormones and genetically Modified Organisms (GMOs) as a cause of possible food safety problems
- Increased understanding of the susceptibility of certain population groups to food-borne illness

1.5.4 Awareness

- Increased ability to recognize the symptoms of food-borne illness
- Improved knowledge of microorganisms and foods which frequently figure in food-borne illness

This document, *A Campaign to increase Food Safety Awareness among Consumers in Belize*, describes the campaign as it was implemented in Belize by the Belize Agricultural Health Authority, The Ministry of Health and Media consultants Fer De Lance Productions.

2. METHODS AND MATERIALS

2.1 Food Safety Awareness Campaign Scope

2.1.1 Target Market

Female housewives between the ages of 25-50 years of primary school education in both urban and rural areas.

Primary School children.

2.1.2 Campaign Language

English (Spanish versions where the budget allowed this).

2.1.3 Campaign Duration

8 weeks (including Food Safety Awareness Week – 18-23 April 2005).

2.1.4 Campaign Facilitators (Forums)

BAHA and Public Health Officers in collaboration with PAHO/CFNI.

2.2 Campaign Outline

2.2.1 Pre-Launch (9 weeks)

Develop and Produce Materials for use during campaign

Set up Committee to organize FOOD SAFETY FAIR as well as to organize school and discussion group visits during campaign

Public Relations/Advertising Campaign implementation.

2.2.2 Campaign Launch – Food Safety Week (1 Week)

Guest appearances on morning radio talk shows

Official Press Conference Launch of Videos and Introduction of Safe Food Handling Stickers & BAHA Inspected & Passed Stickers

One day Food Safety Fair – focus on schoolchildren & housewives (handouts, promotional items, poster displays, and video repeated short presentation/discussion for various groups during the day) Winner of essay contest announced and published in newspaper

Countrywide School Visits start

Countrywide Discussion Groups start

Media airing of Videos & Radio Ads.

2.2.3 Continued Campaign (7 weeks)

Continue scheduled School visits countrywide

Continue scheduled Discussion Groups countrywide

Media appearances

Media Advertising campaign continues

2.3 Campaign Materials

2.3.1 Informational Video

Title: KITCHENS & YARDS Duration: 45 secs

Safe food handling tips at home: food safety practices in kitchens and yards – food preparation,

food storage and garbage disposal

2.3.2 Official Inspection Video

Title: BAHA Label Duration: 40 Secs

A narrated video extolling consumers to look for the "inspected and passed" label that is placed on meat and meat products which signify that the product has gone through a food safety inspection process which help to ensure the safety of the product offered to consumers.

2.3.3 Essay Contest - Primary Schools

Develop rules for essay competition: "Safe Food Handling: How I can make a difference" "as the topic for a 500 word essay to be judged by a panel of food safety regulatory personnel and school educators.

Disseminate info directly to schools countrywide.

2.3.4 Food Safety Factoids

Create a comprehensive list of short Food Safety "factoids" Print 5,000 copies in black and white on laser printer.

2.3.5 Posters

Design 5 colour posters using humorous cartoon illustrations that highlight and correct five typical food safety practices or perceptions

Print 100 copies of each poster. (Total: 500 posters)*

2.3.6 Brochure

Design an illustrated colour brochure that lists a number of Food safety Tips in simple & clear language that addresses perceptions identified in the survey and using food safety messages promoted by WHO

Print 5,000 colour brochures.

2.3.7 Food Handling Sticker

Compile Information for sticker Design & Print 25,000 copies

2.3.8 BAHA Inspected & Passed Sticker

Use the BAHA designed (PAHO/INNPAZ Collaboration) seal

* 50 large posters of four different safe food handling messages done in comic strip type characters

Print 25,000 copies to be used as a promotion in selected supermarkets and meat outlets and to assess consumer's response.

2.3.9 Promotional Items – with Food Safety Factoids printed on them

Refrigerator Magnets

Produce 5,000 Magnets under the BAHA developed theme "Your Food, Your Health, Your Life!"

2.3.10 Power Point Presentation

Design a child friendly - Powerpoint presentation around Food Safety Perceptions and Practices to be used during group discussions and school presentations. (to complement videos not replace them).

2.3.11 Radio Ads

Record 10 Food Safety factoids to be aired as public service announcements on local radio stations Use local personalities to voice each one.

2.3.12 Newspaper Ads

Announce and Publish essay winner (once in 2 newspapers)* Print factoids weekly (8 weeks x 2 newspapers).

3. RESULTS AND DISCUSSIONS

3.1 General

Following the official signing of the contract between BAHA and CFNI which tasked BAHA with the execution of the food safety awareness campaign, a team was formed to devise and allocate responsibilities as was outlined in the campaign proposal. Several meetings were held with the team which included BAHA personnel, Ministry of Health personnel and media consultants Fer de Lance productions. Fer de Lance productions, under the directorship of Ms. Suzette Zyden, were the media consultants that the team chose to develop the printed and video media after the concepts were formulated by team members. Fer de lance was also instrumental in setting up media appearance for the food safety officials and was a key promoter of the various food safety activities planned by the campaign crew.

3.2 Media Appearances

The results and feed back obtained by BAHA and the Ministry of Health was very positive. Members of the team were able to give interviews and discuss food safety practices on the major talk show programmes of 4 of the 5 Radio and TV media houses in Belize City, which has the widest population coverage. All stations expressed interest in the team members returning to give updates and to discuss other food safety issues in Belize. Many of the talk shows were call-in programmes which gave the general public opportunities to ask specific questions about food safety and what issues they saw as needing attention in Belize. The panelist appearing on the press included the Director of food safety from BAHA, a Senior Public Health Officer and the BAHA Food Safety Officer responsible for the school education component

^{*} Winner to be announced during World Food Day ceremonies held in Orange Walk District 14 October 2005.

of the programme. The team was also joined by a medical doctor on two occasions, and on one occasion, the Minister of Health promoted the campaign during the course of his appearance on a talk show.

3.3 Food Safety Fair

The Food Safety Fair was held at the Santiago Castillo Plaza in Belize City. A booth was manned by team members which had video presentations, brochures, posters and food safety magnets which were given to patrons of Save U Supermarket, one of the largest supermarkets in Belize. Interviews were conducted before and after patrons had visited the supermarket and observed the newly placed "Inspected and Passed" stickers which were placed on meat products in the supermarket. These stickers were placed on meat on display in the cold refrigeration units from the day before. A BAHA/Public Health team inspection of the facilities had been conducted earlier to ensure that the facilities displaying the stickers on the meat products met more stringent sanitary requirements for use of the label.

Interviews were also obtained from an even wider audience at the annual Agricultural and Trade Show held on the weekend of 1 May 2005 at the Belmopan showgrounds. BAHA food safety department had a booth at this show which emphasized the food safety education campaign. More than 200 respondents gave their views on the "Inspected and Passed" label which was part of the food safety awareness campaign conducted by BAHA and the Ministry of Health. A total of 228 respondents to the BAHA "Inspected and Passed" label campaign were recorded during the survey conducted at the Annual Agricultural and Trade Show in Belmopan.

3.4 BAHA Label Promotion ("Inspected and Passed" Label)

The analysis of the results of the survey showed that most of the consumers interviewed were aware of the media campaign as they had heard of the BAHA label which was only announced over the media during the time the food safety awareness campaign was being conducted. This indicated that most of the consumers (80%) heard of the label during one ore more of the various media appearance or presentations delivered by team members over the past few weeks of the campaign. The majority of consumers (73%) stated that the "Inspected and Passed" label made them think about safety in how food is prepared, and was willing to pay a bit more for the product with the label vs the same product without the label (68%), as they felt that the label gave an indication of the safety of the product. This is a crucial finding as many producers and processors often complain that institution of food safety programmes is costly, and consumers were not willing to pay for it. The survey showed that consumers were willing to pay a bit more for a product if it meant that it was produced under a safer environment.

3.5 School Visits

The School education component was presented to primary schools throughout Belize (18 schools in 3 districts – Belize, Orange Walk and Cayo). Schools visited included those that were under the administration of the religious sector (Adventist, Anglican, Catholic, and Methodist) as well as primary schools administered by the public and private sector. The targeted audiences in these schools were those students in the last two years at the primary level (Standard 4-6). Brochures, posters and refrigerator magnets with the food safety message to remember to wash hands when handling food were distributed to the students. A powerpoint presentation was presented and information on safe food handling (using the WHO 5 Keys to Food Safety)¹² was shared with students. The students were encouraged to write an essay entitled "Food Safety - How I can make a Difference" and thus compete for the \$500 prize offered by the campaign team. The teachers were told that the team would solicit food products from producers and processors in Belize which would be then donated to the school that boast the winning student. This latter component of the campaign (solicitation of food products from processors) met with some resistance as the

processors contacted indicated that they were already donating financially to many of the schools in Belize, especially those that were in their immediate vicinity or district. Thus it was not possible to fulfill the campaign promise of donation of food to the school feeding programme of the winning school. The team felt that they should have made more effort to sit with the processors to explain more thoroughly the aim of the campaign rather than soliciting their support for contributions through letters or telephone contacts. Members were also of the opinion that some food items could still be accessed for the wining school if this is done at a later date.

Teachers selected the best three essays from their school and submitted these to the food safety officer responsible for the school visits. 30 essays were submitted to a team of food safety officials and educators who chose the 1st, 2nd, & 3rd place winners. As the essays were sent in the month of June, when most of the schools were closing, team members decided to defer the date of announcement of the winners to a later date. It was then later decided to announce the winners at the opening ceremonies of the World Food Day celebrations to be held in the Corozal District on 14 October 2005. Government officials from the Ministry of Agriculture, the Ministry of Health as well as the members of the Food and Nutrition Commission who are responsible for the organization of the events of World Food Day were present at the ceremonies as the winning essay was read by the student author..

3.6 Printed and Multimedia Materials

In addition to the printed material that highlighted the keys to food safety in the home, Fer de Lance, the media consultants contracted by the campaign team, developed two professional videos that promoted food safety in the home. These multimedia productions were aired at all the TV stations during the months of April/May 2005 and was very well received. Interestingly, the Belize Chamber of Commerce requested permission from the campaign team and its media consultant to use footage of one of the videos for the Chambers' promotional campaign extolling the virtues of the quality of Belizean food and to showcase the benefits of investing in Belize. The Chambers' video is being promoted both at the national and international level. But perhaps the most popular of the campaign materials developed and promoted were the food safety refrigerator magnets which were widely distributed in Belize. These can now be seen in a number of homes and offices. The magnets have also been given to a number of international contacts involved in food safety (most recently food safety officials in Argentina and Costa Rica) as a token promotional item. The message on the magnet is clear - If your are about to handle food, you must wash your hands - which perhaps is the single most important thing an individual can do to help prevent food-borne illnesses.

4. CONCLUSIONS

Technical cooperation programmes in food safety that are supported by international agencies, have largely focused on regulatory programmes, institutional strengthening and industry support which have assisted countries in establishing food control mechanisms. However, it is widely acknowledged that it is the *consumers* who play a key role in the prevention of food-borne illness in any particular country. PAHO's initiative, through the Caribbean Food and Nutrition Institute (CFNI) which focuses on food safety education that is specifically targeted at consumers in the home, has presented Belize with a great opportunity to address a number of food safety issues identified in the nationwide food safety awareness survey conducted in 2002. The Food Safety Awareness Campaign of 2005 which has been a collaborative effort between the Belize Agricultural Health Authority, (BAHA), the Ministry of Health and PAHO/CFNI has allowed regulatory agencies responsible for food safety in Belize, deliver key safe food handling messages to consumers through multiple media sources, some of which would otherwise be very difficult to achieve given the financial resource constraints faced by these regulatory agencies.

The consensus about the campaign is that it has been successful, with very positive responses from the public. The challenge now is developing the sustainable mechanisms that will make food safety education programmes an ongoing activity, and a key component in the delivery of effective food control systems.

5. REFERENCES

- 1. The Role of Food Safety in Health and Development. Report of a Joint FAO/WHO Expert Committee on Food Safety (1984).TRS 705 WHO Geneva 1984.
- 2. Food Safety and Food-borne Illness Fact Sheet No. 237, March 2000. http://www.who.int/inf-fs/en/fact237.html
- 3. Report of the Meeting of Interested Partners, Food Safety Programme, World Health Organization, 29 June 2000, Geneva www.who.int/fsf
- 4. Todd E.C. Epidemiology of Food-borne Diseases: A Worldwide Review. *World Health Stat Q.* 1989; 50 (1-2): 30-50.
- 5. World Health Organization (WHO) (1989): *Health Surveillance and Management Procedures for Food-handling Personnel*. Technical Report Series 785. Geneva: World Health Organization (WHO).
- 6. World Health Organization. *Health Education in Food Safety: Food Safety Recommendations for Prevention of Food-borne Infections.* Washington DC: World Health Organization, 1997.
- 7. Bryan FL. Risks associated with vehicles of Food-borne Pathogens and Processes that lead to Outbreaks of Food-borne Diseases. *J Food Prot* 1988: 51: 663-673.
- 8. World Health Organization *Food Safety: An Essential Public Health Issue for the New Millennium*. WHO/SDE/PHE/FOS/99.4. WHO Food Safety Programme, Department of Protection of the Environment, Cluster of Sustainable Development and Healthy Environment, Geneva, 1999.
- 9. International Commission on Microbiological Specifications for Foods of the International Union of Microbiological Societies (ICMSF). *HACCP in Microbiological Safety and Quality*. p. 1-22, 302-316. Oxford: Blackwell Scientific Publications, 1988.
- 10. Klontz KC, Timbo BB, Fein SB, Levy AS. Prevalence of Selected Food Consumption and Preparation Behaviours associated with Increased Risks of Food-borne Disease. *J Food Prot* 1995; 58 (8): 927-930.
- 11. Caribbean Food and Nutrition Institute (CFNI). Strengthening Caribbean Food Safety: The Role of Consumers. A Report on Survey of Consumer Food Safety Awareness and Practices -Belize, Belize, 2003.
- 12. World Health Organization: 5 Keys to Safer Food. WHO/SDE/PHE/FOS/01.1 www.who.int

Table 1: Consumer Response BAHA "Inspected and Passed" label (Save - U Supermarket Survey)

BAHA Label Questionnaire

Question	Yes	No	Maybe
1. Had you heard of the BAHA label before	44	19	
today?			
2. Does the label make you think more about	14		
how food is prepared:			
2. Do you think the BAHA label is a good	68	3	1
idea?			
3. Would you purchase products with the	62	2	2
label over products without?			
4. Even if food with the label cost 5 to 15 cents	49	3	2
more?			
	Safety	Quality	Other*
5. What does the label make you think of?	43	9	5
	Bigger	More color	OK
6. How can we improve the label?**	9	16	26

*Question 5: "other" comments:

- Healthy, Safer
- Someone was looking out for the consumer

**Question 6: "other" comments

- Label should be comparable in size to cost label.
- Reminds consumer of label stuck on apples.
- Sticker is coming off. Needs more adhesive.
- You shouldn't put the sticker on a product that is not in a good setting, e.g. blood in the cooler, temperature in cooler bad.
- Include an expiry date (suggestion made by three different people)
- Put sticker inside package

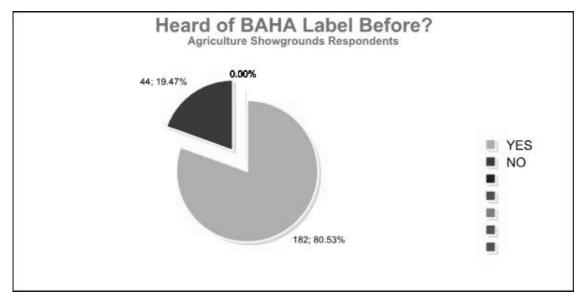
Other General Comments:

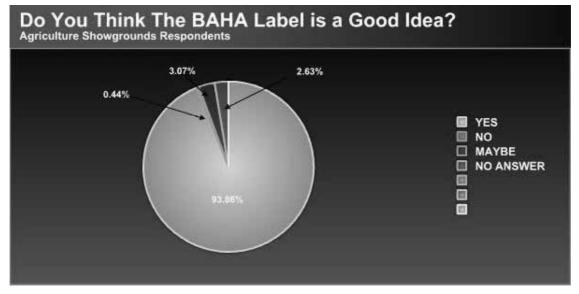
- "We di get deh."
- Public Education important.
- Like the USDA label

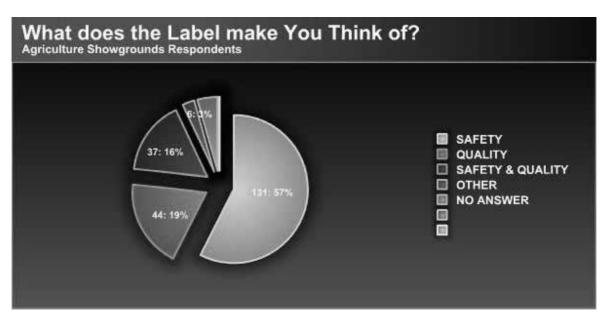
Table 2: Consumer Response BAHA "inspected and Passed" label (Agricultural and Trade Show (2005) Survey)

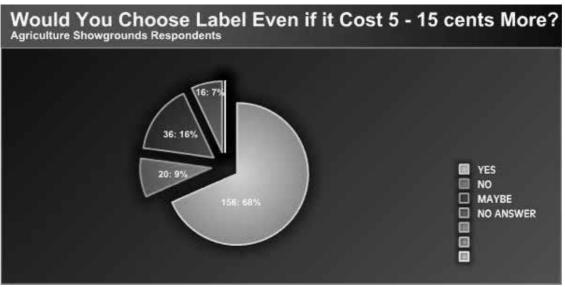
				No	
Question	Yes	No	Maybe	Answer	
Had you heard of the BAHA label before today?	182	44	1	1	
Does the label make you think more about how					
food is prepared?	195	15	14	4	
Do you think the BAHA label is a good idea?	214	1	7	6	
Would you purchase products with the label over					
products without?	142	58	20	8	
Even if food with the label cost 5 to 15 cents					
more?	156	20	36	16	
				No	Safety &
	Safety	Quality	Other	Answer	Quality
What does the label make you think of?	131	44	6	10	37
		More	No	No	Other
	Bigger	Color	Change	Answer	Comments
How can we improve the label?	63	79	59	21	6
There were a total of 228 persons surveyed.			_		











Winning Essay

HOW CAN I MAKE A DIFFERENCE

"Mmmm can you smell the Bar-B-Q and the hot dogs every night you pass by the park?" Certainly it's appetizing and smells good, but is it healthy for you and me? I don't think it is healthy with all the dust blowing on the food. I don't think I will ever buy another hot dog on the street side. I am sure that I can make a difference with safe food handling practices mom taught me at home.

At home and at school, we have all been taught that all fruits and vegetables should be properly washed before being consumed. I am aware of the different food-borne diarrhoeal diseases that can derive from unsafe food handling practices. That is why I am very cautious with the food I eat. Everyday I make it my responsibility to teach a classmate, friend, baby or even an adult about the five key elements for food safety recommended by WHO. We should not only wash fruits and vegetables before being consumed, but we should also make sure that our hands are properly washed before eating.

I am sure that good hygiene practices such as washing hands after going to the toilet, will always keep the people around me and myself healthy. When mom is cooking, I try not to touch the food she is cooking, but rather remind her of proper food handling practices such as cooking the food thoroughly and washing all utensils used for food preparation. By doing this, I am taking care of my family's health and therefore making a difference. I show them that I care, since it's our food, our health, our life.

We are now in the mango season and everyone is eating mangoes, but are they washing the mangoes before eating them? I don't think so especially when my friends picked up the mangoes on the roadside. I am sure that I can and will make a difference with safe handling practices. Since I have three mango trees, yesterday I told them that I would bring mangoes for them. At home I picked the mangoes and washed them properly before taking them to school. I gave all my classmates enough mangoes to cease the desire of eating mangoes for the day. I am sure that I made a difference because on that day, my friends ate clean healthy mangoes.

After listening to BAHA and reading about WHO, I have decided to make brochures and fliers about safe food handling practices and distribute them at school and around my neighborhood to make them aware of what is good for their health. I am also sure that preparing talk shows on the radio with the help of my teacher and thus guiding the children to make their own key elements for food safety will surely reduce the risk of getting ill from contaminated food. Going on the Internet and opening my own website on Kiddies Corner will make even more people aware of how to eat properly. Probably, I can give them hints in the form of stories or games on safe food handling practices.

I believe that many people learn by example; therefore. If I continue practicing safe food handling practices I will surely make a difference wherever I go. You can also make a difference. Remember! It's your food, your health, and your life. There is no one better to take care of it than you! Choose properly what you eat, how you will eat it and when you will eat it. If I do it and you do it, I am sure that we will be making a difference. Believe me, try practicing safe food handling practices and we'll have a better Belize free of food-borne diseases, for you and me. Let's join hand in hand and make a difference today. If I can you can. Just try it.