The Healthy Heart Initiative

Barriers to Eating a Heart Healthy Diet
In a Low Income African American Community

A SPECIAL REPORT

The Mary Horrigan Connors Center for Women’s Health and Gender Biology
Brigham and Women’s Hospital
Brigham and Women’s Hospital

Recognized internationally for its excellence in patient care, medical research, and training of outstanding young professionals, Brigham and Women’s Hospital (BWH) is a 716-bed teaching affiliate of Harvard Medical School.

Connors Center for Women’s Health and Gender Biology
The Mary Horrigan Connors Center for Women’s Health and Gender Biology (Connors Center) at Brigham and Women’s Hospital, works to improve the health of women and transform their care through research, clinical care, education and policy.

Center for Cardiovascular Disease in Women: The Center for Cardiovascular Disease in Women at the Connors Center is dedicated to increasing awareness about coronary heart disease in women and developing new sex- and gender-specific strategies for the prevention, treatment and rehabilitation of coronary heart disease in women.

Women’s Health Policy and Advocacy Program: The Women’s Health Policy and Advocacy Program at the Connors Center works to influence policy at the institutional, local, and national level to promote the highest standard of health and health care for all women.

Acknowledgements
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For more information about this report, contact:
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Connors Center for Women’s Health and Gender Biology
Brigham and Women’s Hospital, 75 Francis Street, Boston, MA 02115
Phone: (617) 525-7502, Fax: (617) 525-7746, Email: ConnorsCenter@partners.org

* Informational assistance with this report does not imply organizational or agency endorsement

Contributors
Paula Johnson, MD, MPH,
Chief, Division of Women’s Health and Executive Director, Connors Center for Women’s Health and Gender Biology
Rachel Wilson, MPH,
Director, Women’s Health Policy and Advocacy Program
Rachael Fulp, MPH,
Administrative Director, Center for Cardiovascular Disease in Women
Brian Schuetz, MSc,
Policy Analyst, Women’s Health Policy and Advocacy Program
Piper Orton, MBA,
Director, Women’s Health Programs
The Healthy Heart Initiative

Barriers to Eating a Heart Healthy Diet In a Low Income African American Community

BACKGROUND

Heart disease is the leading cause of death among women in the U.S., claiming more lives than the next 7 causes combined. African American women have the highest rates of heart disease of all racial/ethnic groups and are more likely to die prematurely from heart disease than white women. 2,3

The risk factors for heart disease include: being overweight or obese, lack of physical activity, cigarette smoking, diabetes, high blood pressure (hypertension), high blood cholesterol, increasing age, and family history. Many heart disease risk factors are more common among black women than white women.

For example:

- Black and Hispanic women in the U.S. are more likely to be overweight or obese compared to white women. 4
- More than half of black females in the U.S. report having no leisure-time physical activity, a higher rate then both white women and men, and black men. 5
- While fewer black women in the U.S. smoke (18%) than white women (22%)6, black women may be more susceptible to nicotine dependence. 7
- African American women have twice the rate of diabetes than white women.8
- The prevalence of high blood pressure in American blacks is among the highest in the world, developing earlier and with greater severity.9 Black women in the U.S. have the highest rate of high blood pressure of any race-sex group, and are the least likely race/gender group to have their high blood pressure controlled. 10,11
- Though African Americans tend to have lower blood cholesterol levels than whites, 46% of black women still are at increased risk for heart disease due to borderline-high cholesterol. 12

Disparities also exist in diagnosis and treatment for heart disease. African Americans are less likely than whites to be referred for diagnostic cardiology procedures and treatment. 13 In addition, African American women are less likely to be referred to cardiac rehabilitation once they have been diagnosed with coronary heart disease, compared to men. 14
In an effort to better understand some of the challenges that African American women face in preventing heart disease, the Center for Cardiovascular Disease in Women at Brigham and Women’s Hospital (BWH) conducted formative group research to look more closely at the barriers to adopting a heart healthy diet. More specifically, researchers conducted a study to assess the costs for individuals and families living in the Roxbury neighborhood of Boston to purchase a nutritionally adequate diet, which is both heart healthy and culturally appropriate.15

**Participants**
The study sample consisted of two groups, six women each, living in the Roxbury neighborhood of Boston. The first group consisted of six women age 65 and older living alone. The second group consisted of women younger than 65 with children 18 and younger living in their household. A female sample was selected because, in families, women typically make key dietary choice and behavior decisions.

**Location**
Roxbury is one of sixteen neighborhoods in Boston, Massachusetts. It is predominantly a community of color, with a population that is 52% black and 22% Hispanic.16 Roxbury is also one of the poorest neighborhoods in the city, with 29% of its residents living below the federal poverty level.17 Roxbury residents also report some of the highest levels of poor health indicators in Boston. In the city of Boston overall, black residents (63%) were more likely than Hispanic (57%), white (42%), and Asian (18%) residents to be obese or overweight.18

**Roxbury Socioeconomic and Health Indicators** 20

<table>
<thead>
<tr>
<th>Socioeconomic Indicators</th>
<th>Roxbury</th>
<th>Boston</th>
<th>MA</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than High School Graduation or GED</td>
<td>29%</td>
<td>21%</td>
<td>15.2%</td>
<td>19.6%</td>
</tr>
<tr>
<td>% of Population Below Poverty Level</td>
<td>29%</td>
<td>20%</td>
<td>9.3%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Median Household Income in 1999</td>
<td>$26,515</td>
<td>$39,629</td>
<td>$50,502</td>
<td>$41,994</td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Overweight or obese</td>
<td>51%</td>
<td>46%</td>
<td>54.6%</td>
<td>64.5%</td>
</tr>
<tr>
<td>Physician-diagnosed high blood pressure</td>
<td>29%</td>
<td>19%</td>
<td>23.1%</td>
<td>24.8%</td>
</tr>
<tr>
<td>Diabetes mortality (rate per 100,000 population)</td>
<td>38.4</td>
<td>23.2</td>
<td>20.2%</td>
<td>25.1%</td>
</tr>
</tbody>
</table>
Development of Culturally Appropriate Heart Healthy Menus
It is well acknowledged that heart healthy eating - that is a diet that is low in fat, particularly saturated and trans fats, and high in fruits, vegetables and whole grain products - is critically important in reducing the risk for heart disease. When coupled with physical activity, weight loss, and lack of exposure to tobacco products, heart disease risk can be reduced considerably.

The study aimed to develop heart healthy menus by adapting existing meals to improve their nutritional value. The process began by collecting information about household food preferences, preparation, cost, and access issues from focus group members. Registered dieticians from the BWH Department of Nutrition worked with focus group participants to develop two sets of model seven-day menus that were culturally appropriate and nutritionally adequate for a heart healthy diet.

Cost of Culturally Appropriate Heart Healthy Menus
The menus developed through this process were translated into shopping lists and food prices were collected at two large, local grocery stores frequented by focus group members. Items were selected for affordability, by buying bulk quantities and selecting generic brand names, and prices were used to calculate a monthly food cost.

In June 2003, the average cost per month to purchase the high quality, heart healthy foods for the menus developed by the Healthy Heart (HH) study was $242 for seniors and $692 for a family of four. Two benchmarks used to assess these costs included: the maximum benefit provided by the Food Stamp Program (FSP) for Fiscal Year 2003 and the 2003 Massachusetts Family Economic Self-Sufficiency Standard (FESS) food budget for Boston. Benchmark comparisons are described in greater detail later in this document.

<table>
<thead>
<tr>
<th></th>
<th>Healthy Heart</th>
<th>Food Stamp Program</th>
<th>Difference</th>
</tr>
</thead>
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<tr>
<td>Family of Four</td>
<td>$692</td>
<td>$465</td>
<td>-$227</td>
</tr>
<tr>
<td>Senior</td>
<td>$242</td>
<td>$139</td>
<td>-$103</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Healthy Heart</th>
<th>FESS</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family of Four</td>
<td>$692</td>
<td>$554</td>
<td>-$138</td>
</tr>
<tr>
<td>Senior</td>
<td>$242</td>
<td>$178</td>
<td>-$64</td>
</tr>
</tbody>
</table>
IMPLICATIONS
In order to further our understanding of the complex issues of affordability and accessibility of healthy foods, broader replication of this study is needed on a larger scale, with other ethnicities, and in both rural and urban areas. There are, nevertheless, several important program and policy implications that deserve our immediate attention.

Affordability
Many low-income women in Massachusetts and the U.S., particularly elderly women, face significant challenges in stretching their income to cover the costs of their basic needs. The overall cost of living in Boston is about 37% higher than the average American city. Boston is the seventh most expensive city in the United States to live in terms of rent, with a median cost of $933 per month or $250 more than the national median. The cost of prescription drugs can also cause financial strain, particularly for elderly women who, in Massachusetts, fill nearly 40 prescriptions a year, about 25% more than their male counterparts.

While many important initiatives aim to educate at-risk community members about healthy eating, the financial barriers to healthy eating receive less attention. Research shows that food choice is influenced by cost. A recent study conducted by researchers at the University of Washington and the U.S. Department of Agriculture noted that, when cost constraints are imposed, people tend to rely more on low-cost energy-dense foods that are not consistent with a heart healthy diet - such as cereals, foods with added fats, and sweets - while reducing their intake of fresh fruit, vegetables, meat and dairy products. Thus, it is not sufficient to merely tell people to adhere to dietary recommendations when they do not have the economic ability to do so.

Food Stamps
Currently, the largest program to provide financial support for food purchases is the Food Stamp Program (FSP), a federally funded, state-run program that provides financial assistance to help low-income families purchase food. According to the BWH Healthy Heart study, for individuals and families relying solely on food stamp benefits to purchase food, the maximum benefit is insufficient to purchase a culturally appropriate, heart healthy diet. A senior receiving the maximum FY2003 Food Stamp benefit of $139 per month would need an additional $103 to purchase the BWH Heart Healthy diet. The gap is far greater for a family of four, who would need to add $227 to their monthly maximum food stamp benefit of $465 to be able to purchase the BWH Heart Healthy diet. [Note: Current FY2005 benefit levels are $149 for a senior and $499 for a family of four, reflecting annual cost of living increases.]
Massachusetts Financial Economic Self-Sufficiency Standard (FESS)

Another benchmark for comparison with the cost of menus developed in the Healthy Heart Study is the Financial Economic Self-Sufficiency Standard or FESS, developed by the Women’s Educational and Industrial Union. FESS provides a measure of the costs of living, working, raising a family and paying taxes in Massachusetts. The FESS provides a more generous budget for food purchases than does the Food Stamp Program, recommending $178 per month for a senior and $554 for a family of four. Yet, even this more realistic estimate falls $39 and $89 below the amounts required for the BWH Healthy Heart diets, respectively.

Policy Implications

• Explore means to increase food stamp benefits. While politically and fiscally challenging, efforts should be undertaken to increase food stamp benefits and eligibility. Policymakers should also work to further restore benefits to legal immigrants.

• Encourage and promote public-private partnerships to reduce cost and increase affordability of heart healthy foods, including fresh produce. In target communities, state agencies and community organizations should partner with private health, wellness, food and/or fitness companies to sponsor weekly/monthly promotion and partial subsidization of specific heart-healthy foods, providing culturally appropriate recipes, cooking demonstrations, and nutritional information.

• Maximize participation in the Food Stamp Program (FSP). Even though the FSP benefit may be insufficient to cover all food costs, it provides an important financial supplement to help low-income residents purchase heart healthy foods. However, in 2001, only 54% of those eligible in the U.S. and 45% of eligibles in Massachusetts participated in the FSP. Many states, including Massachusetts, should be commended and supported for their recent progress in streamlining the FSP enrollment and recertification processes. However, enhanced outreach and reduced administrative burdens will be necessary to further improve the rate of eligible participants.

• Increase the Role of Health Care Institutions in Promoting Food Security. Health care providers can play an important role in promoting healthy eating and food security as components of good health. Some potential examples in Massachusetts include:

  – New Massachusetts regulations require health care institutions to adopt online tools to screen and enroll uninsured patients onto MassHealth (Massachusetts’ Medicaid program) and Massachusetts’ Uncompensated Care Pool. Since these online tools will ultimately have the capacity to screen and enroll residents onto a variety of health and public assistance programs - including the Food Stamp Program - efforts to adopt the full screening and enrollment tool should be piloted and promoted by health care institutions as a “health improvement package”. (See vgportal.hhs.state.ma.us and realbenefits.org for information on the two online programs)

  – Boston Medical Center, Boston’s only public hospital, provides an important model for how health care providers can work to combat food insecurity, particularly among children with chronic illnesses. Among many efforts, BMC physicians screen their patients for hunger, refer patients for onsite assistance in food stamp enrollment, and provide access to an onsite food pantry. The BMC model should be replicated in targeted urban areas throughout Boston and the state.

“They want your whole life history for $10 [a month].”
- Study participant
Convenience

Today, most people purchase their food at supermarkets. Particularly in suburban areas where cars predominate, supermarkets are the most common and convenient option for buying food. The selection of products at large supermarkets is often more extensive and less expensive than smaller neighborhood markets which do not offer a similarly wide variety.

National research indicates that supermarkets are less likely to be located in urban neighborhoods and communities with large minority populations. Far fewer residents of urban neighborhoods have access to a car and are more likely to rely on convenience stores close to home or easily accessible by public transit. Therefore, low-income residents may have limited local access to heart healthy foods and make complicated and lengthy journeys to find quality food products.

In the City of Boston, circumstances are more favorable than in many other urban areas. Under the leadership of Mayor Thomas Menino, Boston has become a model in the movement to develop supermarkets in urban areas, serving as anchors of larger community redevelopment plans. Between 1992 and 2002, twenty-one new or expanded supermarkets opened in the city of Boston with a number of additional stores in development. These urban supermarkets have been successful; inner city markets are more profitable per square foot than the regional average. The continued success of these urban markets is important to improving access by low-income residents to heart healthy foods.

At the other end of the shopping spectrum are farmers’ markets, a common sight across Massachusetts from spring through autumn. These small markets represent a unique opportunity to improve access to fresh fruits and vegetables in low-income communities of color. However, few farmers’ markets are currently capable of accepting payment from the Electronic Benefits Transfer (EBT) system now used in the Food Stamps Program.

Policy Implications

• **Work to increase access to high quality affordable heart healthy foods, including fresh produce, at local convenience stores.** Boston and other urban areas should explore models to increase access to fresh produce at local convenience stores, such as the Oakland Good Neighbor Project in Oakland, California. Stores participating in this project devote at least 10% of their inventory to fresh produce and an additional 10-20% to other healthy foods. In return, stores receive incentives such as energy-efficient refrigeration units and marketing assistance. (See [http://www.lejyouth.org/envision.htm](http://www.lejyouth.org/envision.htm) for more information.)

• **Increase access to farmers markets by food stamp recipients.** The USDA is currently funding pilot programs working to implement and evaluate a variety of systems allowing the use of food stamp benefits to purchase produce at farmers’ markets. Funding should be allocated to replicate the systems found to be successful in low-income communities with limited access to fresh produce.

• **Promote adoption of voluntary nutrition guidelines at restaurants.** While the focus of the current research focuses primarily on food consumption in the home, in reality eating takes place in many venues, including restaurants, schools, and workplaces. The STEPS program
run by the Boston Public Health Commission is working in coalition with the BWH Nutrition Department and others to develop and promote voluntary nutrition standards for restaurants in Boston. Once successfully implemented in Boston, this initiative should be replicated in other localities in Massachusetts and the U.S.

- **Increase availability of heart healthy foods in schools and workplaces.** Healthy food is more likely to be consumed when it is readily available. Programs to increase the availability of heart healthy foods in schools and workplaces that have been implemented and found to be successful should be replicated in communities throughout Massachusetts and the U.S.

- **Promote the development of supermarkets in inner city communities.** The City of Boston, driven by the efforts of Mayor Thomas Menino, uses supermarkets as the anchors of larger community redevelopment plans in urban areas. Expansion of this model to other cities in the U.S. offers the potential for urban renewal as well as improvements in accessibility of heart healthy foods in urban communities.

### Culture and Ethnicity

The BWH Healthy Heart Study illustrates the value of working with communities to incorporate their cultural food preferences into the development of model meal plans. A critical component of the process was where it began, asking participants, “What do you and your family eat?” Nutritionists and participants worked to modify existing meals to improve their heart health, while preserving unique cultural foods and tastes, where possible. [See Appendix A for menu comparison.]

Nutrition outreach and education efforts reaching out to various ethnicities also present a challenge in incorporating linguistic and cultural competency. For maximum effect, outreach staff and materials must be available in the diverse languages of target communities and use culturally appropriate messages. To this end, partnerships between food security agencies and community organizations, including neighborhood and church groups, can and should be utilized.

### Policy Implications

- **Expand current research to include other racial and ethnic groups in different geographic locations.** While the BWH Healthy Heart study has begun to explore the accessibility of heart healthy foods in the African American community, additional research must be pursued among other ethnic and racial groups. To this end, the Center for Cardiovascular Disease in Women at Brigham and Women’s Hospital is conducting similar and expanded focus group research with Latina women in the Jamaica Plain neighborhood of Boston. Such research should continue to be conducted and expanded both geographically and ethnically.

- **Promote culturally and linguistically appropriate nutrition education.** Wherever nutrition education is taking place – in schools, churches, state and local agencies, and food stamp outreach initiatives – menus and educational information should be appropriate in culture, language and reading level to the target community.

- **Develop publicly available culturally appropriate menus.** The collaborative process between community members and health experts used by the BWH Healthy Heart Study to develop culturally appropriate heart healthy menus should be replicated by others seeking to develop menus targeting specific racial and ethnic populations. While several resources exist with various menus, ideally a centralized location should be developed to serve as a repository and resource for these and other culturally appropriate menus developed by communities throughout the country.

- **Create community partnerships to promote culturally appropriate healthy eating through grocery stores, health care institutions, and others working to promote healthy eating.** Such efforts could include development of a menu of the week with culturally appropriate heart healthy recipes at grocery stores, cooking demonstrations in public housing complexes, and other innovative methods of reaching out to the communities in greatest need.
THE HEALTHY HEART INITIATIVE

Recommendations

Beyond the specific recommendations suggested in this report, the work of the BWH Healthy Heart Study also brought to light several broader implications related to the affordability and accessibility of heart healthy nutrition for low-income communities of color.

✔ **Focus On Heart Disease as a Major Contributing Factor to Health Disparities**  As the leading cause of death among African American men and women, ongoing efforts to eliminate health disparities must include a major focus on reducing the risk of heart disease. The seriousness and scope of the problem are indisputable. However, disparities by gender, race and ethnicity exist, with African American women faring the worst of all groups.

✔ **Use Heart Disease Prevention as a Method of Reducing Other Chronic Illnesses**  In addition to healthy eating, physical activity, healthy weight and not smoking are essential to reducing risk of heart disease. By adopting these preventive measures to reduce their risk of heart disease, low-income African American women and their families will also protect themselves from many other chronic illnesses including lung cancer, breast cancer, diabetes, asthma, high blood pressure, high blood cholesterol, and arthritis.

✔ **Involve Communities in the Development of Healthy Diets**  The importance of involving community members in efforts to reduce risk of heart disease cannot be overstated. The community participatory approach adopted by the BWH Healthy Heart Study was a critical component of its process and learning, assuring that dietary outcomes were not only healthy, but also realistic. In order to begin to address the barriers that low-income African American women and others face in purchasing a heart healthy diet, we must first understand such challenges from the perspectives of the people who experience them.

✔ **Replicate and Expand Upon the BWH Healthy Heart Study**  While the Healthy Heart Study focused on one neighborhood in Boston, the problem of affordability of heart healthy foods for low-income individuals is not unique to Boston or even to urban areas. To better understand the full scope of accessibility and affordability as it relates to heart healthy eating, additional research must be conducted on a larger scale and in new jurisdictions. Ideally, future research will expand to include other races and ethnicities, as well as low-income rural communities.

✔ **Target Communities in Greatest Need**  It is important for the health community to continue to target research, interventions and funding to communities at greatest risk for heart disease. Additionally, those at risk for heart disease must be reached when they are young and forming their behaviors and attitudes. While this study focuses primarily on the homes where mothers and children live, it is important also to continue to expend energy and resources in schools. Policymakers, public health officials, advocates and educators should work to expand nutrition education, increase children’s access to healthy foods, and promote physical education and activity in schools.

✔ **A Focus on Women is a Focus on Families**  The BWH Healthy Heart Study has chosen to focus their research on improving the heart health of women; but by no means does this relay a concern only for their health. Women are often the nutrition and health decision makers for their families. Improving the health of women through lifestyle modifications will have a positive impact on the health of her entire family, and ultimately the broader community.

✔ **Expand Upon Work That Already Exists**  With the recent attention to the increasing problem of obesity and the longstanding work of many to reduce hunger, many programs in Massachusetts and throughout the country have created innovative and effective programs to reduce risk of heart disease. The learnings from such initiatives should be implemented, expanded and evaluated in new locations and used to continue to build our nation’s capacity to address the problem of heart disease, particularly among low-income communities of color. [See Appendix B and C for several state and federal programs.]

The work of the Center for Cardiovascular Disease in Women at Brigham and Women’s Hospital highlights the challenges of affordability of heart healthy foods for low-income women living in the inner city core. In order to improve the health of low-income women, we must increase the affordability of heart healthy foods. The issue is complex and will require the coordination and concerted effort of policymakers, advocates, medical professionals, and community members. Continued research in this field, coupled with active and aggressive interventions, presents the greatest opportunity for positive change.
References

2. MA Heart Disease and Stroke Interactive Map, National Center for Chronic Disease Prevention and Health Promotion, CDC (data collected from National Vital Statistics System web site. Accessed June 12, 2002)
4. CDC, National Center for Health Statistics, Health, United States, 2002.
6. CDC, National Center for Health Statistics, Health, United States, 2003;212.
22. U.S. Census Bureau, 2003 American Community Survey
Appendix A
Health Heart Study - Adult Menu Comparison

This menu serves as a sample. Individuals may need to eat more calories or less calories depending upon their activity, age, and body type to support a healthy body weight.

<table>
<thead>
<tr>
<th>Sample Regular Menu</th>
<th>Sample Healthy Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td></td>
</tr>
<tr>
<td>1 corn muffin</td>
<td>2 whole grain waffles</td>
</tr>
<tr>
<td>1 cup coffee</td>
<td>1 Tbsp maple syrup</td>
</tr>
<tr>
<td>1 Tbsp cream</td>
<td>1 cup orange juice</td>
</tr>
<tr>
<td>2 tsp sugar</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
</tr>
<tr>
<td>4oz ground beef</td>
<td>4 oz white tuna</td>
</tr>
<tr>
<td>1 white hamburger bun</td>
<td>1 Tbsp light mayonnaise</td>
</tr>
<tr>
<td>1 oz American cheese</td>
<td>2 slices whole wheat bread</td>
</tr>
<tr>
<td>2 slices tomato</td>
<td>1 cup red leaf lettuce</td>
</tr>
<tr>
<td>4 Tbsp ketchup</td>
<td>3 slices tomato</td>
</tr>
<tr>
<td>20 French fries</td>
<td>1 cup apple juice</td>
</tr>
<tr>
<td>12 oz Sprite</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Snack</strong></td>
<td></td>
</tr>
<tr>
<td>1 oz Doritos</td>
<td>1 cup low-fat blueberry yogurt</td>
</tr>
<tr>
<td>4 oz Lemonade</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dinner</strong></td>
<td></td>
</tr>
<tr>
<td>5 fried chicken wings</td>
<td>4 oz baked pork chop</td>
</tr>
<tr>
<td>1 cup rice pilaf</td>
<td>1 small sweet potato</td>
</tr>
<tr>
<td>1 cup grape juice</td>
<td>1 cup broccoli stir fried in</td>
</tr>
<tr>
<td></td>
<td>1 Tbsp olive oil</td>
</tr>
<tr>
<td></td>
<td>1 cup mixed greens</td>
</tr>
<tr>
<td></td>
<td>1 tomato</td>
</tr>
<tr>
<td></td>
<td>1 Tbsp oil and vinegar</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Snack</strong></td>
<td></td>
</tr>
<tr>
<td>1 cup chocolate ice cream</td>
<td>1 cup grapes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nutritional Content</strong></td>
<td></td>
</tr>
<tr>
<td>Calories: 2222</td>
<td>Calories: 1804</td>
</tr>
<tr>
<td>Fat: 90gms/ 36% of calories</td>
<td>Fat: 63.6 gms/ 31.7% of calories</td>
</tr>
<tr>
<td>• Sat Fat: 34.7gms/ 14%</td>
<td>• Sat Fat: 14.9 gms/ 7.4%</td>
</tr>
<tr>
<td>• Mono: 27.9 gms/ 11%</td>
<td>• Mono: 26 gms/ 12.9%</td>
</tr>
<tr>
<td>• Poly: 12 gms/ 4.8%</td>
<td>• Poly: 14.9 gms/ 7.4%</td>
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<tr>
<td>• Cholesterol: 274.5 mg</td>
<td>• Cholesterol: 278.8 mg</td>
</tr>
<tr>
<td>• Sodium: 3365.5 mg</td>
<td>• Sodium: 2179.4 mg</td>
</tr>
<tr>
<td>• Fiber: 8.4 gms</td>
<td>• Fiber: 19.9 gms</td>
</tr>
</tbody>
</table>
Appendix B
National Resources

Campaigns & Coalitions
Go Red for Women (American Heart Association)  women.americanheart.org
   National campaign to increase awareness of cardiovascular disease in women

The Heart Truth (National Heart Lung & Blood Institute)  www.nhlbi.nih.gov/health/hearttruth
   National campaign to educate women on the risks of heart disease

Sister to Sister www.sistertosister.org
   Organizers of National Women's Heart Day, promoting prevention of heart disease

Women's Heart Health Education Initiative (NHLBI)  hin.nhlbi.nih.gov/womencvd/index.htm
   Initiative to Increase Awareness of Cardiovascular Disease in Women

WomenHeart  www.womenheart.org
   National Coalition for Women with Heart Disease

Programs and Resources
America's Second Harvest  www.secondharvest.org
   Food bank organization with information on food insecurity

   Demonstration projects on feasibility of using food stamps at farmers’ markets

Food Stamp Program (U.S. Department of Agriculture)  www.fns.usda.gov/fsp
   Federal food stamp program

NHLBI at NIH  www.nhlbi.nih.gov/health/public/heart/other/chdblack/cooking.htm
   Heart Healthy Home Cooking African American Style

Data & Statistics
American Heart Association americanheart.org
   Heart disease and stroke statistics, fact sheets, and other resources

CDC  http://www.cdc.gov/cvh/maps/cvdatalas/atlas_womens/factsheets_womens/
   State Fact Sheets About Heart Disease Among Women

Center for Nutrition and Policy Promotion (USDA)  www.usda.gov/cnpp
   Source for research on food stamps and nutrition

Nutrition and Physical Activity Legislative Database (CDC)  apps.nccd.cdc.gov/dnpaleg
   Database of state legislation concerning nutrition and physical activity
Appendix C
Massachusetts Resources

State Agencies
MA Department of Health and Human Services: Virtual Gateway  vgportal.hhs.state.ma.us
  Online information, screening, referral and intake for health and human services programs

MA Department of Transitional Assistance  www.mass.gov/dta
  Massachusetts’ food stamp program agency

MA Department of Public Health (MDPH) WIC Program  www.mass.gov/dph/fch/wic.htm
  Nutrition assistance program for low-income families

MA Partnership for a Heart Healthy & Stroke Free (MDPH)  617-624-5469
  Statewide coalition working to reduce heart disease and stroke in Massachusetts

Boston-Based Programs
Boston STEPS (BPHC)  www.bphc.org/programs/program.asp?b=2&p=190
  Initiative to reduce obesity by increasing fitness and nutrition in 8 Boston neighborhoods

Center for CVD in Women  www.brighamandwomens.org/cardiovascularisease
  Brigham and Women’s Hospital: Information, research and clinical care

Cherishing Our Hearts and Souls Coalition  www.hsph.harvard.edu/php/pri/pehd/cohs.htm
  Collaborative effort to improve the health of African Americans in Roxbury, MA

Statewide Organizations
Family Nutrition Program (UMass Extension)  www.umass.edu/umext/nutrition/programs/fnp
  Nutrition education for those who receive or are eligible for food stamps

Federation of Massachusetts’ Farmers’ Markets  www.massfarmersmarkets.org
  Farmers’ markets in Massachusetts

  Measures the cost of living, working, raising a family and paying taxes in Massachusetts

MA Online Food Stamps Screening Tool (Project Bread)  gettingfoodstamps.org
  Information on food stamps, including eligibility screening and application guidelines

Project Bread  www.projectbread.org
  Hunger prevention and food stamp outreach program

Real Benefits (Community Catalyst)  www.realbenefits.org
  Online health and human services enrollment tool
The Healthy Heart Initiative
Barriers to Eating a Heart Healthy Diet In a Low Income African American Community

BRIGHAM AND WOMEN'S HOSPITAL

A report by The Mary Horrigan Connors Center for Women's Health and Gender Biology
Brigham and Women's Hospital