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Risk Factors for Prostate Cancer in African American Veterans

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The feasibility of developing a cohort of veterans to evaluate risk factors that influence prostate cancer incidence is being assessed. On-site investigators are being established at six VA Medical Centers (VAMC) across the country to obtain local IRB approval and to establish blood drawing facilities for willing participants. Through VA computerized patient records, we have identified 121,781 veterans without prostate cancer that are eligible for recruitment at the six VAMCs. Mailing addresses are being obtained from the VA National Computer Center and from local sites. A short and long version of a lifestyle survey has been developed to capture information on demographics, medical history, physical health, smoking, etc. This will be sent with a dietary survey (HFFQ) to 3,000 veterans (500 per site), randomly selected from our master file of eligible participants. A follow-up phone survey has been developed to ascertain reasons of non-response from individuals who don’t participate after two mailing attempts. Protocols are under development to directly administer these surveys to 500 veterans at one site. We have been collaborating on an observational study of prostate cancer survivors which has refined our survey instruments and study protocols. We anticipate that we will recruit approximately 1,200 participants.
FOREWORD

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Signature 10/24/1997

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V. Introduction

Prostate cancer is the most common cancer in men. Approximately 180,000 men will receive a diagnosis for prostate cancer and 40,000 men will die from the disease this year\(^1\). Incidence and mortality rates are higher among African-American men than white men, however the reasons for this increase are not clear.\(^2,3\) Some studies suggest that dietary factors may be important risk factors for prostate cancer, including high consumption of fats and meat,\(^4,5,6\) low intake of lycopene (from tomato products),\(^7,8\) low intake of fruit,\(^9\) and low intake of dietary calcium. The intent of this study is to evaluate the feasibility of establishing a large observational cohort of African American males and an equal number of white males for the purpose of studying environmental, as well as genetic factors, that may influence the incidence of prostate cancer. The cohort will consist of US Veterans without prostate cancer utilizing the Department of Veteran Affairs (VA) health care system identified through VA in-patient and out-patient computer files. Equal numbers of African-Americans and whites will receive dietary and lifestyle surveys to attain information on risk factors that may be associated with prostate cancer (n=3,500). We will conduct a follow-up phone survey of veterans who did not respond to the initial mail surveys to determine reasons for non-response. Results from the mail and follow-up phone surveys will be used to expand veteran recruitment into a large observational cohort for future research.
VI. Body

The following subsection report progress for each of the tasks outlined in the approved statement of work found in the original proposal.

A. Identify African-American and White Male Veterans with VA and non-VA Databases

The first research task determined the feasibility of identifying African-American and white male veterans without prostate cancer to recruit into our cohort. Six sites were selected from VA Medical Centers across the country where African-American utilization of VA services is high. The sites differ from those initially described in the proposal. Two sites were changed to provide broader geographic variation. The six sites are: Baltimore, Chicago—West Side, Durham, Houston, Memphis, and San Francisco.

On-site investigators are being identified at each VA site for the purpose of obtaining local IRB approvals (i.e., human subjects), mailing addresses from the local database and establishing on-site contacts such as a representative of Laboratory Services. To date, we have established on-site investigators at four of the six sites. We are talking with potential investigators in the remaining two sites. We anticipate IRB approval from two sites this month and will initiate the first wave of survey mailing in November. Bringing the study sites on line in a staggered fashion fits with our plan to stage the mailing of surveys over one year to accommodate implementation of the follow-up phone survey to non-respondents.

A1. Recruit research analyst (Study Coordinator)

The Study Coordinator was hired in the first month of the project. She was on maternity leave for 3 months and returned only on a part-time basis. This delayed project start up. A new Study Coordinator was hired in June and has been working hard to get the project up to speed.

A2. Create master file of all veteran-users in the selected study sites

VA in-patient (PTF) and out-patient (OPC) files were used to identify African-American and white men without prostate cancer for recruitment into the cohort. First we established a data file of all veterans who utilized VA services (out-patient and/or in-patient) from October 1997 to June 1999 at the six VA medical centers. A total of 266,099 veterans were identified as potential cases. The majority of cases had no known race (48.5%), while 27.7% were white, 21.6% were African-American, and 2.2% were other races (i.e. Hispanic, Asian, or Native American).

A3. Link master file with data for HCFA

We linked the index cases to other data sources to attain missing racial information. The master file was merged with a data set of veterans who used VA services and Medicare services from 1992-1996. Of the index cases, 24.2% had a Medicare record match. This reduced the unknown racial distribution from 48.5% to 38.2%. Other data sources were
considered for linkage in the original proposal, including data from the Defense Manpower Data Center (DMDC) and the Veterans Benefit Administration (VBA). However, after closer examination of these data sets, we determined that additional race information could not be obtained from these sources. DMDC data, for instance, only contains electronic records for active military personnel after 1972, whereas our cohort would consist of older men whose military activity was during the World War II period, making a match with this data less likely.

A4. Generate Random sample of cases from each VAMC

Cases were included in the master file if they met the following conditions: 1) had no evidence of prostate cancer, 2) had a race code of White, African-American, or unknown, 3) were 45 to 70 years of age, and 4) had no in-patient discharge record of death. Diagnostic and procedure files from the PTF were examined to identify individuals who had a history of prostate cancer or a history of surgical procedures for treating prostate cancer including prostatectomy, TURP, prostate biopsy, or radiation therapy. ICD-9 codes were used to identify prostate cancer diagnoses from PTF diagnostic files. A total of 14,920 (5.6%) veterans had a diagnostic code for prostate cancer. Prostate cancer surgery and other treatment procedures were evaluated in two ways: 1) through examination of in-patient surgical fields in the PTF files according to ICD-9 surgical codes and 2) through examination of out-patient procedure fields in the OPC files via CPT codes. As a result, an additional 3,513 (1.3%) individuals had a history of prostate cancer procedures and were removed from the master file. After consideration of the inclusion criteria, the master file consisted of 130,237 individuals; 48.9% of the veteran population at the six VA sites. The racial distribution was 34.5% white, 23.1% African-American, and 42.4% with no known race.

Case exclusion criteria included: 1) history of cancer, except skin cancer and 2) residence in a long-term care facility. There were 8,456 individuals with a diagnostic record for cancer who were excluded from the master file. Residence in a long-term care facility will be assessed after obtaining patient’s mailing addresses. A total of 121,781 veterans remained in the eligible pool of patients in the six study centers. There were 19,598 (16.1%) veterans from Baltimore, 27,829 (22.9%) veterans from Chicago-Hynes, 16,206 (13.3%) veterans from Durham, 27,527 (22.6%) veterans from Houston, 15,490 (12.7%) veterans from Memphis, and 15,131 (12.4%) veterans from San Francisco.

We have randomly selected 600 cases from each study site. The research plan called for 500 cases per site but we included 100 additional cases so that we can exclude residence of long-term care facilities once we obtain patient addresses and patients who have recently died. We will randomly select 500 cases per site after applying all exclusion criteria. The initial study design was to distribute surveys to an equal number of African-American and white men. We found that race was recorded as unknown for many individuals in the VA data files and attempts to identify racial information from other data sources (i.e., Medicare) although useful did not provide complete ascertainment. In a related study being conducted by our group, we found that the vast majority of patients classified as unknown in VA databases were white. Therefore, we modified our selection scheme in order to obtain an equal distribution by race. Of the 600 requested cases, 300
are African-American, 150 are white, and 150 are individuals with no known race. Once addresses have been reviewed to screen out residence of long-term care, we will randomly select 500 veterans from each site (3,000 overall) to mail surveys (250 African-Americans, 125 whites, and 125 individuals with unknown race).

A5. Request patient addresses and phone numbers

Patient’s addresses and phone numbers have been requested for the study sample from the VA National Austin Computer Center. We obtained approval from the VA Freedom of Information Officer an expect to receive study addresses this month. Addresses and phone number have also been requested from the two study sites that we will be sending the first wave of surveys.

B. Develop Dietary, Health, and Follow-up Surveys

We have developed two of the three instruments to be used in this study. The third instrument, the Harvard Food Frequency Questionnaire (HFFQ), is an already validated instrument for use with observational cohorts. We developed the baseline health and lifestyle survey and a follow-up phone survey. We chose to spend more developmental time on these instruments than originally planned and take advantage of a parallel VA pilot study also conducted by our group. The purpose of that pilot study was to evaluate risk factors that influence prostate cancer survivors among veterans. Preliminary results of that study are presented in Appendix 1. These studies share similar research staff, utilize similar methodology, and involve the development of similar survey instruments.

B1. Utilize the HFFQ as a dietary assessment tool

Dietary information will be collected through the Harvard Food Frequency Questionnaire (HFFQ). This will accompany a version of the lifestyle survey in the baseline mailing. The HFFQ assesses average intake of specified foods, supplemental vitamins, and beverages and has been used extensively in epidemiological studies assessing nutritional components (Appendix 2).

B2. Develop health survey adapted from other professional studies.

Two versions of a lifestyle survey are being developed to collect baseline information including demographics, medical history, lifestyle behaviors (such as smoking and physical activity), and information on social networks. The surveys have been designed with Cardiff scanning software and will allow us to scan all incoming surveys in-house. Both versions were adapted from many validated health and lifestyle instruments. The long version contains 41 questions and is eight pages in length (located in Appendix 3). The shorter version is under development and is half the size of the long survey. Response to the different surveys will be evaluated to determine what is the most efficient way to obtain lifestyle information from participants.
B3. Develop follow-up surveys used to ascertain reasons for non-participation.

A follow-up phone survey has been developed to ascertain reasons of non-response from non-participants (Appendix 4). This survey will be administered over the phone to all African Americans and a sample of white non-respondents. We were able to pre-pilot the instrument while making follow-up phone calls to over 100 veterans participating in the prostate cancer survivors study. This process has helped us refine the phone survey and develop better protocols for implementing follow-up phone call to non-respondents in our study.

C. Implement Survey Mailings and Follow-up Phone Survey

C1. Staggered mailings of HFFQ and health survey to study sample.

Survey mailings will be conducted in a staggered fashion depending on when sites obtain IRB approval for human subjects research and laboratories are established to draw blood. We anticipate mailing to the first two study sites starting in November. The survey will be mailed twice to elicit a response. The introductory letter requesting subject participation is provided in Appendix 5. The follow-up mailing will occur four weeks after the initial mailing.

We have selected three mailing strategies to evaluate the optimum method for obtaining response in the veteran population. In the first approach, subjects will be sent the long version of the lifestyle survey along with the dietary assessment. The second approach will assess survey length as a factor on response. This group will receive the short version of the lifestyle survey along with the dietary assessment. The third approach will be a staggered mailing in which only the long version of the lifestyle survey will be sent to subjects, followed by the dietary assessment upon receipt of the initial survey. The mailing approach will be assigned equally across the three racial groups (White, African-American, and unknown race).

We have set up an Access database to track participant’s responses to the mailings. This system will track the date of each mailing and the response to the survey. This system will also track participant interest in donating blood and actual blood collection. Of the 296 veterans who completed the surveys in the prostate survivors study, 201 (67.9%) agreed to have blood drawn for the study and 106 (35.8%) have given blood. We are in the process of setting up a toll free phone line to answer participants’ questions about the survey and the blood request.

C2. Conduct follow-up phone survey of non-respondents

The phone survey will be initiated within 2 weeks of the second mailing. The implementation of phone calls will be staggered, since the survey mailings are also staggered. We anticipate the first round of phone calls will begin in December.
D. On-site Recruitment of Veterans for Cohort

An additional component of this project is the recruitment of participants by approaching them at the site. One of the six medical centers will be selected for on-site recruiting along with survey mailings. On-site interviewers will approach 500 veterans (equal numbers of African-Americans and Whites) at the ambulatory care clinic and encourage them to participate in the project. Interviewers will be trained in methods of approaching veterans, requesting participation, and assisting participants with the surveys. Veterans that agree to participate will be escorted to a room to complete the surveys. The short version of the lifestyle survey and the dietary assessment will be given to the participants to complete. Participants will also be asked if they would be willing to give blood for the study. Those that are interested will be directed to a blood drawing lab within the hospital. If a veteran chooses not to participate in the survey project, the interviewer will attempt to conduct a short non-response survey which will ask questions regarding reasons for not participating.

The site for this study has not been established, but we are currently working on the material necessary to carry out on-site recruitment. The short version of the lifestyle survey is under development. In addition, the non-response survey to obtain reasons for non-participation in the research project is being constructed for the on-site recruitment. Once a site is established and interviewers have been trained, we will initiate this phase of the study.

E. Analyses of Study Data

The primary goal of the project is to assess the feasibility of recruiting African-American and white male veterans into a prospective observational cohort. Survey response will be evaluated by comparing response from the three mailing techniques as well as on-site recruitment. Response by race will also be assessed. Follow-up data from the survey will provide insight on ways to improve African-American participation. Statistical analyses will also be conducted on dietary and lifestyle data at baseline and through follow-up assessments. Cross-sectional and follow-up analyses of dietary, genetic, and lifestyle data may elucidate reasons for racial differences in prostate cancer incidence.

We have established the procedures necessary to input, manipulate, and analyze data obtained from the multiple study instruments. No analyses have been conducted at this time.
VII. Key Research Accomplishments

- Recruitment of on-site investigators at six VA medical centers (Baltimore, Chicago-West Side, Durham, Houston, Memphis, and San Francisco).

- Generated a master file of veterans without prostate cancer at the six VAMCs stratified by race. Master file consists of 121,781 veterans.

- Randomly selected 3,600 from the master file to obtain address and contact information. A total of 3,000 will receive surveys.

- Developed and pre-pilot tested a lifestyle survey that will be sent in conjunction with a dietary assessment (HFFQ) to obtain information on risk factors for prostate cancer incidence.

- Developed and pre-pilot tested a follow-up phone survey for non-responders to determine reasons for non-response.

- Development of strategies and methods for on-site recruitment of 500 veterans at one VAMC.
VIII. Reportable Outcomes

Pending Department of Defense Grant Proposal:

Title: Predictors of Prostate Cancer Morbidity, Mortality, and Quality of Life Among African-American and White Veterans with Prostate Cancer

Description: We propose the establishment of a Prostate Cancer Center by following a group of 10,000 men with prostate cancer to assess factors that influence survival and quality of life among men with prostate cancer. Three sub-studies will evaluate the observational data:

1) Dietary and Other Lifestyle Risk Factors for Prostate Cancer Morbidity and Mortality;
2) Biochemical, Genetic, and Tumor Specific Risk Factors for Prostate Cancer Morbidity and Mortality; and
3) Predictors of Health Related Quality of Life

Pending NCI Grant Proposal:

Title: MAVERIC Component of the Prostate Cancer Tissue Resource:

Description: A cooperative project with five VA Medical Centers across the country to inventory archived paraffin blocks of prostate tissue with related clinical data and establish a system to collect fresh tissue from new patients.
IX. Conclusions

The establishment of our cohort of veterans without prostate cancer is underway. Much of the early start-up work is in place. We are finalizing the establishment of the six sites that will be used as focal points for the administration of the study. Approval is being obtained from local IRBs at each site and protocols for drawing blood are being established at laboratories services in each study site. Once address information is obtained, we will initiate the first wave of survey mailings to those institutions first on board.

Our work related to establishment of a cohort of veterans with prostate cancer are encouraging and demonstrate our ability to recruit a large number of individuals for prospective follow-up studies (See Appendix 1). Approximately a third of the individuals identified with prostate cancer were willing to participate in that project. Survey completion was high considering the older age of the population being recruited. Many of the participants expressed a strong interest in the program and a willingness to participate in the study. Survey completion by African-American men was slightly lower than that of Caucasians, which may be due to socioeconomic factors and difficulties reading and/or understanding the questions asked in the survey. Response to the blood request was high. About two-thirds of the participants agreed to have blood drawn for the purpose of genetic and biochemical tests.

Based on these results, we predict that at least a third of the veterans we recruit will respond to our survey, resulting in a cohort of more than 1,200 individuals (from both mailed surveys and on-site hospital recruitment). This will provide useful information on the optimum procedures for collecting dietary and lifestyle data, as well as blood samples, for large scale recruitment of veterans in the next phase of this project. We have also gained invaluable experience conducting follow-up phone surveys of veterans who do not respond to initial mail surveys. This information has already helped us refine our study instruments and improve mail protocols. We expect that our phone survey will yield important lessons about the reasons African Americans are reluctant research participants and help us develop better ways to recruit African American into observations studies. This will enable us to better assess the reasons for racial differences associated with incidence of prostate cancer and cancer-related mortality.
X. References


XI. Appendices

Appendix 1  Survey Response from Prostate Cancer Survivors Study
Appendix 2  Harvard Food Frequency Questionnaire
Appendix 3  Long Version of Lifestyle Survey
Appendix 4  Follow-up Phone Survey
Appendix 5  Introductory Letter
Appendix 1: Survey Response from Prostate Cancer Survivors Study
RESPONSE TO DIET AND LIFESTYLE SURVEYS AMONG PROSTATE CANCER SURVIVORS IN THE VA – RESULTS FROM THE PROSTATE CANCER SURVIVORS STUDY

Introduction

Prostate cancer is the most common cancer in men. Approximately 180,000 men will receive a diagnosis for prostate cancer and 40,000 men will die from the disease this year\(^1\). Despite improvements in detecting the disease, optimal management strategies for treating prostate cancer remain elusive. The relative benefit of different treatment approaches is unclear and little is known about risk factors that influence disease progression. The ability to identify individuals who will progress to clinically aggressive disease would have enormous benefits. It would help allay the anxiety of those with indolent disease and potentially reduce the morbidity and mortality of those with clinically aggressive cancer.

The prospective follow-up of a large-scale cohort of men diagnosed with prostate cancer could address many of the risk factors surrounding the progression of the disease, particularly those that impact the change from early stage to clinically aggressive cancer. Furthermore, it would elucidate the benefit and quality of life of different treatment approaches. We conducted a pilot project to determine the feasibility of establishing a large-scale cohort to evaluate risk factors, such as diet, lifestyle behavior, and molecular components, that influence prostate cancer progression. The cohort consisted of male veterans who used the VA-Boston Healthcare System and had a diagnosis of prostate cancer. Eligible veterans were sent a packet of surveys addressing diet and lifestyle as well as information about their disease and prostate specific antigen (PSA) levels. The pilot was conducted to determine the best strategies for establishing and maintaining a prostate cancer cohort. The methods and procedures gained from the pilot analysis will be applied to future plans to expand this cohort to 10,000 veterans.

Background

Only a few risk factors for prostate cancer incidence have been established, such as age, race and family history\(^2,3,4,5\). Several lines of evidence demonstrate that exogenous factors influence both the etiology and progression of the disease. Some studies have suggested that dietary factors may be important risk factors for prostate cancer, including high consumption of fats and meat,\(^6,7,8\) low intake of lycopene (from tomato products),\(^9,10\) low intake of fruit,\(^11\) and low intake of dietary calcium. Smoking also appears to impact prostate cancer progression. Although it may not be a risk factor for prostate cancer incidence,\(^12,13,14\) it does appear to influence prostate cancer mortality.\(^15,16\) This increase in mortality appears to be due specifically to the progression of prostate cancer, rather than other smoking-related causes of death, suggesting that smoking plays a role in the transformation from early stage to clinical disease. In aggregate, the above findings raise the possibility that prostate tumor growth rates are modulated by environmental factors.

Methods

Veterans with prostate cancer who utilize the VA-Boston Healthcare System were recruited for the cohort. Inpatient treatment files (PTF) and outpatient clinic files (OPC) were examined to
identify individuals with an ICD-9 code for prostate cancer (code 185). All African-Americans were selected for inclusion in the recruitment cohort, in addition to a sample of subjects who were white or had no known race. Twice the number of white and unknown race subjects as African-American subjects were selected for the cohort.

Lifestyle data was obtained through a survey that we developed from instruments used in other health studies. Two versions of the baseline survey were developed to assess response to different survey lengths. The long version contains 40 questions and collects information on a wide variety of factors including demographics, prostate cancer history and treatment, medical history, lifestyle behaviors such as smoking and physical activity, social networks, and perceptions of individual health. The shorter version contains 20 questions and is similar to the longer survey, but excludes questions on social networks and perceptions of health. To measure dietary factors, we used the Harvard Food Frequency Questionnaire (HFFQ) which assesses average intake of specified foods, beverages, and supplemental vitamins during the past year. The reproducibility and validity of the questionnaire has been documented in men. The instrument also has been widely used in workplace settings where literacy is relatively low.

Three mailing approaches were tested to determine the optimum method for obtaining response. In one approach, participants were sent the long version of the lifestyle survey along with the dietary assessment. Another approach assessed the survey length as a factor for response. This second group received the short version of the lifestyle survey along with the dietary assessment. The third approach was a staggered mailing in which only the long version of the lifestyle survey was sent to participants, followed by the dietary assessment upon receipt of the initial survey.

For each racial group (White, African-American, unknown race), participants were randomly assigned to one of the three mailing groups. The survey was mailed twice to each participant to elicit a response. Veterans’ local addresses were obtained from two data sources. The first source was hospital records maintained by the Information Resource Management (IRM) Service through the Decentralized Hospital Computer Program (DHCP) at each institution. The second source was from the National VA Patient Care Database. Both addresses were used to identify participants’ local mailing address and to provide alternative addresses for survey packages that were returned to the data coordinating facilities. The participants’ phone numbers were obtained through DHCP records at each hospital.

A database was established to follow participants’ response to the mailings. This system tracked the date of each mailing and the response to the survey. In addition, participant information, including address, phone number, race, and social security number, was maintained in the tracking system. A phone line was also established to answer participants’ questions to the survey.

Participants were asked in the survey packets if they would be willing to provide a sample of blood for genetic and/or biochemical testing. Willing respondents were sent an envelope with instructions for blood donation at one of four local VA clinics that were established to draw blood from participants. The envelope included an informed consent form, a blood tracking form, and a set of labels for the blood tubes. Three tubes of blood (10mL EDTA) were requested from each participant. The samples are being stored at the MAVERIC core blood laboratory for future research.

A follow-up phone call was made to all participants who did not reply to the survey after the second mailing to determine reasons for non-response. This was a semi-structured phone survey
designed to quantitatively and qualitatively assess reasons for unwillingness to participate in the study or complete survey instruments. All African-American non-responders and a portion of non-responders of other races were contacted. The phone survey includes questions about attitudes towards the VA medical community, perceptions of the study as outlined in the introductory letter, interest level, time availability, and ability to complete surveys.

Results

Survey Response

From the pool of subjects identified with an ICD-9 code for prostate cancer, 836 were randomly selected to receive surveys. There were 132 (15.8%) African-Americans, 342 (43.3%) whites, and 362 (40.9%) with no identified race. A total of 276 (33.0%) veterans received the long version of the lifestyle survey plus the dietary assessment, 280 (33.5%) veterans received the short version of the lifestyle survey plus the dietary assessment, and 280 (33.5%) veterans received the long version of the lifestyle survey followed by the dietary assessment. Survey response is described below for surveys received as of August 8, 1999.

Response to the mailing is described in Table 1. In the first mailing, 269 (32.2%) of the subjects responded to the survey request. Completed surveys were received from 207 (24.8%) of the 836 subjects selected for the cohort. Forty-four (5.3%) subjects indicated that they did not have a diagnosis of prostate cancer and ten (1.2%) subjects were unwilling to participate in the project. Information was received on eight (1.0%) subjects who were deceased. By the end of the second mailing, response to the survey request increased to 410 (49.0%) subjects. An additional 89 subjects completed the survey bringing the total number in the cohort to 296 (35.4%). Thirty-five additional subjects indicated they did not have prostate cancer, 11 were unwilling to participate, and six were reported as deceased.

Table 1 - Response to Prostate Cancer Survey (N=836)

<table>
<thead>
<tr>
<th>Response † to Mailing</th>
<th>First Mailing*</th>
<th>Second Mailing**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed Surveys</td>
<td>207 (24.8%)</td>
<td>296 (35.4%)</td>
</tr>
<tr>
<td>No Prostate Cancer Diagnosis</td>
<td>44 (5.3%)</td>
<td>79 (9.4%)</td>
</tr>
<tr>
<td>Unwilling to Participate</td>
<td>10 (1.2%)</td>
<td>21 (2.5%)</td>
</tr>
<tr>
<td>Deceased</td>
<td>8 (1.0%)</td>
<td>14 (1.7%)</td>
</tr>
</tbody>
</table>

† Response defined as any reply to the mailings.
* As of March 23, 1999.
** As of August 8, 1999 – including response from first mailing.

Survey response varied by race (as identified through VA patient files) with higher survey completion rates among white participants and those with unknown race compared to African-Americans. After the second mailing, 28 (21.2%) completed surveys were received from 132 African-Americans selected for the cohort. This was much lower than the response observed for whites [135 (39.5%)] and those with unknown race [133 (36.7%)]. A phone survey of African-American non-responders is currently underway to improve response among African-Americans.
The greatest response was observed among veterans who received the long survey together with the dietary assessment. Within this group, 107 (38.8%) men completed the survey. A total of 95 (33.9%) men receiving the short version of the lifestyle survey along with the dietary assessment completed the questionnaires. Among those receiving only the long version of the lifestyle survey, 94 (33.6%) men completed the initial survey. However, 72 (25.7%) men completed the dietary follow-up. The lowest complete response rate was observed in this final group.

Of the 296 men who took part in the survey, 201 (67.9%) men agreed to have blood drawn for the study. Response to blood donation is summarized in Table 2. Interest in donating blood was higher among white subjects and subjects of unknown races (69.6% and 67.7%, respectively) compared to African-Americans (60.7%). About 100 men have already had blood drawn for the study. We are currently having blood drawn from willing participants and storing it in our core blood laboratory.

**Table 2 – Response to Donating Blood by Overall and by Race (N=296)**

<table>
<thead>
<tr>
<th>Blood Response</th>
<th>African-Am.</th>
<th>White</th>
<th>Unknown</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willing to Donate</td>
<td>17 (60.7%)</td>
<td>94 (69.6%)</td>
<td>90 (67.7%)</td>
<td>201 (67.9%)</td>
</tr>
<tr>
<td>Not Willing to Donate</td>
<td>11 (39.2%)</td>
<td>41 (30.4%)</td>
<td>43 (32.3%)</td>
<td>95 (32.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>135</td>
<td>133</td>
<td>296</td>
</tr>
</tbody>
</table>

* Participants who completed the survey.

**Baseline Survey Results**

Baseline survey data for certain demographic and clinical variables were evaluated prior to optical scanning for 291 of the surveys. This included date of birth, race, early prostate cancer symptoms, prostate cancer treatment, and PSA levels at diagnosis.

Date of birth was obtained from 271 of the survey participants. The median age of the cohort was 74 years and ranged from 50 to 90 years. A race question was answered by 280 of the participants. A total of 242 (86.4%) of the participants were white, while 30 (10.7%) of the participants were African-American. Eight (2.9%) of the participants were of other races.

Table 3 summarizes the initial reason participants were suspected of having prostate cancer by their physicians. Responses to this question were provided by 261 respondents. Over half of the participants had elevated PSA levels [170 (65.1%)]. Problems with urination [106 (40.6%)] and enlarged prostate [93 (35.6%)] were also frequent reasons for suspicion of prostate cancer.

Prostate cancer treatment is also summarized in Table 3. Five participants did not respond to this question. Based on the 286 that did respond, 247 (86.4%) veterans received some form of treatment, while 39 (13.6%) veterans had no active treatment. The most frequent treatments in the population were radical or total prostatectomy [102 (35.7%)], radiation to the prostate [112 (39.2%)], and hormonal therapy [52 (18.2%)]. Other therapies such as brachytherapy and cryosurgery were infrequent.
Table 3 – Initial Reason Prostate Cancer Suspected by Physician and Prostate Cancer Treatment

<table>
<thead>
<tr>
<th>Initial Reason Prostate Cancer Suspected (N=261)</th>
<th>Freq (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevated PSA</td>
<td>170 (65.1%)</td>
</tr>
<tr>
<td>Problems with Urination</td>
<td>106 (40.6%)</td>
</tr>
<tr>
<td>Nodule or Tumor on the Prostate</td>
<td>53 (20.3%)</td>
</tr>
<tr>
<td>Large Prostate</td>
<td>93 (35.6%)</td>
</tr>
<tr>
<td>Bone Pain</td>
<td>3 (1.1%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment for Prostate Cancer (N=286)</th>
<th>Freq (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Treatment / Watchful Waiting</td>
<td>39 (13.6%)</td>
</tr>
<tr>
<td>Radical or Total Prostatectomy</td>
<td>102 (35.7%)</td>
</tr>
<tr>
<td>TURP</td>
<td>29 (10.1%)</td>
</tr>
<tr>
<td>Radiation to Prostate</td>
<td>112 (39.2%)</td>
</tr>
<tr>
<td>Radiation to Bone</td>
<td>6 (2.1%)</td>
</tr>
<tr>
<td>Brachytherapy</td>
<td>9 (3.1%)</td>
</tr>
<tr>
<td>Cryosurgery</td>
<td>2 (0.7%)</td>
</tr>
<tr>
<td>Lymphadenectomy</td>
<td>10 (3.5%)</td>
</tr>
<tr>
<td>Orchiectomy</td>
<td>17 (5.9%)</td>
</tr>
<tr>
<td>Hormone Therapy</td>
<td>52 (18.2%)</td>
</tr>
</tbody>
</table>

Men were asked if their PSA level at diagnosis was elevated or normal. Many participants indicated that they did not know [102 (35.1%)]. A total of 135 participants indicated that their PSA level at diagnosis was elevated or normal; 123 (42.3%) men indicated that they had elevated PSA, while 12 (4.1%) men indicated they had normal PSA levels at diagnosis. The actual PSA level at diagnosis was provided by less than half of the participants. A total of 106 (36.4%) men provided diagnostic PSA values.

Conclusion

Response to the prostate cancer lifestyle survey and the Harvard Food Frequency Questionnaire in this pilot project were encouraging. Approximately a third of the recruitment cohort were willing to complete surveys for the study and participate in this prostate cancer research project. Completion of the survey was high considering the older age of the population being recruited. Many of the participants expressed a strong interest in the program and a willingness to participate in the study. Survey completion by African-American men was slightly lower than that of Caucasians, which may be due to socioeconomic factors and difficulties reading and/or understanding the questions asked in the survey. We are currently trying to learn reasons for non-response and ways to improve the survey through a telephone survey of Africa-American non-responders to obtain a larger African-American response in the future.

Response was higher for participants who received the long version of the lifestyle survey along with the dietary assessment. This was unexpected considering this group received the largest survey packet. Staggered mailings with the lifestyle and dietary instruments had a high initial response, but a lower follow-up response despite additional requests to participants to complete the second survey.
Response to the blood request was high. About two-thirds of the participants agreed to have blood drawn for the purpose of genetic and biochemical tests.

Response to selected questions on the survey was good for most of the questions. Certain questions such as PSA level had a low response rate. But other questions regarding demographics and clinical characteristics of disease had a high response rate. There was a fairly good response to prostate cancer treatment and early disease symptoms. Many of the participants were suspected of having prostate cancer because of elevated PSA levels, frequent urination, and the presence of an enlarged prostate. Most participants have had a radical or total prostatectomy. Many participants have received radiation treatment to the prostate and hormonal therapy. The frequency of brachytherapy and cryosurgery was relatively low.

Survey response in this pilot project are encouraging and demonstrate the feasibility of establishing larger prostate cancer cohorts in the future. Our research center would like to expand the survivors cohort to 10,000 participants in order to better understand risk factors that impact disease progression. No prospective epidemiological study has examined the relationships of diet, lifestyle, biochemical, genetic and tumor specific risk factors on prostate cancer survival. Establishing a large-scale prospective cohort to determine the factors that predict outcome in men with prostate cancer would have great relevance in our understanding of the disease. Patients with clinically aggressive cancer could be identified early in order to reduce morbidity and mortality and improve quality of care. In addition, it could lead to targeted treatment strategies that would improve long term outcome.
References


Appendix 2  Harvard Food Frequency Questionnaire
Dietary Assessment

ID NUMBER: ____________________________
DATE: ________________________________

- Use No. 2 Pencil Only

- Darken one circle per question that corresponds to your answer
- Follow arrows

Vitamins

1. Have you ever regularly taken multi-vitamins?
   - Never have
   - Have in the past only
   - Currently take them

   a) For how many years did you take them in the past?
      - 1 year or less
      - 2–4 years
      - 5–9 years
      - 10 or more years

   b) If you currently take multi-vitamins, how many do you take per week?
      - 2 or less
      - 3–5
      - 6–9
      - 10 or more

   c) If you currently take them, what brand do you usually use?
      (Specify exact brand and type)

2. Not counting multi-vitamins, have you ever taken any of the following specific vitamins or minerals?

   Vitamin A
   - Never taken
   - Taken in the past only
   - Yes, currently take it

   Dose per day?
   - Less than 8,000 IU
   - 8,000 to 12,000 IU
   - 13,000 to 22,000 IU
   - 23,000 IU or more
   - Don't know

   How long?
   - 0–1 year
   - 2–4 years
   - 5–9 years
   - 10 years or more
2: (Continued) **Not counting multi-vitamins**, have you ever taken any of the following specific vitamins or minerals?

**Beta Carotene**
- Never taken
- Taken in the past only
- Yes, currently take it

Dose per day:
- Less than 8,000 IU
- 8,000 to 12,000 IU
- 13,000 to 22,000 IU
- 23,000 IU or more
- Don’t know

How long:
- 0–1 year
- 2–4 years
- 5–9 years
- 10 years or more

**Vitamin B6**
- Never taken
- Taken in the past only
- Yes, currently take it

Dose per day:
- Less than 10 mg
- 10 to 39 mg
- 40 to 79 mg
- 80 mg or more
- Don’t know

How long:
- 0–1 year
- 2–4 years
- 5–9 years
- 10 years or more

**Vitamin C**
- Never taken
- Taken in the past only
- Yes, currently take it

Dose per day:
- Less than 400 mg
- 400 to 700 mg
- 750 to 1,250 mg
- 1,300 mg or more
- Don’t know

How long:
- 0–1 year
- 2–4 years
- 5–9 years
- 10 years or more

**Vitamin E**
- Never taken
- Taken in the past only
- Yes, currently take it

Dose per day:
- Less than 100 IU
- 100 to 250 IU
- 300 to 500 IU
- 600 IU or more
- Don’t know

How long:
- 0–1 year
- 2–4 years
- 5–9 years
- 10 years or more

**Selenium**
- Never taken
- Taken in the past only
- Yes, currently take it

Dose per day:
- Less than 80 mcg
- 80 to 130 mcg
- 140 to 250 mcg
- 260 mcg or more
- Don’t know

How long:
- 0–1 year
- 2–4 years
- 5–9 years
- 10 years or more

**Iron**
- Never taken
- Taken in the past only
- Yes, currently take it

Dose per day:
- mg of elemental iron (325 mg Ferrous Sulfate = 65 mg elemental iron)
- Less than 41 mg
- 41 to 80 mg
- 81 to 150 mg
- 151 mg or more
- Don’t know

How long:
- 0–1 year
- 2–4 years
- 5–9 years
- 10 years or more

**Zinc**
- Never taken
- Taken in the past only
- Yes, currently take it

Dose per day:
- Less than 25 mg
- 25 to 74 mg
- 75 to 100 mg
- 101 mg or more
- Don’t know

How long:
- 0–1 year
- 2–4 years
- 5–9 years
- 10 years or more

---

27
2. (Continued) **Not counting multi-vitamins**, have you **ever** taken any of the following specific vitamins or minerals?

**Calcium or Dolomite**
(Include Tums)
- Never taken
- Taken in the past only
- Yes, currently take it

Dose per day?
- mg of elemental Calcium (1 Tums = 500 mg Calcium Carbonate = 200 mg elemental)
  - Less than 400 mg
  - 400 to 900 mg
  - 901 to 1,300 mg
  - 1,301 mg or more
  - Don't know

How long?
- 0–1 year
- 2–4 years
- 5–9 years
- 10 years or more

**Fish Oil**
(Omega 3 fatty acids)
- Never taken
- Taken in the past only
- Yes, currently take it

Dose per day?
- Less than 2500 mg
- 2500 to 4999 mg
- 5000 to 9999 mg
- 10,000 mg or more
- Don't know

How long?
- 0–1 year
- 2–4 years
- 5–9 years
- 10 years or more

Which **other** supplements are you taking **currently** on a regular basis (at least once per week)?

- None
- Metamucil
- Cod liver oil
- Brewer’s yeast
- Vitamin D
- Folic acid or folate (B₉)
- Potassium
- Magnesium
- Niacin
- Other Supplements (specify) ____________

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**DAIRY FOODS**

In the following section, please describe how often on average you have used the amount specified in the past year. Please indicate your average total use, taking the portion size into account. For example, if you use 1/2 a glass of milk twice a week, mark 1 glass per week to represent your average total intake.

3. For each food listed, fill in the circle indicating your average total use of the amount specified during the past year.

**Skim milk (8 oz. glass)**
- Never
- Less than once per month
- 1–3 glasses per month
- 1 glass per week
- 2–4 glasses per week
- 5–6 glasses per week
- 1 glass per day
- 2–3 glasses per day
- 4 or more glasses per day

**1% or 2% milk (8 oz. glass)**
- Never
- Less than once per month
- 1–3 glasses per month
- 1 glass per week
- 2–4 glasses per week
- 5–6 glasses per week
- 1 glass per day
- 2–3 glasses per day
- 4 or more glasses per day

**Whole milk (8 oz. glass)**
- Never
- Less than once per month
- 1–3 glasses per month
- 1 glass per week
- 2–4 glasses per week
- 5–6 glasses per week
- 1 glass per day
- 2–3 glasses per day
- 4 or more glasses per day
3. (Continued) Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Food Description</th>
<th>Options</th>
</tr>
</thead>
</table>
| **Cream, e.g., in coffee, whipped or sour cream (1 lbs.)** | ○ Never  
○ Less than once per month  
○ 1–3 lbs. per month  
○ 1 lbs. per week  
○ 2–4 lbs. per week  
○ 5–6 lbs. per week  
○ 1 lbs. per day  
○ 2 or more lbs. per day |
| **Non-dairy coffee whitener (tsp.)**                   | ○ Never  
○ Less than once per month  
○ 1–3 tsp. per month  
○ 1 tsp. per week  
○ 2–4 tsp. per week  
○ 5–6 tsp. per week  
○ 1 tsp. per day  
○ 2 or more tsp. per day |
| **Frozen yogurt, sherbet or non-fat ice cream (1/2 cup)** | ○ Never  
○ Less than once per month  
○ 1–3 times per month  
○ Once per week  
○ 2–4 times per week  
○ 5–6 times per week  
○ Once per day  
○ 2 or more servings per day |
| **Ice cream (1/2 cup)**                                | ○ Never  
○ Less than once per month  
○ 1–3 times per month  
○ Once per week  
○ 2–4 times per week  
○ 5–6 times per week  
○ Once per day  
○ 2 or more servings per day |
| **Flavored yogurt, without Nutrasweet (1 cup)**        | ○ Never  
○ Less than once per month  
○ 1–3 cups per month  
○ 1 cup per week  
○ 2–4 cups per week  
○ 5–6 cups per week  
○ 1 cup per day  
○ 2 or more servings per day |
| **Yogurt, plain or with Nutrasweet (1 cup)**           | ○ Never  
○ Less than once per month  
○ 1–3 cups per month  
○ 1 cup per week  
○ 2–4 cups per week  
○ 5–6 cups per week  
○ 1 cup per day  
○ 2 or more servings per day |
| **What type of yogurt do you usually eat?**            | ○ None  
○ Regular  
○ Low fat  
○ Nonfat |
| **Cottage or ricotta cheese (1/2 cup)**                | ○ Never  
○ Less than once per month  
○ 1–3 times per month  
○ Once per week  
○ 2–4 times per week  
○ 5–6 times per week  
○ Once per day  
○ 2 or more servings per day |
| **Cream cheese (1 oz.)**                               | ○ Never  
○ Less than once per month  
○ 1–3 times per month  
○ Once per week  
○ 2–4 times per week  
○ 5–6 times per week  
○ Once per day  
○ 2 or more servings per day |
| **Other cheese, e.g., American, cheddar, etc., plain or as part of a dish (1 slice or 1 oz. serving)** | ○ Never  
○ Less than once per month  
○ 1–3 slices per month  
○ 1 slice per week  
○ 2–4 slices per week  
○ 5–6 slices per week  
○ 1 slice per day  
○ 2 or more slices per day |
| **What type of cheese do you usually eat?**           | ○ None  
○ Regular  
○ Low fat or lite  
○ Nonfat |
| **Butter (small pat or tsp.), added to food or bread; exclude use in cooking** | ○ Never  
○ Less than once per month  
○ 1–3 pats per month  
○ 1 pat per week  
○ 2–4 pats per week  
○ 5–6 pats per week  
○ 1 pat per day  
○ 2–3 pats per day  
○ 4 or more pats per day |
3. (Continued) Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Margarine (small pat or tsp., added to food or bread; exclude use in cooking)</th>
<th>What form of margarine do you usually use? (Do not include “spray” type margarine)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ None</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Stick</td>
</tr>
<tr>
<td>○ 1–3 pats per month</td>
<td>○ Tub</td>
</tr>
<tr>
<td>○ 1 pat per week</td>
<td>○ Squeeze (liquid)</td>
</tr>
<tr>
<td>○ 2–4 pats per week</td>
<td>○ Type?</td>
</tr>
<tr>
<td>○ 5–6 pats per week</td>
<td>○ Regular</td>
</tr>
<tr>
<td>○ 1 pat per day</td>
<td>○ Light spread</td>
</tr>
<tr>
<td>○ 2–3 pats per day</td>
<td>○ Extra light spread</td>
</tr>
<tr>
<td>○ 4 or more pats per day</td>
<td>○ Nonfat</td>
</tr>
</tbody>
</table>

What specific brand and type (e.g., Land O’ Lakes Country Morning Blend Light)?

---

FRUITS

4. Please fill in your average total use, during the past year, of each specified food.

Please try to average your seasonal use of foods over the entire year. For example, if a food such as cantaloupe is eaten 4 times a week during the 3 months that it is in season, then the average total use would be once per week over the year.

<table>
<thead>
<tr>
<th>Raisins (1 oz. or small pack) or grapes</th>
<th>Prunes (7 prunes or 1/2 cup)</th>
<th>Bananas (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 times per month</td>
<td>○ 1–3 times per month</td>
<td>○ 1–3 per month</td>
</tr>
<tr>
<td>○ Once per week</td>
<td>○ Once per week</td>
<td>○ 1 per week</td>
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<tr>
<td>○ 2–4 times per week</td>
<td>○ 2–4 times per week</td>
<td>○ 2–4 per week</td>
</tr>
<tr>
<td>○ 5–6 times per week</td>
<td>○ 5–6 times per week</td>
<td>○ 5–6 per week</td>
</tr>
<tr>
<td>○ Once per day</td>
<td>○ One per day</td>
<td>○ 1 per day</td>
</tr>
<tr>
<td>○ 2 or more servings per day</td>
<td>○ Two or more per day</td>
<td>○ 2 or more per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cantaloupe (1/4 melon)</th>
<th>Avocado (1/2 fruit or 1/2 cup)</th>
<th>Applesauce (1/2 cup)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 times per month</td>
<td>○ 1–3 times per month</td>
<td>○ 1–3 times per month</td>
</tr>
<tr>
<td>○ Once per week</td>
<td>○ Once per week</td>
<td>○ Once per week</td>
</tr>
<tr>
<td>○ 2–4 times per week</td>
<td>○ 2–4 times per week</td>
<td>○ 2–4 times per week</td>
</tr>
<tr>
<td>○ 5–6 times per week</td>
<td>○ 5–6 times per week</td>
<td>○ 5–6 times per week</td>
</tr>
<tr>
<td>○ Once per day</td>
<td>○ One per day</td>
<td>○ One per day</td>
</tr>
<tr>
<td>○ 2–3 times per day</td>
<td>○ Two or more per day</td>
<td>○ One or more per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fresh apples or pears (1)</th>
<th>Apple juice or cider (small glass)</th>
<th>Oranges (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 times per month</td>
<td>○ 1–3 glasses per month</td>
<td>○ 1–3 per month</td>
</tr>
<tr>
<td>○ 1 per week</td>
<td>○ 1 glass per week</td>
<td>○ 1 per week</td>
</tr>
<tr>
<td>○ 2–4 glasses per week</td>
<td>○ 2–4 glasses per week</td>
<td>○ 2–4 per week</td>
</tr>
<tr>
<td>○ 5–6 glasses per week</td>
<td>○ 5–6 glasses per week</td>
<td>○ 5–6 per week</td>
</tr>
<tr>
<td>○ 1 glass per day</td>
<td>○ 1 glass per day</td>
<td>○ 1 per day</td>
</tr>
<tr>
<td>○ 2 or more glasses per day</td>
<td>○ 2 or more glasses per day</td>
<td>○ 2–3 per day</td>
</tr>
<tr>
<td>○ 4 or more per day</td>
<td></td>
<td>○ 4 or more per day</td>
</tr>
</tbody>
</table>
4. (Continued) Please fill in your average total use, during the past year, of each specified food.

**Orange juice (small glass)**
- Never
- Less than once per month
- 1-3 glasses per month
- 1 glass per week
- 2-4 glasses per week
- 5-6 glasses per week
- 1 glass per day
- 2 or more glasses per day

**Grapefruit (1/2)**
- Never
- Less than once per month
- 1-3 times per month
- Once per week
- 2-4 times per week
- 5-6 times per week
- Once per day
- 2-3 times per day
- 4 or more times per day

**Grapefruit juice (small glass)**
- Never
- Less than once per month
- 1-3 glasses per month
- 1 glass per week
- 2-4 glasses per week
- 5-6 glasses per week
- 1 glass per day
- 2 or more glasses per day

**Other fruit juices (small glass)**
- Never
- Less than once per month
- 1-3 glasses per month
- 1 glass per week
- 2-4 glasses per week
- 5-6 glasses per week
- 1 glass per day
- 2 or more glasses per day

**Strawberries, fresh, frozen or canned (1/2 cup)**
- Never
- Less than once per month
- 1-3 times per month
- Once per week
- 2-4 times per week
- 5-6 times per week
- Once or more per day

**Blueberries, fresh, frozen or canned (1/2 cup)**
- Never
- Less than once per month
- 1-3 times per month
- Once per week
- 2-4 times per week
- 5 or more servings per week

**Peaches, apricots or plums (1 fresh, or 1/2 cup canned)**
- Never
- Less than once per month
- 1-3 times per month

**In summary, how many servings of fruit do you usually eat, not counting juices?**
- None
- Less than one per month
- 1-3 per month
- 1 per week
- 2-4 per week
- 5-6 per week
- 1 more per day

**VEGETABLES**

5. Please fill in your average total use, during the past year, of each specified food.

**Tomatoes (1)**
- Never
- Less than once per month
- 1-3 times per month
- 1 week
- 2-4 times per week
- 5-6 times per week
- 1 more per day

**Tomato juice (small glass)**
- Never
- Less than once per month
- 1-3 glasses per month
- 1 glass per week
- 2-4 glasses per week
- 5-6 glasses per week
- 1 glass per day
- 2 or more glasses per day

**Tomato sauce (1/2 cup)**
- Never
- Less than once per month
- 1-3 times per month
- Once per week
- 2-4 times per week
- 5 or more servings per week

**Salsa, picante or taco sauce (1/4 cup)**
- Never
- Less than once per month
- 1-3 times per month
- Once per week
- 2-4 times per week
- 5-6 times per week
- Once per day
- 2 or more servings per day

**Tofu or soybeans (3-4 oz.)**
- Never
- Less than once per month
- 1-3 times per month
- Once per week
- 2-4 times per week
- 5-6 times per week
- Once per day
- 2 or more servings per day

**String beans (1/2 cup)**
- Never
- Less than once per month
- 1-3 times per month
- Once per week
- 2-4 times per week
- 5 or more servings per week
5. (Continued) Please fill in your average total use, during the past year, of each specified food.

| Food (1/2 cup) | Broccoli | Cabbage or cole slaw | Cauliflower | Brussels sprouts | Carrots, raw (1/2 carrot or 2-4 sticks) | Carrots, cooked (1/2 cup) or carrot juice (2-3 oz.) | Corn (1 ear or 1/2 cup frozen or canned) | Peas or lima beans (1/2 cup fresh, frozen or canned) | Mixed vegetables (1/2 cup) | Beans or lentils, baked or dried (1/2 cup) | Dark orange (winter) squash (1/2 cup) | Eggplant, zucchini or other summer squash (1/2 cup) | Spinach, cooked (1/2 cup) | Spinach, raw as in salad |
|----------------|----------|---------------------|------------|----------------|----------------------------------------|-----------------------------------------------|--------------------------------|^---------------------------------|--------------------------------|--------------------------------|^--------------------------------|^--------------------------------|^--------------------------------|^--------------------------------|
|                | ○ Never  | ○ Never             | ○ Never    | ○ Never        | ○ Never                                | ○ Never                                       | ○ Never                           | ○ Never                          | ○ Never                            | ○ Never                          | ○ Never                          | ○ Never                           | ○ Never                          | ○ Never                           |
|                | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month | ○ Less than once per month |
|                | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month | ○ 1-3 times per month |
|                | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week | ○ Once per week |
|                | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week | ○ 2-4 times per week |
|                | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week | ○ 5-6 times per week |
|                | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day | ○ 1 or more servings per day |

(page 32)
5. (Continued) Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Kale, mustard, or chard greens (1/2 cup)</th>
<th>Iceberg or head lettuce (serving)</th>
<th>Romaine or leaf lettuce (serving)</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Never</td>
<td>o Never</td>
<td>o Never</td>
</tr>
<tr>
<td>o Less than once per month</td>
<td>o Less than once per month</td>
<td>o Less than once per month</td>
</tr>
<tr>
<td>o 1–3 times per month</td>
<td>o 1–3 times per month</td>
<td>o 1–3 times per month</td>
</tr>
<tr>
<td>o Once per week</td>
<td>o Once per week</td>
<td>o Once per week</td>
</tr>
<tr>
<td>o 2–4 times per week</td>
<td>o 2–4 times per week</td>
<td>o 2–4 times per week</td>
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<tr>
<td>o 5–6 times per week</td>
<td>o 5–6 times per week</td>
<td>o 5–6 times per week</td>
</tr>
<tr>
<td>o 1 or more servings per day</td>
<td>o 1 or more servings per day</td>
<td>o 1 or more servings per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Celery (4&quot; stick)</th>
<th>Green peppers (3 slices or 1/4 pepper)</th>
<th>Onions as a garnish or in a salad (1 slice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Never</td>
<td>o Never</td>
<td>o Never</td>
</tr>
<tr>
<td>o Less than once per month</td>
<td>o Less than once per month</td>
<td>o Less than once per month</td>
</tr>
<tr>
<td>o 1–3 per month</td>
<td>o 1–3 times per month</td>
<td>o 1–3 slices per month</td>
</tr>
<tr>
<td>o Once per week</td>
<td>o Once per week</td>
<td>o 1 slice per week</td>
</tr>
<tr>
<td>o 2–4 per week</td>
<td>o 2–4 times per week</td>
<td>o 2–4 slices per week</td>
</tr>
<tr>
<td>o 5–6 per week</td>
<td>o 5–6 times per week</td>
<td>o 5–6 slices per week</td>
</tr>
<tr>
<td>o Once per day</td>
<td>o 1 or more servings per day</td>
<td>o 1 or more slices per day</td>
</tr>
<tr>
<td>o 2 or more servings per day</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In summary, how many servings of vegetables do you usually eat, not counting salad or potatoes?

o None
o Less than one per month
o 1–3 per month
o 1 per week
o 2–4 per week
o 5–6 per week
o 1 per day
o 2–3 per day
o 4–5 per day
o 6+ per day
6. Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Egg Beaters or egg whites only (1/4 cup or 1 egg)</th>
<th>Eggs whole, with yolk (1)</th>
<th>Bacon (2 slices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 eggs per month</td>
<td>○ 1–3 eggs per month</td>
<td>○ 1–3 times per month</td>
</tr>
<tr>
<td>○ 1 egg per week</td>
<td>○ 1 egg per week</td>
<td>○ Once per week</td>
</tr>
<tr>
<td>○ 2–4 eggs per week</td>
<td>○ 2–4 eggs per week</td>
<td>○ 2–4 times per week</td>
</tr>
<tr>
<td>○ 5–6 eggs per week</td>
<td>○ 5–6 eggs per week</td>
<td>○ 5–6 times per week</td>
</tr>
<tr>
<td>○ 1 egg per day</td>
<td>○ 1 egg per day</td>
<td>○ 1 or more servings per day</td>
</tr>
<tr>
<td>○ 2 or more eggs per day</td>
<td>○ 2 or more eggs per day</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chicken or turkey sandwich</th>
<th>Other chicken or turkey, with skin (4–6 oz.)</th>
<th>Other chicken or turkey, without skin (4–6 oz.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 times per month</td>
<td>○ 1–3 times per month</td>
<td>○ 1–3 times per month</td>
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<tr>
<td>○ Once per week</td>
<td>○ Once per week</td>
<td>○ Once per week</td>
</tr>
<tr>
<td>○ 2–4 times per week</td>
<td>○ 2–4 times per week</td>
<td>○ 2–4 times per week</td>
</tr>
<tr>
<td>○ 5 or more per week</td>
<td>○ 5–6 times per week</td>
<td>○ 5–6 times per week</td>
</tr>
<tr>
<td></td>
<td>○ Once per day</td>
<td>○ Once per day</td>
</tr>
<tr>
<td></td>
<td>○ 2 or more servings per day</td>
<td>○ 2 or more servings per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Beef or pork hot dogs (1)</th>
<th>Chicken or turkey hot dogs (1)</th>
<th>Salami, bologna, or other processed meat sandwiches</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 per month</td>
<td>○ 1–3 per month</td>
<td>○ 1–3 times per month</td>
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<tr>
<td>○ 1 per week</td>
<td>○ 1 per week</td>
<td>○ Once per week</td>
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<tr>
<td>○ 2–4 per week</td>
<td>○ 2–4 per week</td>
<td>○ 2–4 times per week</td>
</tr>
<tr>
<td>○ 5–6 per week</td>
<td>○ 5–6 per week</td>
<td>○ 5–6 times per week</td>
</tr>
<tr>
<td>○ 1 per day</td>
<td>○ 1 per day</td>
<td>○ 1 per day</td>
</tr>
<tr>
<td>○ 2 or more per day</td>
<td>○ 2 or more per day</td>
<td>○ 2 or more servings per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Processed meats, e.g., sausage, kielbasa, etc. (2 oz. or 2 small links)</th>
<th>Hamburger, lean or extra lean (1 patty)</th>
<th>Hamburger, regular (1 patty)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 times per month</td>
<td>○ 1–3 per month</td>
<td>○ 1–3 per month</td>
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<tr>
<td>○ Once per week</td>
<td>○ 1 per week</td>
<td>○ 1 per week</td>
</tr>
<tr>
<td>○ 2–4 times per week</td>
<td>○ 2–4 per week</td>
<td>○ 2–4 per week</td>
</tr>
<tr>
<td>○ 5–6 times per week</td>
<td>○ 5–6 per week</td>
<td>○ 5–6 per week</td>
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<tr>
<td>○ Once per day</td>
<td>○ 1 per day</td>
<td>○ 1 per week</td>
</tr>
<tr>
<td>○ 2 or more servings per day</td>
<td>○ 2 or more servings per day</td>
<td>○ 2 or more servings per day</td>
</tr>
</tbody>
</table>
6. (Continued) Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Food Type</th>
<th>Frequency Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef, pork, or lamb as a sandwich or mixed dish, e.g., stew, casserole, lasagna, etc.</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more times per day</td>
</tr>
<tr>
<td>Pork as a main dish, e.g., ham or chops (4–6 oz.)</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more times per day</td>
</tr>
<tr>
<td>Beef or lamb as a main dish, e.g., steak, roast (4–6 oz.)</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more times per day</td>
</tr>
<tr>
<td>Liver: beef, calf or pork (4 oz.)</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more servings per week</td>
</tr>
<tr>
<td>Liver: chicken or turkey (1 oz.)</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more servings per week</td>
</tr>
<tr>
<td>Canned tuna fish (3–4 oz.)</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more servings per day</td>
</tr>
<tr>
<td>Breaded fish cakes, pieces, or fish sticks (1 serving, store bought)</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more per day</td>
</tr>
<tr>
<td>Shrimp, lobster, scallops, clams as a main dish (1 serving)</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more times per day</td>
</tr>
<tr>
<td>Dark meat fish, e.g., mackerel, salmon, sardines, bluefish, swordfish (3–5 oz.)</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more servings per day</td>
</tr>
<tr>
<td>Other fish, e.g., cod, haddock, halibut (3–5 oz.)</td>
<td>Never, Less than once per month, 1–3 times per month, once per week, 2–4 times per week, 5–6 times per week, 1 or more servings per day</td>
</tr>
</tbody>
</table>
7. Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Cold breakfast cereal (1 cup)</th>
<th>Cooked oatmeal/cooked oat bran (1 cup)</th>
<th>Other cooked breakfast cereal (1 cup)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 cups per month</td>
<td>○ 1–3 cups per month</td>
<td>○ 1–3 cups per month</td>
</tr>
<tr>
<td>○ 1 cup per day</td>
<td>○ 1 cup per week</td>
<td>○ 1 cup per week</td>
</tr>
<tr>
<td>○ 2–4 cups per week</td>
<td>○ 2–4 cups per week</td>
<td>○ 2–4 cups per week</td>
</tr>
<tr>
<td>○ 5–6 cups per week</td>
<td>○ 5–6 cups per week</td>
<td>○ 5–6 cups per week</td>
</tr>
<tr>
<td>○ 1 cup per day</td>
<td>○ 1 cup per day</td>
<td>○ 1 cup per day</td>
</tr>
<tr>
<td>○ 2–3 cups per day</td>
<td>○ 2–3 cups per day</td>
<td>○ 2–3 cups per day</td>
</tr>
<tr>
<td>○ 4 or more cups per day</td>
<td>○ 4 or more cups per day</td>
<td>○ 4 or more cups per day</td>
</tr>
</tbody>
</table>

What brand and type of cold breakfast cereal do you usually eat? Specify brand & type (e.g., "Ralston Rice Chex")

○ Don't eat cold breakfast cereal

<table>
<thead>
<tr>
<th>White bread (slice), including pita bread</th>
<th>Dark bread (slice), including wheat pita bread</th>
<th>Bagels, English muffins, or rolls (1 whole)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 slices per month</td>
<td>○ 1–3 slices per month</td>
<td>○ 1–3 times per month</td>
</tr>
<tr>
<td>○ 1 slice per week</td>
<td>○ 1 slice per week</td>
<td>○ Once per week</td>
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<tr>
<td>○ 2–4 slices per week</td>
<td>○ 2–4 slices per week</td>
<td>○ 2–4 times per week</td>
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<tr>
<td>○ 5–6 slices per week</td>
<td>○ 5–6 slices per week</td>
<td>○ 5–6 times per week</td>
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<tr>
<td>○ 1 slice per day</td>
<td>○ 1 slice per day</td>
<td>○ Once per day</td>
</tr>
<tr>
<td>○ 2–3 slices per day</td>
<td>○ 2–3 slices per day</td>
<td>○ 2 or more per day</td>
</tr>
<tr>
<td>○ 4–5 slices per day</td>
<td>○ 4–5 slices per day</td>
<td></td>
</tr>
<tr>
<td>○ 6+ slices per day</td>
<td>○ 6+ slices per day</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Muffins (regular) or biscuits (1)</th>
<th>Brown rice (1 cup)</th>
<th>White rice (1 cup)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 per month</td>
<td>○ 1–3 cups per month</td>
<td>○ 1–3 cups per month</td>
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<td>○ 1 per month</td>
<td>○ 1 cup per week</td>
<td>○ 1 cup per week</td>
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<tr>
<td>○ 2–4 per week</td>
<td>○ 2–4 cups per week</td>
<td>○ 2–4 cups per week</td>
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<tr>
<td>○ 5–6 per week</td>
<td>○ 5–6 cups per week</td>
<td>○ 5–6 cups per week</td>
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<tr>
<td>○ 1 per day</td>
<td>○ 1 cup per day</td>
<td>○ 1 cup per day</td>
</tr>
<tr>
<td>○ 2 or more per day</td>
<td>○ 2 or more cups per day</td>
<td>○ 2 or more cups per day</td>
</tr>
</tbody>
</table>
7. (Continued) Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Pasta, e.g., spaghetti, noodles, etc. (1 cup)</th>
<th>Tortillas (1)</th>
<th>Other grains, e.g., bulgur, kasha, couscous, etc. (1 cup)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 cups per month</td>
<td>○ 1–3 per month</td>
<td>○ 1–3 cups per month</td>
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<td>○ 1 cup per week</td>
<td>○ 1 per week</td>
<td>○ 1 cup per week</td>
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<tr>
<td>○ 2–4 cups per week</td>
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<td>○ 2–4 cups per week</td>
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<td>○ 5–6 cups per week</td>
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<td>○ 5–6 cups per week</td>
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<tr>
<td>○ 1 cup per day</td>
<td>○ 1 per day</td>
<td>○ 1 cup per day</td>
</tr>
<tr>
<td>○ 2 or more cups per day</td>
<td>○ 2–3 per day</td>
<td>○ 2 or more cups per day</td>
</tr>
<tr>
<td></td>
<td>○ 4 per more per day</td>
<td>○ 2 or more cups per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pancakes or waffles (3 pieces)</th>
<th>French fried potatoes (small order or 1/2 cup)</th>
<th>Potatoes, baked, boiled (1) or mashed (1 cup)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 servings per month</td>
<td>○ 1–3 times per month</td>
<td>○ 1–3 per month</td>
</tr>
<tr>
<td>○ 1 serving per week</td>
<td>○ Once per week</td>
<td>○ 1 per week</td>
</tr>
<tr>
<td>○ 2–4 servings per week</td>
<td>○ 2–4 times per week</td>
<td>○ 2–4 per week</td>
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<tr>
<td>○ 5–6 servings per week</td>
<td>○ 5–6 times per week</td>
<td>○ 5–6 per week</td>
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<tr>
<td>○ 1 serving per day</td>
<td>○ 1 or more servings per day</td>
<td>○ 1 per day</td>
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<tr>
<td>○ 2 or more servings per day</td>
<td></td>
<td>○ 2 or more servings per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potato chips or corn chips (small bag or 1 oz.)</th>
<th>Crackers, Triscuits, Wheat Thins (5)</th>
<th>Pizza (2 slices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 per month</td>
<td>○ 1–3 times per month</td>
<td>○ 1–3 per month</td>
</tr>
<tr>
<td>○ 1 per week</td>
<td>○ Once per week</td>
<td>○ 1 per week</td>
</tr>
<tr>
<td>○ 2–4 per week</td>
<td>○ 2–4 times per week</td>
<td>○ 2–4 per week</td>
</tr>
<tr>
<td>○ 5–6 per week</td>
<td>○ 5–6 times per week</td>
<td>○ 5–6 per week</td>
</tr>
<tr>
<td>○ 1 per day</td>
<td>○ Once per day</td>
<td>○ 1 per day</td>
</tr>
<tr>
<td>○ 2 or more servings per day</td>
<td>○ 2–3 times per day</td>
<td>○ 2 or more servings per day</td>
</tr>
<tr>
<td></td>
<td>○ 4 or more servings per day</td>
<td>○ 2 or more servings per day</td>
</tr>
</tbody>
</table>

**Beverages**

**Carbonated Beverages**—Consider the serving size as one 12 oz. glass, bottle or can for these carbonated beverages.

8. Please fill in your average total use, during the past year, of each specified food.

**Low-Calorie (Sugar-free types)**

<table>
<thead>
<tr>
<th>Low-calorie cola, e.g., Diet Coke with caffeine (1 glass, bottle, can)</th>
<th>Low-calorie caffeine-free soda (1 glass, bottle, can)</th>
<th>Other low-calorie carbonated beverage, e.g., Diet 7-Up, Fresca, diet ginger ale (1 glass, bottle, can)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 cans per month</td>
<td>○ 1–3 cans per month</td>
<td>○ 1–3 cans per month</td>
</tr>
<tr>
<td>○ 1 can per week</td>
<td>○ 1 can per week</td>
<td>○ 1 can per week</td>
</tr>
<tr>
<td>○ 2–4 cans per week</td>
<td>○ 2–4 cans per week</td>
<td>○ 2–4 cans per week</td>
</tr>
<tr>
<td>○ 5–6 cans per week</td>
<td>○ 5–6 cans per week</td>
<td>○ 5–6 cans per week</td>
</tr>
<tr>
<td>○ 1 can per day</td>
<td>○ 1 can per day</td>
<td>○ 1 can per day</td>
</tr>
<tr>
<td>○ 2–3 cans per day</td>
<td>○ 2–3 cans per day</td>
<td>○ 2–3 cans per day</td>
</tr>
<tr>
<td>○ 4 or more cans per day</td>
<td>○ 4 or more cans per day</td>
<td>○ 4 or more cans per day</td>
</tr>
</tbody>
</table>
8. (Continued) Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>REGULAR TYPES (not sugar-free)</th>
<th>Caffeine-Free Coke, Pepsi, or other cola with sugar (1 glass, bottle, can)</th>
<th>Other carbonated beverage with sugar, e.g., 7-Up (1 glass, bottle, can)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 cans per month</td>
<td>○ 1–3 cans per month</td>
<td>○ 1–3 cans per month</td>
</tr>
<tr>
<td>○ 1 can per week</td>
<td>○ 1 can per week</td>
<td>○ 1 can per week</td>
</tr>
<tr>
<td>○ 2–4 cans per week</td>
<td>○ 2–4 cans per week</td>
<td>○ 2–4 cans per week</td>
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<tr>
<td>○ 5–6 cans per week</td>
<td>○ 5–6 cans per week</td>
<td>○ 5–6 cans per week</td>
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<tr>
<td>○ 1 can per day</td>
<td>○ 1 can per day</td>
<td>○ 1 can per day</td>
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<tr>
<td>○ 2–3 cans per day</td>
<td>○ 2–3 cans per day</td>
<td>○ 2–3 cans per day</td>
</tr>
<tr>
<td>○ 4 or more cans per day</td>
<td>○ 4 or more cans per day</td>
<td>○ 4 or more cans per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER BEVERAGES</th>
<th>Beer, regular (1 glass, bottle, can)</th>
<th>Light beer, e.g., Bud Light (1 glass, bottle, can)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaiian Punch, lemonade, or other non-carbonated fruit drinks (1 glass, bottle, can)</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Never</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 glasses per month</td>
<td>○ 1–3 cans per month</td>
<td>○ 1–3 cans per month</td>
</tr>
<tr>
<td>○ 1 glass per week</td>
<td>○ 1 can per week</td>
<td>○ 1 can per week</td>
</tr>
<tr>
<td>○ 2–4 glasses per week</td>
<td>○ 2–4 cans per week</td>
<td>○ 2–4 cans per week</td>
</tr>
<tr>
<td>○ 5–6 glasses per week</td>
<td>○ 5–6 cans per week</td>
<td>○ 5–6 cans per week</td>
</tr>
<tr>
<td>○ 1 glass per day</td>
<td>○ 1 can per day</td>
<td>○ 1 can per day</td>
</tr>
<tr>
<td>○ 2–3 glasses per day</td>
<td>○ 2–3 cans per day</td>
<td>○ 2–3 cans per day</td>
</tr>
<tr>
<td>○ 4 or more glasses per day</td>
<td>○ 4–5 cans per day</td>
<td>○ 4–5 cans per day</td>
</tr>
<tr>
<td></td>
<td>○ 6+ cans per day</td>
<td>○ 6+ cans per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Red wine (4 oz. glass)</th>
<th>White wine (4 oz. glass)</th>
<th>Liquor, e.g., whiskey, gin, etc. (1 drink or shot)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 glasses per month</td>
<td>○ 1–3 glasses per month</td>
<td>○ 1–3 drinks per month</td>
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<tr>
<td>○ 1 glass per week</td>
<td>○ 1 glass per week</td>
<td>○ 1 drink per week</td>
</tr>
<tr>
<td>○ 2–4 glasses per week</td>
<td>○ 2–4 glasses per week</td>
<td>○ 2–4 drinks per week</td>
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<tr>
<td>○ 5–6 glasses per week</td>
<td>○ 5–6 glasses per week</td>
<td>○ 5–6 drinks per week</td>
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<tr>
<td>○ 1 glass per day</td>
<td>○ 1 glass per day</td>
<td>○ 1 drink per day</td>
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<tr>
<td>○ 2–3 glasses per day</td>
<td>○ 2–3 glasses per day</td>
<td>○ 2–3 drinks per day</td>
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<tr>
<td>○ 4–5 glasses per day</td>
<td>○ 4–5 glasses per day</td>
<td>○ 4–5 drinks per day</td>
</tr>
<tr>
<td>○ 6+ glasses per day</td>
<td>○ 6+ glasses per day</td>
<td>○ 6+ drinks per day</td>
</tr>
</tbody>
</table>
8. (Continued) Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Plain water, bottled or tap including mineral water and soda water (1 cup or glass)</th>
<th>Herbal tea (1 cup)</th>
<th>Tea (1 cup), Not herbal teas</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 glasses per month</td>
<td>○ 1–3 cups per month</td>
<td>○ 1–3 cups per month</td>
</tr>
<tr>
<td>○ 1 glass per week</td>
<td>○ 1 cup per week</td>
<td>○ 1 cup per week</td>
</tr>
<tr>
<td>○ 2–4 glasses per week</td>
<td>○ 2–4 cups per week</td>
<td>○ 2–4 cups per week</td>
</tr>
<tr>
<td>○ 5–6 glasses per week</td>
<td>○ 5–6 cups per week</td>
<td>○ 5–6 cups per week</td>
</tr>
<tr>
<td>○ 1 glass per day</td>
<td>○ 1 cup per day</td>
<td>○ 1 cup per day</td>
</tr>
<tr>
<td>○ 2–3 glasses per day</td>
<td>○ 2–3 cups per day</td>
<td>○ 2–3 cups per day</td>
</tr>
<tr>
<td>○ 4–5 glasses per day</td>
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<td>○ 4–5 cups per day</td>
</tr>
<tr>
<td>○ 6+ glasses per day</td>
<td>○ 6+ cups per day</td>
<td>○ 6+ cups per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decaffeinated coffee (1 cup)</th>
<th>Coffee with caffeine (1 cup)</th>
<th>Candy without chocolate (e.g., 1 pack mints, Lifesavers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 cups per month</td>
<td>○ 1–3 cups per month</td>
<td>○ 1–3 times per month</td>
</tr>
<tr>
<td>○ 1 cup per week</td>
<td>○ 1 cup per week</td>
<td>○ Once per week</td>
</tr>
<tr>
<td>○ 2–4 cups per week</td>
<td>○ 2–4 cups per week</td>
<td>○ 2–4 times per week</td>
</tr>
<tr>
<td>○ 5–6 cups per week</td>
<td>○ 5–6 cups per week</td>
<td>○ 5–6 times per week</td>
</tr>
<tr>
<td>○ 1 cup per day</td>
<td>○ 1 cup per day</td>
<td>○ Once per day</td>
</tr>
<tr>
<td>○ 2–3 cups per day</td>
<td>○ 2–3 cups per day</td>
<td>○ 2–3 times per day</td>
</tr>
<tr>
<td>○ 4–5 cups per day</td>
<td>○ 4–5 cups per day</td>
<td>○ 4 or more times per day</td>
</tr>
<tr>
<td>○ 6+ cups per day</td>
<td>○ 6+ cups per day</td>
<td>○ 4 or more times per day</td>
</tr>
</tbody>
</table>

9. Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Pure chocolate candy bar or packet, (e.g., Hershey’s, M&amp;M’s)</th>
<th>Other mixed candy bars, (e.g., Snickers, Milky Way, Reeses)</th>
<th>Peanut butter (1 tbs.)</th>
<th>Popcorn (1 cup)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 per month</td>
<td>○ 1–3 candy bars per month</td>
<td>○ 1–3 tbs. per month</td>
<td>○ 1–3 tbs. per month</td>
</tr>
<tr>
<td>○ 1 per week</td>
<td>○ 1 candy bar per week</td>
<td>○ 1 tbs. per week</td>
<td>○ 1 tbs. per week</td>
</tr>
<tr>
<td>○ 2–4 per week</td>
<td>○ 2–4 candy bars per week</td>
<td>○ 2–4 tbs. per week</td>
<td>○ 2–4 tbs. per week</td>
</tr>
<tr>
<td>○ 5–6 per week</td>
<td>○ 5–6 candy bars per week</td>
<td>○ 5–6 tbs. per week</td>
<td>○ 5–6 tbs. per week</td>
</tr>
<tr>
<td>○ 1 per day</td>
<td>○ 1 candy bar per day</td>
<td>○ 1 tbs. per day</td>
<td>○ 1 tbs. per day</td>
</tr>
<tr>
<td>○ 2–3 per day</td>
<td>○ 2–3 candy bars per day</td>
<td>○ 2–3 tbs. per day</td>
<td>○ 2–3 tbs. per day</td>
</tr>
<tr>
<td>○ 4 or more per day</td>
<td>○ 4 or more candy bars per day</td>
<td>○ 4 or more tbs. per day</td>
<td>○ 4 or more tbs. per day</td>
</tr>
</tbody>
</table>
9. (Continued) Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Food Description</th>
<th>Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pretzels (1 oz., or small bag)</strong></td>
<td>Never, Less than once per month, 1-3 servings per month, One serving per week, 2-4 servings per week, 5-6 servings per week, One serving per day, 2 or more servings per day</td>
</tr>
<tr>
<td><strong>Cookies, home baked (1)</strong></td>
<td>Never, Less than once per month, 1-3 cookies per month, One cookie per week, 2-4 cookies per week, 5-6 cookies per week, One cookie per day, 2-3 cookies per day, 4 or more cookies per day</td>
</tr>
<tr>
<td><strong>Cookies, ready made (1)</strong></td>
<td>Never, Less than once per month, 1-3 cookies per month, One cookie per week, 2-4 cookies per week, 5-6 cookies per week, One cookie per day, 2-3 cookies per day, 4 or more cookies per day</td>
</tr>
<tr>
<td><strong>Brownies (1)</strong></td>
<td>Never, Less than once per month, 1-3 per month, 1 per week, 2-4 per week, 5-6 per week, 1 per day, 2 or more per day</td>
</tr>
<tr>
<td><strong>Doughnuts (1)</strong></td>
<td>Never, Less than once per month, 1-3 per month, 1 per week, 2-4 per week, 5-6 per week, 1 per day, 2-3 per day, 4 or more per day</td>
</tr>
<tr>
<td><strong>Cake, home baked (slice)</strong></td>
<td>Never, Less than once per month, 1-3 slices per month, 1 slice per week, 2-4 slices per week, 5-6 slices per week, 1 or more slices per day</td>
</tr>
<tr>
<td><strong>Cake, ready made (slice)</strong></td>
<td>Never, Less than once per month, 1-3 slices per month, 1 slice per week, 2-4 slices per week, 5-6 slices per week, 1 or more slices per day</td>
</tr>
<tr>
<td><strong>Pie, homemade (slice)</strong></td>
<td>Never, Less than once per month, 1-3 slices per month, 1 slice per week, 2-4 slices per week, 5-6 slices per week, 1 or more slices per day</td>
</tr>
<tr>
<td><strong>Sweet roll, coffee cake or other pastry, home baked (serving)</strong></td>
<td>Never, Less than once per month, 1-3 times per month, Once per week, 2-4 times per week, 5-6 times per week, Once per day, 2 or more servings per day</td>
</tr>
<tr>
<td><strong>Sweet roll, coffee cake or other pastry, ready made (serving)</strong></td>
<td>Never, Less than once per month, 1-3 times per month, Once per week, 2-4 times per week, 5-6 times per week, Once per day, 2 or more servings per day</td>
</tr>
<tr>
<td><strong>Other nuts (small packet or 1 oz.)</strong></td>
<td>Never, Less than once per month, 1-3 per month, 1 per week, 2-4 per week, 5-6 per week, 1 per day, 2 or more servings per day</td>
</tr>
<tr>
<td><strong>Oat bran, added to food (1 tbs.)</strong></td>
<td>Never, Less than once per month, 1-3 tbs. per month, 1 tbs. per week, 2-4 tbs. per week, 5-6 tbs. per week, 1 tbs. per day, 2 or more servings per day</td>
</tr>
<tr>
<td><strong>Other bran, added to food (1 tbs.)</strong></td>
<td>Never, Less than once per month, 1-3 tbs. per month, 1 tbs. per week, 2-4 tbs. per week, 5-6 tbs. per week, 1 tbs. per day, 2 or more servings per day</td>
</tr>
</tbody>
</table>
9. (Continued) Please fill in your average total use, during the past year, of each specified food.

<table>
<thead>
<tr>
<th>Wheat germ (1 tbs.)</th>
<th>Chowder or cream soup (1 cup)</th>
<th>Ketchup or red chili sauce (1 tbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 tbs. per month</td>
<td>○ 1–3 tbs. per month</td>
<td>○ 1–3 tbs. per month</td>
</tr>
<tr>
<td>○ 1 tbs. per week</td>
<td>○ 1 cup per week</td>
<td>○ 1 tbs. per week</td>
</tr>
<tr>
<td>○ 2–4 tbs. per week</td>
<td>○ 2–4 cups per week</td>
<td>○ 2–4 tbs. per week</td>
</tr>
<tr>
<td>○ 5–6 tbs. per week</td>
<td>○ 5–6 cups per week</td>
<td>○ 5–6 tbs. per week</td>
</tr>
<tr>
<td>○ 1 tbs. per day</td>
<td>○ 1 or more cups per day</td>
<td>○ 1 tbs. per day</td>
</tr>
<tr>
<td>○ 2 or more servings per day</td>
<td>○ 2 or more servings per day</td>
<td>○ 2 or more servings per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Salt added at table (1 shake)</th>
<th>How many teaspoons of sugar do you add to your beverages or food each day?</th>
<th>Nutrasweet or Equal (1 packet) NOT Sweet 'N Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 shakes per month</td>
<td>○ 1–3 per month</td>
<td>○ 1–3 per month</td>
</tr>
<tr>
<td>○ 1 shake per week</td>
<td>○ 1 per week</td>
<td>○ 1 per week</td>
</tr>
<tr>
<td>○ 2–4 shakes per week</td>
<td>○ 2–4 per week</td>
<td>○ 2–4 per week</td>
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<tr>
<td>○ 5–6 shakes per week</td>
<td>○ 5–6 per week</td>
<td>○ 5–6 per week</td>
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<tr>
<td>○ 1 shake per day</td>
<td>○ 1 per day</td>
<td>○ 1 per day</td>
</tr>
<tr>
<td>○ 2–3 shakes per day</td>
<td>○ 2–3 per day</td>
<td>○ 2–3 per day</td>
</tr>
<tr>
<td>○ 4–5 shakes per day</td>
<td>○ 4–5 per day</td>
<td>○ 4–5 per day</td>
</tr>
<tr>
<td>○ 6+ shakes per day</td>
<td>○ 6+ per day</td>
<td>○ 6+ per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Garlic (1 clove or 4 shakes)</th>
<th>Low fat mayonnaise/fat free mayonnaise (2 tbs.)</th>
<th>Regular mayonnaise (2 tbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Never</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 per month</td>
<td>○ 1–3 tbs. per month</td>
<td>○ 1–3 tbs. per month</td>
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<tr>
<td>○ 1 per week</td>
<td>○ 1 tbs. per week</td>
<td>○ 1 tbs. per week</td>
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<tr>
<td>○ 2–4 per week</td>
<td>○ 2–4 tbs. per week</td>
<td>○ 2–4 tbs. per week</td>
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<td>○ 5–6 per week</td>
<td>○ 5–6 tbs. per week</td>
<td>○ 5–6 tbs. per week</td>
</tr>
<tr>
<td>○ 1 per day</td>
<td>○ 1 tbs. per day</td>
<td>○ 1 tbs. per day</td>
</tr>
<tr>
<td>○ 2–3 per day</td>
<td>○ 2 or more tbs. per day</td>
<td>○ 2 or more tbs. per day</td>
</tr>
<tr>
<td>○ 4–5 per day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>○ 6+ per day</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Salad dressing (2 tbs.)</th>
<th>Type of salad dressing:</th>
<th>Olive oil added to food or bread (1 tbs.); exclude use in cooking</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Never</td>
<td>○ Nonfat</td>
<td>○ Never</td>
</tr>
<tr>
<td>○ Less than once per month</td>
<td>○ Low fat</td>
<td>○ Less than once per month</td>
</tr>
<tr>
<td>○ 1–3 tbs. per month</td>
<td>○ Olive oil dressing</td>
<td>○ 1–3 tbs. per month</td>
</tr>
<tr>
<td>○ 1 tbs. per week</td>
<td>○ Regular</td>
<td>○ 1 tbs. per week</td>
</tr>
<tr>
<td>○ 2–4 tbs. per week</td>
<td></td>
<td>○ 2–4 tbs. per week</td>
</tr>
<tr>
<td>○ 5–6 tbs. per week</td>
<td></td>
<td>○ 5–6 tbs. per week</td>
</tr>
<tr>
<td>○ 1 tbs. per day</td>
<td></td>
<td>○ 1 tbs. per day</td>
</tr>
<tr>
<td>○ 2–3 tbs. per day</td>
<td></td>
<td>○ 2–3 tbs. per day</td>
</tr>
<tr>
<td>○ 4 or more tbs. per day</td>
<td></td>
<td>○ 4–5 tbs. per day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ 6+ tbs. per day</td>
</tr>
</tbody>
</table>
10. How much of the visible fat on your beef, pork or lamb do you remove before eating?
- Don't eat meat
- Remove all visible fat
- Remove most
- Remove small part of fat
- Remove none

11. What kind of fat is usually used for frying and sautéing at home?
- Don't fry
- Real butter
- Margarine
- Olive oil
- Vegetable oil
- Vegetable shortening
- Lard/bacon fat
- Pam type spray

12. What kind of fat is usually used for baking at home?
- Don't bake
- Real butter
- Margarine
- Olive oil
- Vegetable oil
- Vegetable shortening
- Lard/bacon fat
- Pam type spray

13. How often do you eat food fried, stir-fried in oil, or sautéed at home?
- Never
- Less than once a week
- Once per week
- 2–4 times per week
- 5–6 times per week
- Daily

14. How often do you eat deep fried food away from home or as take out (e.g., French fries, fried chicken, fish, clams, shrimp, etc.)?
- Never
- Less than once a week
- Once per week
- 2–4 times per week
- 5–6 times per week
- Daily

15. What type of cooking oil is usually used at home (e.g., Wesson Corn Oil)?
(Specify brand and type)

16. Are there any other foods not mentioned above that you usually eat at least once per week?
Include for example: Paté, cream sauce, custard, radishes, fava beans, coconut, mango, horseradish, parsnips, rhubarb, papaya, dried apricots, dates, figs. (Do not include dry spices and do not list something that has been listed in the previous sections.)

<table>
<thead>
<tr>
<th>Other foods that you usually eat at least once per week</th>
<th>Usual serving size</th>
<th>Servings per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17. Do you currently follow a special diet?
- No
- Yes
  - Physician prescribed
  - Self prescribed
  - If yes, for how many years?
    - Number of years on diet
  - If yes, what kind of diet do you follow?
    - Weight reduction (low calorie)
    - Low cholesterol
    - Low sodium
    - Diabetic
    - Low fat
    - Low triglyceride
    - Ulcer
    - High Potassium
    - Other

18. How has your use of the following foods and beverages changed over the past ten years?

- **Whole milk**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Butter**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Margarine**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Eggs**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Fish**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Red meat**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Fruits**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Vegetables**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Whole wheat bread**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Whole grains**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Sugar**
  - Use has decreased
  - Use about the same
  - Use has increased

- **Alcohol**
  - Use has decreased
  - Use about the same
  - Use has increased
Thank you!

Please check to make sure you have not accidentally skipped any pages.
Appendix 3  Long Version of Lifestyle Survey
LIFESTYLE QUESTIONNAIRE

Please begin here:

1. Date of Birth:   /

2. Your current weight (Pounds)

3. Your current height

4. What is the highest level of education you have completed?
   ○ Grade school
   ○ High school
   ○ Trade school
   ○ 2 year college
   ○ 4 year college
   ○ Graduate/professional school

5. What is your major ancestry?
   ○ African-American or Black
   ○ White
   ○ Asian
   ○ American Indian
   ○ Hispanic White
   ○ Other
   ○ Hispanic Black

6. Have you ever heard of a blood test for prostate cancer called PSA (Prostate Specific Antigen) test?
   ○ Yes   ○ No   ○ Don’t know

7. Have you ever discussed having a PSA test with your doctor?
   ○ Yes   ○ No   ○ Don’t know

8. Have you ever been told by a doctor or other health care worker that you have or had prostate cancer?
   ○ Yes → If yes when? → Month   Year
   ○ No → Go to #11

9. If you were diagnosed with prostate cancer, would you be willing to take part in a different study about prostate cancer?
   ○ Yes
   ○ No

IF YOU HAVE OR EVER HAD PROSTATE CANCER YOU ARE DONE COMPLETING THIS SURVEY.
PLEASE STOP AND RETURN THE SURVEY IN THE ENVELOPE PROVIDED.

THANK YOU

If you do not have prostate cancer please continue...
12. Did your father ever have prostate cancer?
   - Yes
   - No
   - Don't know

   If yes, at what age did he learn of it?
   - Age 50 or younger
   - Age 51-60
   - Age 61-70
   - Age 71-80
   - Age 80 or older
   - Don't know

13. Do you have any brothers (living or dead)?
   - Zero
   - One
   - Two
   - Three
   - Four
   - Five
   - Six
   - Seven
   - Eight
   - Nine
   - Ten

   How many of your brothers have or had prostate cancer?
   - Zero
   - One
   - Two
   - Three
   - Four
   - Five
   - Six
   - Seven
   - Eight
   - Nine
   - Ten

   Did any of your brothers find out they had prostate cancer at age 50 or younger?
   - Yes
   - No
   - Don't know

14. What was your weight 5 years ago?
   lbs

15. What was your weight at age 18?
   lbs

16. Which diagram best depicts your body outline at the time indicated?

17. Do you currently smoke?
   - Yes
   - No

   Did you smoke in the past?
   - Yes
   - No

   How long ago?
   - Less than 30 days
   - Between 30 days and 1 year
   - 1-2 years
   - 3-5 years
   - 6-9 years
   - 10+ years

   On average, when you smoke/smoked how many packs do you or did you smoke? (1 pack = 20 cigarettes)
   - Less than 1/2 pack per day
   - 1/2 pack per day
   - 1 pack per day
   - 1 1/2 packs per day
   - 2 packs per day
   - More than 2 packs per day

   For approximately how long have you smoked?
   years
This section is about your activity level within THE PAST YEAR

18. **During the past year**, what was your average time per week spent doing each of the following activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>None</th>
<th>1-4 Min</th>
<th>5-19 Min</th>
<th>20-59 Min</th>
<th>1-2 Hours</th>
<th>2-3 Hours</th>
<th>4-6 Hours</th>
<th>7-10 Hours</th>
<th>11+ Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking or hiking (including golf and walking to work)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jogging (slower than 10 min/mile)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Running (10 min/mile or faster)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calisthenics/Aerobics/Rowing Machine/Nordic Track</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycling (includes stationary machine)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tennis, Squash, or Racquetball</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lap swimming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weightlifting or Nautilus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other aerobic activity (e.g., heavy outdoor work, raking, pushing a lawn mower, ballroom dancing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**What is your usual walking pace outdoors?**

- Easy, casual (less than 2 mph)
- Normal, average (2 - 2.9 mph)
- Brisk pace (3 - 3.9 mph)
- Very brisk/striding (4 mph or faster)
- Unable to walk

**How many flights of stairs (not individual steps) do you climb daily?**

- 2 flights or less
- 3-4 flights
- 5-9 flights
- 10-14 flights
- 15 or more flights

This section is about your activity level FIVE YEARS AGO

19. **5 years ago**, what was your average time per week spent doing each of the following activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>None</th>
<th>1-4 Min</th>
<th>5-19 Min</th>
<th>20-59 Min</th>
<th>1-2 Hours</th>
<th>2-3 Hours</th>
<th>4-6 Hours</th>
<th>7-10 Hours</th>
<th>11+ Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking or hiking (including golf and walking to work)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jogging (slower than 10 min/mile)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Running (10 min/mile or faster)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calisthenics/Aerobics/Rowing Machine/Nordic Track</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycling (includes stationary machine)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tennis, Squash, or Racquetball</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lap swimming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weightlifting or Nautilus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other aerobic activity (e.g., heavy outdoor work, raking, pushing a lawn mower, ballroom dancing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**What was your usual walking pace outdoors?**

- Easy, casual (less than 2 mph)
- Normal, average (2 - 2.9 mph)
- Brisk pace (3 - 3.9 mph)
- Very brisk/striding (4 mph or faster)
- Unable to walk

**How many flights of stairs (not individual steps) did you climb daily?**

- 2 flights or less
- 3-4 flights
- 5-9 flights
- 10-14 flights
- 15 or more flights
This section is about medical conditions you may have.

20. Has a doctor ever told you that you have or had any of the following?

Please mark all that apply:

<table>
<thead>
<tr>
<th>Condition</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>High blood pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes mellitus (High sugar-diabetes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High cholesterol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High triglycerides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart Attack</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angina pectoris (Heart pain)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angioplasty (Balloon-PICA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary artery bypass graft (CABG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke (CVA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carotid artery surgery (neck artery surgery)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vasectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enlarged prostate (Benign Prostatic Hyperplasia, i.e. BPH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery for enlarged prostate (e.g., TURP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer of colon or rectum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melanoma (skin cancer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lymphoma, leukemia, hodgkin's disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lung cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple Sclerosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parkinson's Disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphysema, chronic bronchitis, chronic obstructive pulmonary disease (COPD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other major illness?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If YES, what year were you first told you had disease/procedure:

Other diagnosis:

49
21. Have you used any of the following medications REGULARLY (at least twice a week for at least 3 months.) Please mark all that apply:

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>never</th>
<th>less than 3 months</th>
<th>more than 3 months</th>
<th>current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proscar (Finasteride)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Viagra</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>alpha-blockers (such as: Hytrin, Terazosin, Cardura, Prazosin)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

☐ None of the above drugs were ever taken regularly

---

This section is about your family and friends.

22. Are you currently married or in a steady relationship?
☐ No  ☑ Yes

23. Do you have someone that you feel very close to, someone you can share confidences and feelings with?
☐ As much as you want  ☐ Quite a bit  ☐ A fair amount  ☐ A little bit  ☐ Not at all

24. How many people, including you, live in your household?
☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5  ☐ 6  ☐ 7  ☐ 8  ☐ 9  ☐ 10  ☐ 11  ☐ 12  ☐ 13  ☐ 14+

25. How often do you go to religious meetings or services?
☐ More than once a week  ☐ Once a week  ☐ One to three times per month  ☐ Less than once per month  ☐ Never or almost never

26. How many hours each week do you participate in groups such as social or work groups, church-connected, self help, support charity, public service or community groups?
☐ None  ☐ 1-2 Hours  ☐ 3-5 Hours  ☐ 6-10 Hours  ☐ 11-15 Hours  ☐ 16+ Hours

27. How many close relatives (including children) or close friends do you have?
☐ None  ☐ 1-2  ☐ 3-5  ☐ 6-9  ☐ 10+

28. How many close relatives (including children) or close friends do you SEE at least once a month?
☐ None  ☐ 1-2  ☐ 3-5  ☐ 6-9  ☐ 10+

29. How many close relatives (including children) or close friends do you TALK TO at least once a month?
☐ None  ☐ 1-2  ☐ 3-5  ☐ 6-9  ☐ 10+

30. Do you have someone available to help you with errands or chores if you want or need this type of help?
☐ As much as you want  ☐ Quite a bit  ☐ A fair amount  ☐ A little bit  ☐ Not at all

31. In general, would you say your health is:
☐ Excellent  ☐ Very good  ☐ Good  ☐ Fair  ☐ Poor
This section is about how you feel about your overall, general health status.

32. Compared to one year ago, how would you rate your health in general now?

☐ Much better now than one year ago  ☐ Somewhat better now than one year ago  ☐ About the same as one year ago  ☐ Somewhat worse than one year ago  ☐ Much worse now than one year ago

33. The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

- Vigorous activities (running, lifting heavy objects, strenuous sports)  
- Moderate activities (moving a table, pushing a vacuum, bowling, playing golf)  
- Lifting or carrying groceries  
- Climbing several flights of stairs  
- Climbing one flight of stairs  
- Bending, kneeling, or stooping  
- Walking more than a mile  
- Walking several blocks  
- Walking one block  
- Bathing or dressing yourself

34. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

☐ Not at all  ☐ Slightly  ☐ Moderately  ☐ Quite a bit  ☐ Extremely

35. During the past 4 weeks, how much bodily pain have you had?

☐ None  ☐ Very mild  ☐ Mild  ☐ Moderate  ☐ Severe  ☐ Very severe

36. During the past 4 weeks, how much did pain interfere with your normal work (include work outside the home and housework)?

☐ Not at all  ☐ Slightly  ☐ Moderately  ☐ Quite a bit  ☐ Extremely

37. During the past 4 weeks, how much of the time...

- Did you feel full of pep?
- Have you been a very nervous person?
- Have you felt so down in the dumps that nothing could cheer you up?
- Have you felt calm and peaceful?
- Did you have a lot of energy?
- Have you felt downhearted and blue?
- Did you feel worn out?
- Have you been a happy person?
- Did you feel tired?

38. Did someone help you fill out this survey?

☐ No  ☐ Yes
39. Please indicate the name and address of someone at a different address that we might write to in the event that we are unable to contact you.

First Name

Middle Initial

Last Name

Street

City

State

Zip

Thank you for your participation.
Appendix 4  Follow-up Phone Survey
PROSTATE DISEASE PHONE SURVEY
DRAFT

Name: ___________________________ Phone Number: ______________________

Subject ID: ______________________ Subject’s Race: ______________________

Response to Survey: ______________ (Non-Responders and Survey Returned
Incomplete)

First Attempt:  
Date: __________ Time: __________  
Interviwer: __________ Response*: ______________

Comment: ___________________________________________________________

_____________________________________________________________________

Second Attempt:  
Date: __________ Time: __________  
Interviwer: __________ Response*: ______________

Comment: ___________________________________________________________

_____________________________________________________________________

Third Attempt:  
Date: __________ Time: __________  
Interviwer: __________ Response*: ______________

Comment: ___________________________________________________________

_____________________________________________________________________

*Response:
- Successful Interview
- Unwilling to Participate
- Unable to Participate
- Willing to Complete Survey
- No Answer / Busy
- Left Message
- Wrong Number
- Phone Disconnected
- Other __________________________

October 26, 1999  
Version 4.0
PROSTATE DISEASE PHONE SURVEY
DRAFT

"Hi this is ___________. I'm a (nurse, health researcher, other) with the Prostate Disease Project at the West Roxbury VA Medical Center.

May I speak with Mr. ___________

If not home, ask for a time that is good for the participant ________________

Repeat introductory phrase if participant is called to the phone. Otherwise continue ...

We recently sent you a package with two questionnaires. The questionnaires asked about your diet, physical activity, medication use, and smoking."

1) "Did you receive these questionnaires?" (Describe questionnaires to participant if they can’t recall: "The questionnaires were initially sent in ________ in a large manila envelope. One questionnaire was blue the other was pink. A second copy was sent over a month ago.")

___ YES ___ NO

IF YES, Proceed to Question 2) on page 3.

IF NO /don’t recall,

"Can I verify your address?"

Check participant’s address
(OLD) (NEW)

____________________
____________________
____________________
____________________

IF address is incorrect,

"Would you be willing to complete these questionnaires if we sent you another copy?"

___ YES ___ NO

"We appreciate your participation in our prostate cancer project. The results will help our efforts to prevent and treat prostate cancer."

IF NO, Proceed to Question 2) on page 3.
PROSTATE DISEASE PHONE SURVEY
DRAFT

2) "We are trying to learn the best way we can collect this information. It's helpful to know why people did not respond so we can improve our survey. Can we ask you a few questions about why you did not respond? It should take about ten minutes."

___ YES ___ NO

IF NO,

"Is this a bad time? Is there a better time we can call"?

If participant is unwilling to participate – "Thank you for your time. Goodbye."

IF YES,

"Thank you." - Proceed to Question 3) below.

"First of all we would like to ask a few questions about prostate cancer."

3) "Were you ever tested for prostate cancer (i.e. PSA blood test, ultrasound, biopsy)?"

___ YES ___ NO

"Were you ever told by a doctor that you had prostate cancer or were you told in the past?"

___ YES ___ NO

IF YES,

"When were you told that you had prostate cancer?" (Try to obtain month and year)

Proceed to Question 15) on page 4.

If the participant had prostate cancer, then discontinue the survey.

"This is all the information we need. Thank you for your participation."
PROSTATE DISEASE PHONE SURVEY
DRAFT

I would like to ask some “yes/no” type questions. There may be some overlap with what you just said.

4) “Were you unable to read this questionnaire due to limitations in sight?”
   ___ YES  ___ NO

   If yes, stop here and go to Question

5) “Did you have difficulties understanding the cover letter or instructions sheet?”
   ___ YES  ___ NO

6) “Did the questionnaires look too long?”
   ___ YES  ___ NO

7) “Did you have difficulties understanding the questions in the survey?”
   ___ YES  ___ NO

8) “Did you not have time to complete the questionnaires?”
   ___ YES  ___ NO

9) “Did you not feel well enough to answer the questions?”
   ___ YES  ___ NO

10) “Did you feel there were too many questions to answer?”
    ___ YES  ___ NO

11) “Did you have difficulties recalling details asked in the questions? (i.e. diet, medical treatments, vitamin use, PSA levels, etc.)
    ___ YES  ___ NO

12) “Were you concerned about the confidentiality of your responses?”
    ___ YES  ___ NO

13) “Did you find the questions too sensitive to answer?”
    ___ YES  ___ NO

14) “Do you choose not to participate in research projects?”
    ___ YES  ___ NO

15) “Do you wish to share with us any other reasons for not completing the questionnaires?

Participants may spend a lot of time with this question. If so, redirect them to the next set of questions.

16) “Would you have been willing to participate if the survey was offered over the telephone?”
    ___ YES  ___ NO
17) “Would you have been willing to participate if the survey was offered in a personal face to face interview?”  ____ YES  ____ NO

18) “Have you had positive experiences with the health care that you've received from the VA in the past 3 months?” (Write comments to question on the lines below).

____ YES  ____ NO

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

19) “Do you receive your usual care from the VA or outside hospital?

____ VA  ____ Outside hospital

20) “Did your past experience with VA health care influence your decision about these questionnaires?”

____ YES  ____ NO

21) “In general, have you had good or bad experiences with doctors and hospitals? (Write comments to question on the lines below).

____ GOOD  ____ BAD  ____ IT DEPENDS  ____ NO OPINION

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
22) "Have you participated in research projects in the past?"

__ YES  __ NO

IF YES,

"Have you had good or bad experiences participating in research projects?"
(Write comments to question on the lines below).

__ GOOD  __ BAD  __ NO OPINION

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

"Was this research sponsored by the VA?"

__ YES  __ NO

23) "In general, how helpful do you find medical research"?
(State responses to participant and circle their answer)
(Write comments to question on the lines below).

<table>
<thead>
<tr>
<th>Very Helpful</th>
<th>Somewhat Helpful</th>
<th>Not Very Helpful</th>
<th>Not Helpful At All</th>
<th>No Opinion</th>
</tr>
</thead>
</table>

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
PROSTATE DISEASE PHONE SURVEY
DRAFT

24) "How important do you think prostate disease is as a healthcare issue?"
(State responses to participant and circle their answer)

<table>
<thead>
<tr>
<th>Very Important</th>
<th>Somewhat Important</th>
<th>Not Very Important</th>
<th>Not Important at All</th>
<th>No Opinion</th>
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</table>

25) "Would you mind identifying the highest level of education you have completed? (List categories to the participants)

Grade School _____
High School _____
Trade School _____
2 Year College _____
4 Year College _____
Graduate/Professional School _____

Participant refused to identify education _____
PROSTATE DISEASE PHONE SURVEY
DRAFT

26) "Would you mind identifying your race for our study?" (List categories to the participants)

African-American ______
White Caucasian ______
Hispanic Origin ______
Asian ______
Native American ______
Multi-Ethnic ______
Other ____________________________

Participant refused to identify race ______

If non African-American or refused to identify race, proceed to the end of the page.

If African-American, then ask the following questions:

27) "How serious a problem is prostate disease in the African-American community?"
(State responses to participant and circle participant’s answer)

Very Serious Somewhat Serious Not Very Serious Not Serious at All No Opinion

28) "How helpful is research at reducing prostate disease in the African-American community?" (State responses to participant and circle participant’s answer)

Very Helpful Somewhat Helpful Not Very Helpful Not Helpful At All No Opinion

Thank you for participating. This information will be helpful with other healthcare studies that we conduct.

Thanks again. Goodbye.
Appendix 5    Introductory Letter
Dear Veteran,

We are writing to ask for your help in a scientific study being run by the VA through the Massachusetts Veterans Epidemiological Research Information Center (MAVERIC) with the help of researchers at Harvard and Boston universities. We are trying to learn how diet and lifestyle can prevent the development of prostate cancer.

We are interested in enrolling men who do not have prostate cancer. Prostate cancer is one of the most common diseases in the United States. Approximately 180,000 men will develop prostate cancer this year and 40,000 men will die from the disease. Rates for prostate cancer are even higher in African-American men. This is a serious health problem in our country. The causes of prostate cancer are mostly unknown. There is some evidence that diet and lifestyle may be connected to the disease. By giving us some information about yourself we can learn more about the causes of prostate cancer and find ways to prevent the disease.

To participate please complete the enclosed questionnaire by following the instructions attached to this letter. Over the course of the study, you will be asked to complete additional questionnaires.

Your name was obtained, in confidence, from VA patient files. The VA Research Review Board has reviewed this project and supports this work. Your participation is completely voluntary. However, the success of the research critically depends on the cooperation of all men invited to participate. The information you provide will only be used for research purposes. It will not be shared outside of the study and will be kept in the strictest medical confidence. No personal data will be released to the public.

With full participation, we are confident that we will find ways to prevent the development of prostate cancer. By participating you will be making a key contribution to men’s health. Please do not hesitate to call us at the Prostate Cancer Center phone line (1-800-XXX-XXXX) if you have any questions.

Sincerely yours,

Steven Wright, Ph.D.  
W. Roxbury, VAMC

Hayden B. Bosworth, Ph.D.  
Durham, VAMC