Georgetown-Lombardi Health Disparities Initiative: Dietary Questionnaire for West-Africans' Study

Qualitative Analysis Report

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Introduction

This report presents results of the qualitative analysis performed on the Georgetown-Lombardi Health Disparities Initiative, dietary questionnaire for West-Africans' focus groups. The analysis employed an Ethnographic analysis technique to analyze data resulting from four focus groups from West African participants.

The objective of the study was to reveal focus group participants' perceptions with regard to Cancer knowledge and understanding, nutritional knowledge and understanding, as well as dietary habits and influences. The analysis was used to reveal participant perceptions of cancer in general and among West Africans, nutrition and its relevance to health and wellness, dietary habits and changes in these habits resulting from living in the United States, and influences on dietary practices such as household structure, accessibility, self-efficacy, and health communication. In addition, focus groups three and four provided feedback on the dietary questionnaire.

The report provides an overview of the methodological procedures for data analysis, the overall findings of the study, and the results and conclusions drawn from the analysis. The report concludes with a brief summary.

Overview of Methodology & Data Analysis

Precision Consulting provided qualitative analysis of focus group data for the Georgetown-Lombardi Health Disparities Initiative. Data resulted from four focus groups, which were comprised of 7 participants, 9 participants, 9 participants, and 3 participants, providing a total of 16 participants using the focus group 1 and 2 interview guide and 12 participants using the focus group 3 and 4 interview guide and taking the questionnaire. Nvivo8® qualitative analysis software was used to aid in the analysis of the interview data. An Ethnographic approach (LeCompte & Schensul, 1999) for qualitative analysis was employed. Grounded Theory (Glaser & Strauss, 1967) and Case Study (Creswell, 2005; Leedy & Ormrod, 2005) approaches were also considered, but deemed less appropriate for the present study.

Ethnographic research is based in human interaction with data gathered primarily through face to face interaction, and observation (LeCompte & Schensul, 1999). "Ethnographers have only three basic kinds of data: information about what people say, what they do, and what they leave behind…" (LeCompte & Schensul, p. 1). The ethnographer takes raw data, codes, counts, tallies, and summarizes it, and presents more precise data resulting from revealed patterns and themes that relate to other patterns and themes (LeCompte & Schensul; Patton, 1987).

The research data analysis for this study was completed through an analysis of focus group data through coding of the transcribed textual data. Coding is accomplished by reviewing the data and systematically identifying and categorizing characteristics or specific responses to open-ended questions, which become the key variables of the analysis (Merriam, 1988) and allow for interpretation and study conclusions (Lincoln & Guba, 1985).

Findings

This section presents the thematic categories resulting from the data from the four focus groups. Due to the structure of the focus group question guides, the categories follow the major question categories closely. Through the process of the data analysis, as described in the previous section, common relevant invariant constituents (responses, statements, or expressed perceptions or thoughts) of the focus group participants were coded and documented for frequency determination. High frequency invariant constituents are used in conjunction with the revealed thematic categories to provide conclusions for the study. It must be noted that not all common invariant constituents represent a particularly high frequency due to the fact that transcription of focus group data may not reveal agreement of participants in the form of nonverbal communication, such as head nodding, etc.

Major Category 1: Knowledge

Thematic Category 1-1: Perceptions and Understanding of Cancer, Causes and Prevention, and Cancer among West Africans.

The first thematic category included data obtained from all four focus groups and demonstrated the participants' general perceptions and ideas with regard to the term "cancer." The thematic category was developed from invariant constituents related to the participants' understanding of cancer, the causes and prevention of cancer, and perceptions of cancer among West Africans. The participants described their concept of cancer primarily as a deadly disease that cannot be cured. Other responses included that it is related to health and healthy living, or a lack thereof, as well as a "growth of bad cells multiplying in the body" and "life changing," which both represented a single response within the group. While several participants cited "deadly disease" when describing the term cancer, one participant from focus group 2 described, "When I hear cancer, I hear death, sickness, a disease who doesn't have a cure." Some participants related it directly with food and nutrition, "When I hear about the word cancer, I am thinking about how to control myself, how can I control the food I eat to be healthy."

The following table represents all invariant constituents given by focus group participants in this thematic category along with the number of sources or focus groups (i.e., 1-4) that mentioned the invariant constituent as well as the total number of references within all

focus groups, representing the number of times individuals within the groups noted the invariant constituent.

Thematic Category 1-1: Perceptions of Cancer understanding, causes/prevention, and among West Africans

Invariant Constituent	# of Sources (focus groups) in which this response was given at least once	Total # of References
Understanding of Cancer		
Deadly Disease that has no cure	4	14
Growth of bad cells multiplying in body	1	1
Life Changing	1	1
Related to health/healthy living	1	1
Causes		
How treat body/care of your body	2	3
Nutrition/Malnutrition	1	3
Don't really know	2	2
Cells in body not working right/excessive growth of cells	2	2
Hereditary	2	2
Radiation	1	1
Smoking	1	2
Prevention		
Take care of self (diet/nutrition/no smoking/ personal hygiene)	3	4
Eat good natural & fresh food (like African Food) without chemicals	1	4
Exercise more	2	3
Live in a healthy environment/avoid pollutants	2	2
Avoid breast implants	1	1
Avoid too much radiation	1	1
Watch/check weight	1	1
Don't know	1	1
Information and education	1	1
Reduce red meat; eat more fish	1	1
See village juju man to help prevent	1	1
Cancer among West Africans		
Breast Cancer	3	3
Don't hear of it because use fresh food	1	2

Throat cancer in Mali	1	1
Prostate cancer	1	1
Too much Beer	1	1
High mortality of Cancer	1	1
Lack of awareness	1	1

Thematic Category 1-2: Nutrition Understanding

The second thematic category under the major heading of knowledge includes knowledge about nutrition. The focus group participants noted the importance of diet for good health (5 participants in all 4 groups). Four total participants, two from focus group 1 (FG1) and two from focus group 2 (FG2) perceived the word "diet" to imply losing weight or eating fewer calories. Two people related nutrition to cancer, with two noting that nutrition was related to cancer because of poor nutrition, two suggesting that natural, fresh, and non-fattening is considered nutritious. This was exemplified by a participant in FG1, who stated, "the food that is natural, the food that is not in the can, the fresh food, not fast foods, I think that is the more important." Finally, one participant described nutrition as, "When I hear the term nutrition, the first thing that comes into my mind, I am thinking about the way we eat, the kind of food we eat at home."

The following table represents all invariant constituents given by focus group participants in this thematic category along with the number of sources or focus groups (i.e., 1-4) that mentioned the invariant constituent as well as the total number of references within all focus groups, representing the number of times individuals within the groups noted the invariant constituent.

Thematic Category 1-2: Understanding of Nutrition

Invariant Constituent	# of Sources (focus groups) in which this response was given at least once	Total # of References
Importance of diet for good health	4	5
Diet meaning losing weight/eating less calories	2	4
Related to cancer because poor nutrition leads to cancer	2	3
Natural, fresh, & nonfattening is considered nutritious	1	2
Nutrition is what we eat & how we eat it	1	1

Major Category 2: Dietary Habits

The second major heading, dietary habits, was determined from six sub-categories, which included Typical African/West African Foods, Beverages, and Snacks; Dietary Preferences, Dietary Practices, Food Preparation, Migration and Dietary Pattern Changes, and ideas of portion sizes. All of these sub-categories were developed from data resulting from focus groups 1 and 2 only, with the exception of portion sizes, which were discussed in all four groups, although differently in groups 1/2 versus 3/4.

Thematic Category 2-1: African and West African Foods

Thematic category 2-1 provides insight into typical African/West African foods, beverages, and snacks. All the members of FG1 agreed that African food is generally naturally processed and healthy food. The general African foods discussed in both FGs 1 and 2 (all Nigerians) included: Almala (cassava powder and yam powder), Assaro and Ekokore (yam porridge), Attieke (ground cassava similar to couscous), Eba, Lokosourkpe (scrambled, ripe plantain with pounded nut cooked with meat/fish), Okra soup/Agusi Soup, Placali & Djumble (cassava paste and dry okra stew), Foutou (pounded yam, plantain, or cassava), rice/jolloff rice/fried rice, sauce graine/palm nut stew, and red meat, chicken, and fish. In addition, participants noted beverages common in Africa/West Africa that included (a) bangui/palm wine, (b) bissap/sorrel drink, (c) cono, (d) yamankoudj/ginger beer, and (e) Zogbo (made of leaves, similar to ginger). Finally, snacks included plantain (chips, roasted, or fried), fried coconut/grated coconut, bagha/rice porridge, bofloto/African fried beignet, chinchin, cocorosso, couli-couli, degue/wheat couscous mixed with yogurt and sour cream, fried fish (to go with plantains), grounded nuts/fried nuts, and roasted corn.

Thematic Category 2-2: Dietary Preferences

Thematic Category 2-2, dietary preferences, provides information on the food preferences of group participants pertaining to breakfast, lunch, and dinner foods; specific meats, fruits, and vegetables typically eaten; as well as dairy products, breads, and desserts. This data was obtained from FGs 1 and 2 only with no data obtained from FG3 and FG4 relative to this thematic category.

The following table represents the data obtained under this category, providing all invariant constituents given by focus group participants along with the number of sources or focus groups (i.e., 1-2) that mentioned the invariant constituent as well as the total number of references within all focus groups, representing the number of individuals within the groups that noted the invariant constituent.

Thematic Category 2-2: Dietary Preferences

Invariant Constituent	# of Sources	# of References
Breakfast Foods		
Bread or Toast	1	2
Eggs (fried/omelets)	2	4
Oatmeal	1	1
Pop (African Cereal): plain, with moin-moin, or beans	1	3
Pounded yams	1	1
Rice/Riz (left over rice)	2	2
Lunch Foods		
African Soup/Stew	2	9
Rice/Rice with fish, chicken, turkey, or shaqui (intestines)	1	1
Wings & fries/McDonalds	1	1
Dinner Foods		
African Soups	1	7
Types of Meat		
Fish: Tilapia, croakers, catfish, stockfish, rockfish, bluefish, crab, and crayfish	2	8
Smoked Turkey	2	3
Beef	2	3
Chicken	2	2
Goat	1	1
Shaqui	1	1
Fruit		
Watermelon	2	2
Apple	2	2
Mango	2	2
Pineapple	2	2
Bananas	1	1
Orange	1	1
# servings/day of fruit:		
Less than 1	1	3
1	1	1
2	1	1

4	1	1
More than 4	1	1
Vegetables (not in stew)		
Don't eat vegetables much	1	2
Broccoli	2	2
Lettuce/salad	2	2
Carrots	1	1
Cauliflower	1	1
Spinach	1	1
Dairy Products		
Pigs milk	1	2
Cheese	1	1
Yogurt	1	1
Breads		
Aghegee Bread (round, sweet)	1	4
Wheat Bread	1	1
White African Bread (Africk)	1	1
Desserts		
Ice cream	2	5
Fruit	2	2
Yogurt	2	2
Cake (no icing/plain pound cake)	1	1
Cheesecake	1	1
Frappes/smoothies	1	1
How often		
2x/week	1	2
1x/month	1	1

Notably different dietary elements include the limited nature of dessert, and the limited amount of dairy and using pig's milk rather than cow's milk. Fruits, according to many participants, are considered to be more of a dessert, whereas the sweet desserts common in the U.S. are not commonly used. For example, this different concept of dessert was described by a participant from FG2:

> When I hear you talk about fruits and after dessert, I am a little bit confused (group agrees) because in Ivory Coast when you finish to eat, your mother gives to you a banana or an orange and it's like a dessert for you. We used to eat like

this, your mom would say ok we don't have enough money to buy a cake. I think in the French conception, a cake is too heavy to be a dessert, but the orange is a dessert, the banana is a dessert, but in America, the dessert is different.

Thematic Category 2-3: Dietary Practices

Thematic Category 2-3, dietary practices, reveals techniques for food preparation, dietary restrictions, and the number and type of meals typically consumed in a day reported by FG 1 and 2 participants. Most commonly, focus group participants reported typically eating twice (7 participants) or three times (5 participants) a day. Of those reporting a two meal a day diet, participants noted eating lunch and dinner. Participants consuming three meals a day described eating (a) breakfast, lunch, dinner (4 participants), (b)or lunch, dinner, late dinner (1 participant). Other participants reported eating only once a day for dinner (2 participants) and four or more times a day (3 participants) inclusive of breakfast, lunch, dinner, and one or more snacks.

The only specific dietary restriction was a cultural norm to not eat pork products, noted by all seven participants in FG1. One participant in FG2 was on a low sodium diet and restricted to eating before 8 pm due to pregnancy. In addition, four members of FG2 noted a restricted diet in America to avoid weight gain in that they are not able to eat as much due to relative inactivity comparative to lifestyle in Africa.

Pork is not culturally part of the diet. Focus group 1 all agreed, "All of us, we all abstain from pork from Africa so it's not part of our meal, not at all. Except from Africa if you are a Muslim also they say no, and even naturally as Africans we don't like pork, but we eat a lot of red meat, chicken, fish."

With regard to food preparation, a total of 14 participants from both FGs 1 and 2 described making food from scratch most of the time. The following table represents the data revealed with regard to food preparation techniques, including methods for preparing meat and eggs, and oils used in the preparation process, providing all invariant constituents given by focus group participants along with the number of sources or focus groups (i.e., 1-2) that mentioned the invariant constituent as well as the total number of references within all focus groups, representing the number of individuals within the groups that noted the invariant constituent.

Thematic Category 1-2: Understanding of Nutrition

Invariant Constituent	# of Sources (focus groups) in which this response was given at least once	Total # of References
Methods for preparing meat		
Bake or broil	1	9
Boil first then bake	1	2
In stew	2	2
Methods for preparing eggs		
Boil	1	1
Fry	1	1
Types of Oil(s) used		
Vegetable Oil	1	2
Corn Oil	2	2
Canola	1	1
Olive	1	1
Palm oil	1	1
Heart healthy	1	1

Thematic Category 2-4: Migration and Dietary Pattern Changes

Thematic Category 2-4, migration and dietary pattern changes, reveals elements of change resulting from migration to the United States. Focus group participants described if and how their dietary patterns have changed, habits that they have been able to retain from their native country, foods that they have begun to eat as a result of living in the United States, and their overall eating patterns relative to African and American patterns.

Although the majority of participants in both focus groups noted changes in their dietary patterns (13 out of a total of 17 participants), this was noted to be primarily the result of natural foods and methods being unavailable in the United States, resulting in consumption of more processed foods (4 participants) and the temptation to consume fast foods (3 participants). Most participants noted retained African practices in terms of cooking from scratch at home most of the time (14 participants), attempting to use naturally fresh cooked foods (2 participants). Changes in diet demonstrated by foods they have begun to eat since migration to the United States are presented in the following table, with the most common response being fast foods. While many

participants in both FGs (9) noted a mix of using native African techniques and foods with American foods, upon reflecting on the overall maintenance of African dietary practices, more than half of participants (10) perceived eating more African foods than American, with most days eating African foods.

Participants from FG1 described the changes in diet due to migration to the U.S.:

> It has changed because most of the natural foods that we eat back home, that we can easily get from the farm or something like that is not available here so we basically end up eating sometimes fast foods, processed meats, fatty foods.
>
> We no longer eat fresh foods, we buy canned foods umh, and fresh food is more expensive than canned foods so we eat frozen meats, frozen chicken.

The temptation to eat fast foods was described by one participant, particularly when he first came to the U.S.:

> For the first 3 years I was trying in my head to be Americanized so I was eating all the fast foods, Chinese foods and getting bigger and bigger and when realized that, I switched back to African foods, that why I say my habits changed.

The following table illustrates the invariant constituents related to this thematic category.

Thematic Category 2-4: Foods have started to eat resulting from Migration to United States

Invariant Constituent	# of Sources (focus groups) in which this response was given at least once	Total # of References
More Fast Foods in General	1	7
Fries/French fries/Potatoes	1	2
McDonalds Specifically	1	2
Salad	1	2
Subway/Quiznos	1	1
Hot dogs	1	1
Wings	1	1
Fried rice	1	1
Spaghetti/noodles	1	1
Chipotle	1	1
Broccoli	1	1

Thematic Category 2-5: Portion Sizes

Thematic Category 2-5 reveals the participants' understanding of portion sizes. Focus groups 1 and 2 provided data relevant to their understanding of portion size and and example of portion size of stew. Focus groups 3 and 4 provided data in the form of example portion sizes of fish, plantain, mashed potatoes, rice, and turkey, as well as typical size of bowls, cups, and plates used. Therefore, the data are presented for FGs 1 and 2 together and FGs 3 and 4 together, respectively.

Although some participants in FGs 1 and 2 perceived not knowing about portions, some described their personal notion of portion size relative to "what fills me up" (4 participants), or judging by sight (1 participant). The difference between common portion sizes perceived in Africa versus the U.S. was noted by a member of FG2, who stated,

> What I noticed in America everything is big, soda is big, bread is big, so I took that habit to eat big. When I go to a restaurant and they give those small things, my face changes (group giggles). I like to eat big for my money. I work hard, I want portion big for me.
>
> *Facilitator 1: Because of the way the portion sizes are in America you've began to get accustomed to large portions?*
>
> That's right.

Focus Group 2 gave examples of their perceived portion size of stew given a 5 oz., 7-8 oz, or 10 oz. bowl. The results demonstrated variability with 2 participants selecting the 5 oz., 3 participants selecting the 7-8 oz., and 2 participants selecting the 10 oz. bowl size for their personal use.

Focus groups 3 and 4 were asked to describe their personal portion size (i.e., how much they would eat) of several different foods and sizes of dishes that would be typically used personally. The data are presented in the following table.

Thematic Category 2-5: Example Portion Sizes for FGs 3 and 4

Invariant Constituent	# of Sources (focus groups) in which this response was given at least once	Total # of References
Size of Bowl used		
20 oz. (small)	2	3
36 oz. (medium)	2	5
44 oz. (large)	1	2
Size of cups used		
24 oz. (large)	1	2
16 oz. (medium)	2	5
8 oz. (small)	0	0
Size of Plate used		
11 in.	2	7
Smaller	0	0
Portion size of Fish		
Cut into 3 pieces & eat 2 pieces	1	1
Eat half of the fish	1	1
Eat whole fish	1	1
Portion size of Plantain		
1 or 1.5	2	2
2 or more	2	7
If boiled eat less	1	1
If boiled eat about same amount	1	2
None	1	1
Portion size of Mashed Potatoes		
1 cup	1	2
≥ 2 cups	1	3
Portion size of rice		
1 cup	1	3
1.5 cups	1	1
2 cups	1	3
3 cups	1	3
Portion of Smoked Turkey		
4 or 5 pieces	1	2
10 pieces	1	1

Major Category 3: Dietary Influences

The third major thematic category, dietary influences, was generated from five sub-thematic categories related to external influences on diet and resulted from data obtained from only FGs 1 and 2. Not data were obtained concerning thematic categories under major category 3, dietary influences, from FGs 3 and 4. These thematic categories within major category 3 include access and availability of foods, household structure, availability and use of restaurants (i.e., going out to eat), self-efficacy, and health communication.

Thematic Category 3-1: Access and Availability

All participants noted access to a neighborhood grocery store, some within walking distance, some necessitating use of a car. African stores were slightly less accessible, with two participants describing a 30-45 minute car drive. Most participants (14) noted the expense of food in general, but more specifically, the expense of ethnic/African foods. A participant in FG2 noted, "African food is very expensive, if you want to compare, American food is expensive but not the way that African food is expensive." The majority of participants in FGs 1 and 2 described going to the grocery store once a week (8 participants), while four noted going to the store 2-3 times a week. Frequency of shopping at an African store versus a regular grocery store demonstrated all of FG1 members (7) stating about 75% African store and the majority of FG2 members describing a mix between stores. For example, a participant from focus group 1 stated, "75% African store, and the remaining percent at a regular groceries store" and most of the group agreed.

Specific stores where the participants shop, both African and other were noted to be: Africk, 5th Market (local farmer's market), Foodway, Lagos, One Stop, and Yaba.

In terms of food assistance and knowing where to go if one needed assistance obtaining food, the participants in FG2 agreed that this was not part of their culture. One participant in group 2 noted, "You know the Ivorians people are very different, and although the foods are very expensive, Ivorians are not used to go for food like Americans, we don't have names of places where to go." Despite this cultural aspect, one participant did state the knowledge of availability of assistance at the community churches and possible food pantries.

Thematic Category 3-2: Household Structure

The thematic category 3-2 represents data revealing the structure of the household/family in terms of size, major contributor to food budget, and person primarily responsible for shopping and food preparation. The following table demonstrates the composition of households among the FG 1 and 2 participants.

Thematic Category 3-2: Household Structure: Size of Household

Invariant Constituent	# of References
Only 1	1
2 Adults	1
2 Adults, 1 Child	2
4 Total	
3 Adults, 1 Child	2
2 Adults, 1 Child, 1 on the way	2
5 Total	2
2 Adults, 3 Children	1
3 Adults, 2 Children	1
6 Total	
2 Adults, 4 Children	1
5 Adults, 1 Children	1

Little data were obtained with regard to the household member primarily responsible for contributing to the food budget. The reason for this could have been that it was too personal of a question and therefore some participants refused to answer.

As for the person responsible for the food shopping, the majority (7 participants) answered that the female head of household was primarily responsible for shopping, in terms either of themselves or the wife or woman of the household. In addition, 3 participants noted themselves as males or "the husband" to be responsible for grocery shopping. Others noted the contributions in this responsibility across the household, such as "mom, dad, and I" or just the daughter.

Similarly, the person primarily responsible for cooking also tended to be female with 8 participants perceiving either themselves as responsible (3, all female) or the "wife" (5 participants). Two participants perceived this responsibility to be both the husband's and the wife's, two mentioned wife/mother and daughter, and one mentioned the husband as the primary person responsible for cooking.

Thematic Category 3-3: Going Out to Eat

The thematic category 3-3 represents data revealing the nature and frequency of eating at fast food and sit down restaurants outside of the home in the United States for this population. A few respondents from FG2 provided insight into eating at fast food restaurants. These responses included (a) never (1 participant), (b) once per week (2 participants), and (c) twice per week (1 participant). However, more data were obtained with regard to frequency and type of sit-down restaurant the focus group participants utilized. Frequency of eating at a sit-down restaurant included (a) never (1 participant), (b) rarely (2 participants), (c) once a month (1 participant), (d) twice a month (6 participants), (e) once a week (3 participants), (f) twice per week (1 participant), and (g) 4 to 5 times a week (2 participants). Specific sit-down restaurants mentioned by participants included all you can eat restaurants (1), Chinese (1), Oliver Garden (3), Red Lobster (1), Applebees (2), TGIF/Ruby Tuesdays (4), and The Ranch (1).

Thematic Category 3-4: Self-Efficacy

The thematic category 3-4, self-efficacy, represents data revealing participants' interest and willingness to participate in research with regard to healthy foods, interest in learning about healthy foods, and their ideas on how to make healthy eating easier to accomplish. Seven participants demonstrated interest in learning about healthy foods, and an additional seven participants expressed interest in a study of foods eaten and were interested in participating in such a study. One participant in FG2 noted that an incentive would be encouraging, and all members of FG2 agreed.

Three suggestions were revealed in terms of how to make it easier to eat healthier. These suggestions included cooking more at home, making ethnic food "fast food," such as a drive through, and access to "missing foods" from Africa that are used as "Remedies."

> Some of the food, the African foods, the distance does not allow for those foods to come here because they would perished so if there is a way that they could grown them here. We have a particular leaf that is very medicinal in Africa that we eat, like you don't have enough blood, they tell eat this leaf and you would come back immediately, new mothers who have lost blood, distance would not allow, the government will not allow people to bring those seed. We don't have time to grow it in the yard but I don't know how these foods can really be brought in, but we are really missing those good leaves that you eat and you feel healthy.

Of individuals responding to the question of whether they would be willing to give blood, urine, or DNA for research purposes in this field, the majority (6) responded that they would indeed give everything needed. However, one individual stated the willingness to give urine or DNA, but not blood and two were willing to give only urine. One participant suggested he would be more willing to participate given a pay incentive. Lastly, one participant said "no."

Thematic Category 3-5: Health Communication

The thematic category 3-5, health communication, was developed from data with regard to information received on diet and nutrition in the past, interest in receiving information relevant to participants' eating habits, the best ways to communicate this information, whether the FG participants paid attention to information on nutrition, and whether participants felt they listened to their doctor's advice. Some participants had received nutrition information in the past, but did not find it relevant. For example, one participant stated, "I have gotten these information but it does not have any relevance to me because it doesn't deal with the foods I eat." At the same time, all members of FG1 expressed interest in receiving information relevant to their particular eating habits.

Many respondents suggested multiple ways to distribute the information effectively. The most commonly described best way to send this information was via standard mail (6 participants), internet or email (4), and through church (4). One participant noted the importance of face-to-face interaction as the best way to communicate.

> To send in the mail or e-mail, it's really difficult for people to sit down and read even for 30 minutes or 1 hour. And even some of us speak English but most speak French so if you receive information and you don't really know what they talk about, it will be difficult to know some stuff. But as we are sitting here we can ask and when we finish, we learn more than mail, and have the possibility of doing this often, it will be good for our communities even if they don't speak French.

A few participants in FG2 noted paying attention to ads/commercial information on nutrition (3 participants) and two participants described listening to their Doctor's advice.

The table below illustrates the perceived best ways to send information with regard to nutrition information relevant to their particular eating habits.

Thematic Category 3-5: Perceived Best Way to Send Information

Invariant Constituent	# of References
Standard Mail	6
Internet or email	4
Church	4
Phone	1
Text message	1

Questionnaire Feedback (Focus Groups 3 and 4 only)

Focus groups 3 and 4 participated in the West African Food questionnaire. The data provided insight into the perceptions of the FG 3 and 4 participants in terms of questionnaire content, delivery of the questionnaire, design, and format of the questionnaire.

Content

In terms of content, participants noted the need to add certain foods, namely, cucumber (2 participants), sauce longueur or Kple (2), carrots (1), eggplant (1), and more junk food, as well as the frequency of fast food consumption. Participants also felt the section on portion size was helpful (2) and generally "Ok" (2).

Delivery

Focus group 3 and 4 participants suggested that giving out questionnaires face-to-face in a clinic or group is best (5 participants) as well is the use of a self-administered format (6 participants). For example, one participant noted, "It's better in a group that sending it individually or it would be neglected for some time. So group helps a lot." Some participants (2) also suggested providing questions in French and English, as well as possibly other languages, such as Spanish.

Lastly, the timing of such groups or meetings was perceived to be best in the evening (2 participants), with three participants noting after church on Sunday afternoon as a good time, and three participants noting that after church on Sunday is NOT a good time due to that time being family time;

I think the best day would be Sunday afternoon, after 3, after church because we are used to work from Monday to Saturday and Sunday morning we are going to church, and after church we can be able to be at the meeting

After church? No, that's the family time. You won't get people

Design

In terms of colors and illustrations used on the questionnaire, four participants in FGs 3 and 4 suggested the need for more pictures and colors. While most participants felt the questionnaire was generally well designed and easy to fill out, a few design changes were suggested. Two participants noted that everything should be separated into categories and two participants suggested the questionnaire needed to be simplier, condensed, and easier.

Format

Elements of font evaluated by FGs 3 and 4 included font, length of the questionnaire, and the type of format that would most likely be accepted by West Africans. The number of responses to the format questions was limited. Two individuals perceived the font to be just right, while one participant cited it as too small. In terms of length, 9 participants total believed it needs to be shorter, more condensed. Two participants suggested a total of 10 pages; whereas one participant suggested 20 pages, and one suggested the length was "OK." Two participants responded to the question regarding the most accepted format by West Africans, that of paper.

Overall Impression

The overall impression gathered from the two focus groups with regard to the questionnaire was positive in that the participants enjoyed looking into their eating habits, and that the questionnaire covered all their food concerns (2). However, some participants cited that it served to enlighten them on the reality of their diets and physical health (3). The general elements that the participants did not like about the survey are provided in the following table.

Questionnaire Feedback: Overall Impression – Things did not like

Invariant Constituent	# of References
Not inclusive of American Foods eat (i.e., include more American foods/a mix of foods)	9
Repetitive questions/long (15 pgs)	3
Should include reasons for why you eat what you eat and why you think it is good for you	2
Should include Beverages/what drink	1

In contrast, the most appealing elements were that it was informative and comprehensive, covering all African foods, and that participants recognized the foods (5 participants). The participants in FGs 3 and 4 felt that they had all the information needed to fill out the survey easily and all participants in FG3 (3) felt it would be easy for other West Africans, specifically Nigerians, to fill out the survey easily. One participant noted, however, that the survey may be easier for a native Nigerian born individual due to greater familiarity with the foods as compared to those born in the United States.

Results/Conclusions

Several conclusions can be drawn from the data. Themes generated from the thematic categories and high frequency responses serve as general conclusions to the analysis by representing and describing how the focus group participants perceived their knowledge and understanding of cancer and nutrition. Therefore, the following themes resulting from the data provide the overall conclusions of the data analysis.

Theme 1: The general understanding of the causes and prevention of cancer, thought to be a deadly and incurable disease, center around self-care inclusive of nutrition, smoking, hygiene, eating natural foods, exercise, and living in a healthy environment..

The high frequency responses within thematic categories of major category 1, Cancer understanding, causes, and prevention, provided evidence for suggesting a general understanding of cancer as a deadly and incurable disease, while at the same time providing evidence of good understanding of the importance of self-care and particularly nutritional elements. Breast cancer was the most cited type of cancer in West Africans by participants. Although large scale misconceptions were also apparent, such as the concept that keeping money in your bra causes breast cancer, the groups for the most part represented perceptions and ideas that demonstrated good, however very basic knowledge of cancer and nutrition.

Theme 2: Participant understanding of nutrition comprised both the importance of diet for good health and the term "diet" relating to losing weight. Participants demonstrated an understanding of the relationship between nutrition and cancer and overall wellness.

Thematic category 1-2 provided high frequency invariant constituents used to generate this theme. Invariant constituents resulting from focus group data in all four groups demonstrated an understanding of the importance of diet for good health in general and in the prevention of cancer and other illnesses.

Theme 3: Native West African methods and diets, perceived and described by focus group participants as healthy, natural, and lacking chemicals of processed foods, were generally maintained in the population with a perception of primarily eating African foods rather than American.

Major Thematic category 2, inclusive of West African foods and beverages, dietary preferences, dietary practices, food preparation, and migration related dietary changes,