DIETARY PRACTICES OF AFRICAN-AMERICANS IN MACON COUNTY, ALABAMA

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BACKGROUND
BACKGROUND

• In the U.S., African-American males have higher cancer incidence and mortality rates than white males

• African-American women have lower incidence but higher mortality rates than white women

• Poor nutrition and adverse dietary practices contribute to these disparities
BACKGROUND

- Diet is a significant, modifiable risk factor associated with cancer

- Considerable gap in the knowledge base regarding:
  - cancer-related dietary habits
  - food preferences and
  - food preparation practices among African-Americans in the rural South
BACKGROUND

• Semi-quantitative food frequency questionnaire (FFQ)
  • most commonly used dietary assessment instrument for epidemiologic research
  • recalls the frequency and portion sizes of all foods consumed over a specific time period
BACKGROUND

• Commonly used FFQ - NCI dietary health questionnaire (DHQ)
  • extensively studied and validated in the American population
  • little information re: its sensitivity and validity in African-Americans in the rural South
  • FFQs will effectively measure habitual dietary intake, only if they are specifically tailored to encompass the diets of the target population
• Limited attempts have been made to develop culturally sensitive FFQs for use in the southeastern U.S.

• Tucker et al. (2005) developed a regional FFQ for use in the Lower Mississippi Delta (LMD)
BACKGROUND

- Tucker et al. (2005) found that:
  - regional food use patterns differed from national, and between African-Americans and Caucasians in the LMD
  - Ex. - in the rural South, African-Americans commonly consume foods such as cured pork products - the crawfish and jambalaya consumed in the LMD are not generally consumed
  - modified FFQ should contribute to improved assessment of usual dietary intake in the LMD
BACKGROUND

• Focus groups
  • generally underutilized in diet and nutrition research
  • especially suited to exploring, describing, and understanding the dietary habits of African-Americans because of the historical importance of oral communication patterns in their culture
OBJECTIVE

• To generate information about dietary practices, food preferences and food preparation methods in African-Americans in Macon County, Alabama, as a precursor to an intervention designed to modify an existing food frequency questionnaire (FFQ)
METHODOLOGY

Question Development

• A combination of complementary strategies including:
  • review of the literature
  • brainstorming sessions with African-American faculty, staff, and students at Tuskegee University, community members of Tuskegee and pilot focus groups
METHODOLOGY
METHODOLOGY

A qualitative research design using focus group methodology and a structured focus group interview guide.
METHODOLOGY

Focus Group Design

Tightly structured design
Predetermined interview guide

Exploratory design
Use of probes to elicit information

Phenomenological process
Eliciting the participants’ experiences related to food preparation methods and other concerns
METHODOLOGY

Participants

• African American males and females from Shorter, Franklin and Tuskegee in Macon County, Alabama

• Participants received reminder phone calls the day prior to their scheduled focus group meeting
METHODOLOGY

Participants

Approval for the study

• Human Participants Review Committee at Tuskegee

• Institutional Review Board for Human Use at the UAB
METHODOLOGY

Participants

• At each focus group:
  • purpose of study explained
  • participants consented and assured about the confidentiality of the information
  • a brief demographic questionnaire was filled
METHODOLOGY

Focus Group Procedure

• 2 pilot focus groups (N = 19)

• 8 formal groups (N = 61)

• Each group meeting ~ 100 minutes

• Trained African-American facilitator not associated with the study
METHODOLOGY

Focus Group Procedure

• 6-10 persons participated in each focus group, and at the end of each session

• Participants received a modest remuneration for his/her time and participation
METHODOLOGY

- Focus groups were audio taped and transcribed verbatim

- Responses were also recorded on flip charts, and the transcripts compared to these written notes to minimize misinterpretation of the data
METHODOLOGY

Data Analysis

• QRS NUD*IST 6

• Transcripts read independently for initial coding of themes

• Themes were identified using a consensus approach

• Overall summary report of major findings reviewed by research team as a validity check
RESULTS AND DISCUSSION
RESULTS AND DISCUSSION

Pilot focus groups

- Participants in the pilot focus groups were excluded from the formal groups

- Served primarily to:
  - confirm the content and cultural sensitivity of the foods identified in the structured interview
  - to elicit traditional, culturally important foods, which may have been overlooked
RESULTS AND DISCUSSION

Pilot focus groups

• Main findings:
  • indicated that most participants routinely consumed fast foods, and a variety of different beans
  • the structured interview was modified to reflect questions about fast food and bean consumption practices
RESULTS AND DISCUSSION

Formal focus groups

Table 1. Selected Characteristics of Participants

<table>
<thead>
<tr>
<th>Age Group Years</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-35</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>36-50</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>51-65</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>66-75</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

(N = 61)
RESULTS AND DISCUSSION

Formal focus groups

• Themes identified:
  • Dietary practices
  • Food preferences
  • Food preparation methods
  • Fast food practices
  • Seasonal/specialty foods
RESULTS AND DISCUSSION

Definitions of “Soul Food”

- Turnip, collard and mustard greens
- Okra, fried green tomatoes
- Potato salad, macaroni and cheese
- Corn on cob

Chitlins, fried chicken
Pork chops (anything with fried pork)
Pig ears, feet, chicken feet
Hoghead cheese
Fat back, ham hocks, neck bones
Fried catfish and whiting
RESULTS AND DISCUSSION

Definitions of “Soul Food”

- Field and black-eyed peas
  - Cornbread
- Black-eyed peas and rice
  - Buttermilk cornbread
- Baked, snap, string, butter and pinto beans
  - Crackling cornbread
- Sweetpotato pie
  - Fried cornbread
- Peach cobbler
  - Grits
RESULTS AND DISCUSSION

• The usual breakfast foods such as eggs, bacon, ham, cheese, hash brown, grits, cereals and orange juice were reported.

• The breakfast cereals reported by individuals and across groups and gender were the ready-to-eat types such as cornflakes and bran flakes.
RESULTS AND DISCUSSION

Lunch – females 20-35y

- 60% - fast foods 2-3 times/week
- 10% - vegetables daily
- 20% - salads 2-5 times per week

Lunch – males 20-35y

- Consumed mostly pizza
- Wings
- French fries
- Other fast foods
RESULTS AND DISCUSSION

Lunch – females 36-50y
- A variety of sandwiches including hogshead cheese
- 67% consumed fast foods 2 times/week

Lunch – males 36-50y
- Less fast food consumption
- Sandwiches such as bologna, banana and peanut butter/jelly
- 44% - consumed chicken 4 times/week
RESULTS AND DISCUSSION

Lunch – females 66-75y
- Fruits
- Fish
- Vegetables
- Salads
- Sandwiches

Lunch – males 66-75y
- Hamburgers
- Turkey sandwiches
- Salads
- Baked chicken
- Pork chops
RESULTS AND DISCUSSION

Some commonly eaten vegetables

- Beets
- Bell peppers
- Cucumbers
- Carrots
- Broccoli
- Zucchini
- Corn
- Brussels sprouts
- Cabbage
- Rutabagas
- Cauliflower
- Spinach
- Squash
- Tomatoes
RESULTS AND DISCUSSION

Some commonly eaten dinner foods – Meats & Products

- Barbecue ribs
- Stew with potatoes
- Camp stew
- Fish
- Hamburger
- Liver and gravy
- Neck bones
- Pork Sausage
- Shrimp

Beef
Gumbo
Chicken
Ham hocks
Lamb
Meatloaf
Oxtail
Pig - tail, feet, ears
Turkey
RESULTS AND DISCUSSION

Most commonly used cooking methods

- Frying (stir and pan-fry)
- Baking
- Grilling
- Boiling
- Steaming or microwaving
RESULTS AND DISCUSSION

Low-fat behaviors

• 36% removed skin when cooking chicken; 44% did not; others removed it sometimes or after cooking

• Roughly 50% trimmed fats when they cooked meats and 23% did not
## RESULTS AND DISCUSSION

### Food Items Usually added to Vegetables

<table>
<thead>
<tr>
<th>Meat, Poultry, Meat-Related</th>
<th>Spices and Seasonings</th>
<th>Fats, Oils, Oil-Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salt pork</td>
<td>Spices – cinnamon</td>
<td>Cheese</td>
</tr>
<tr>
<td>Pig’s feet</td>
<td>Peppers – black, bell</td>
<td>Oil</td>
</tr>
<tr>
<td>Ham hocks</td>
<td>Herbs, celery, thyme</td>
<td>Bacon</td>
</tr>
<tr>
<td>Meat</td>
<td>Seasonings – smoked</td>
<td>Butter</td>
</tr>
<tr>
<td>Fatback</td>
<td>Seasoning salt</td>
<td>Shortening</td>
</tr>
<tr>
<td>Neck bones</td>
<td>Salt – sea, Kosher</td>
<td></td>
</tr>
<tr>
<td>Turkey – smoked, parts, neck</td>
<td>light, low sodium</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Onions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Garlic</td>
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</tbody>
</table>
RESULTS AND DISCUSSION

• Assessment of dietary practices to reduce cancer risk among African-Americans requires culturally-specific information, which is not typically found in existing standard FFQs.
RESULTS AND DISCUSSION

- Pertinent findings revealed
  - African-Americans’ preference for traditional foods, which represents a large part of their cultural heritage
  - “Soul Food” - perceived as healthy and inexpensive, preference, obvious pride and ownership for it
  - “Soul Food to me is not so much the food, but how we prepare it, we Southern people prepare our food with a lot of fat”
RESULTS AND DISCUSSION

• Processed, salted foods
  • risk factors for cancer

• High fat diets
  • increased cancer risk in humans
  • overweight and obesity
  • body fatness is a cause of endometrial, postmenopausal breast, and colorectal cancers
RESULTS AND DISCUSSION

• Fast food-eating preferences
  • Fast foods, if not used sparingly, are causes of weight gain, overweight and obesity, which have been associated with some cancers
RESULTS AND DISCUSSION

• Pertinent findings
  • provided relevant information for the modification of the FFQ (DHQ) for use in African-Americans in the rural south
  • several traditional, cultural foods such as fried green tomatoes were added; others, which were not commonly consumed were deleted from the DHQ
GENERAL INSTRUCTIONS

• Answer each question as best you can. Estimate if you are not sure. A guess is better than leaving a blank.

• Use only a black ball-point pen. Do not use a pencil or felt-tip pen. Do not fold, staple, or tear the pages.

• Put an X in the box next to your answer.

• If you make any changes, cross out the incorrect answer and put an X in the box next to the correct answer. Also draw a circle around the correct answer.

• If you mark NEVER, NO, or DON’T KNOW for a question, please follow any arrows or instructions that direct you to the next question.

BEFORE TURNING THE PAGE, PLEASE COMPLETE THE FOLLOWING QUESTIONS.
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IMPLICATIONS AND NEXT STEPS

- African-Americans have unique dietary practices with strong cultural and historical roots
  - this should be taken into consideration when planning to modify or create nutritional assessment tools for use in this population

- The findings also led to the development of a modified FFQ, which is being validated in African-Americans in the rural South
ACKNOWLEDGEMENTS

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