



Supplemental Materials for

Breast Cancer Prevention at Mammography Screening Units and Well Women's Clinics

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Listing of Supplemental Material(s):

Supplemental Appendix 1: Footnote details for Table I Patient Characteristics

Supplemental Appendix 2: Breast Cancer Risk Factors at Mammography Screening Point of Care and Well Women's Clinics in Nova Scotia - A Feasibility Questionnaire

A1. Footnote details for Table I Patient Characteristics.

¹ *n* = 12 (5.33) missing/unknown.

² *n* = 7 (2.9) missing.

³ *n* = 7 (2.9) missing.

⁴ *n* = 7 (2.9) missing.

⁵ *n* = 10 (4.1) missing; “Public” insurance coverage includes both Nova Scotia Family Pharmacare Program and Seniors Pharmacare Program.

⁶ *n* = 7 (2.8) missing; *n* = 3 (1.2) from the “<25” BMI category are classified as underweight (<18% BMI), and should not be considered to be within healthy guidelines.

⁷ *n* = 6 (2.5) missing; alcohol consumption guidelines for women recommend ≤ 1 drink/day. One alcoholic drink is defined as 1.5 fl oz of liquor, or 5 fl oz of wine, or 12 fl oz of beer or wine cooler,

⁸ *n* = 4 (1.7) missing; Consuming four or more alcoholic drinks in the same sitting or occasion is above the recommended guidelines for alcohol consumption for Canadian women.

^{9a} One serving of vegetables is defined as 1 cup of raw leafy vegetables, or 1/2 cup of other vegetables such as carrots or peas (excluding potatoes). Threshold for high or low intake was chosen based on the median.

^{9b} One serving of fruit is defined as 1 medium -sized fruit or 1/2 cup chopped, cooked, or canned fruit (excluding juice). Threshold for high or low intake was chosen based on the median.

¹⁰ *n* = 39 (15.1) missing. Threshold for high or low intake was chosen based on the median.

¹¹ *n* = 12 (5.0) missing; total MVPA is total moderate to vigorous physical activity, calculated for each individual per week. Physical activity guidelines state that adults should engage in at least 150 min of moderate to vigorous physical activity (MVPA) per week to benefit health.

¹² *n* = 10 (4.0) missing; physical activity guidelines state that adults should engage in resistance exercises twice per week to benefit health.

¹³ *n* = 17 (6.9) missing.

¹⁴ Current guidelines for mammography screening in Nova Scotia apply to women, age 40-74. Women who are 40-49 are recommended to attend screening annually. Women who are 50-74 are recommended to attend screening biennially. Study participants who indicated that they have followed these recommendations for their specific age group are considered to be attending mammography within current guidelines.

¹⁵ *n* = 13 (5.3) missing; This variable asked study participants to identify where they currently look for health information.

¹⁶ *n* = 8 (3.3) missing; This variable asked study participants to identify the sources from which they would desire to receive health information.

¹⁷ *n* = 6 (2.4) missing; “Unknown” responses totaled 81% of the “No/unknown” responses (*n* = 13, of 16 responses) when study participants were asked about their willingness for intervention regarding lifestyle modification.

¹⁸ *n* = 8 (3.3) missing “Unknown” responses totaled 81% of the “No/unknown” responses (63 of 78) when study participants were asked about their willingness for intervention regarding endocrine therapy.

¹⁹ *n* = 2 (0.8) missing.

A2. Questionnaire developed and utilized for this study is found below:

Breast Cancer Risk Factors at Mammography Screening Point of Care and Well Women's Clinics in Nova Scotia -
A Feasibility Questionnaire

Dear Participant,

As a student currently enrolled in the M.D. program at Dalhousie University, I am in the process of completing my Research In Medicine project under the supervision of Dr. Tallal Younis, MBBCh, FACP, FRCP (UK). Dr. Younis is a cancer specialist with expertise in breast cancer. We are working together to conduct a research study to better understand the occurrence of breast cancer risk factors, especially those that can be changed, in women without history of breast cancer who are attending to mammography screening or Well Women's Clinics.

To participate in the study, all you need to do is complete this one-time questionnaire. The questions will collect information on your lifestyle (for example, diet and physical activity), past medical history, medication use, family history, and personal characteristics (for example, your level of education).

The reason we are doing this study is to test whether it is realistic to collect information about a woman's individual breast cancer risks that can be changed, while she is visiting either mammography screening or a wellness clinic.

For women who are at a higher risk of developing breast cancer, we hope to use these survey results to assess the usefulness of providing recommendations about changing their risk. We are especially interested in the willingness of women to alter risk factors that can be changed (e.g. diet, physical activity).

Your participation in this research project is completely voluntary. You may decline altogether, or leave blank any questions you don't wish to answer. Your responses will remain confidential and anonymous. There are no potential harms or benefits associated with participation in this study, but you will be helping us identify risk factors for breast cancer in our population, and provide recommendations to keep our communities healthy.

If you agree to participate in this project, please answer the questions on the questionnaire as best you can. It should take approximately 10 minutes to complete. You may complete the questionnaire now, or you may return it as soon as possible in the enclosed business reply envelope. If you have any questions about the study, or about completing the questionnaire, please contact the Principal Investigator, Amanda Rundle, by e-mail at arundle@dal.ca or phone at 1 (902) 598-8433.

Thank you for your assistance in this important project.

Regards,

Amanda Rundle
M.D. Candidate ('20) Dalhousie University

Background Information:

1. From which study location were you recruited to participate in this survey?
☐ Mammography Screening Clinic (Halifax Shopping Centre)
☐ Well Women's Clinic (5991 Spring Garden Rd.)
2. What is your age? _____
3. Your height in feet/inches: _____ OR in meters/cm: _____
4. Your weight in pounds: _____ OR in kilograms: _____
5. Have you gone through menopause?
☐ Yes ☐ In menopause now ☐ No ☐ Unknown
6. When was your last mammogram?
☐ 6 months – 1 year ☐ 1 – 2 years ☐ 2 – 3 years
☐ >3 years ☐ Never had one ☐ Unknown
7. Have you ever had a bone density test (i.e. special x-rays to check bone strength)?
☐ Yes ☐ No ☐ Unknown
8. Do you have any of the following conditions? Please check off the conditions that apply to you:
☐ Problems with blood clots (in legs or in lungs) ☐ Stroke
☐ Hysterectomy surgery (i.e. removal of uterus) ☐ Uterine cancer (or pre-cancer condition)
☐ Active history of irregular vaginal bleeding ☐ Unknown
9. Please indicate if you have taken medication for the following medical conditions:
☐ Osteopenia / Osteoporosis (i.e. medication other than vitamins to strengthen weak bones)
☐ Clotting (i.e. a blood thinner)
☐ Unknown
10. Do you/have you ever smoked cigarettes?
☐ Never ☐ Ex-smoker ☐ Current smoker

Nutritional Information:

1. In the last year, on average, how often did you have a serving of vegetables? (one serving is defined as 1 cup of raw leafy vegetables, or ½ cup of other vegetables such as carrots or peas, excluding potatoes)
☐ Less than once per week ☐ 1-3 times per week ☐ 4-6 times per week
☐ 1-2 times per day ☐ 3-4 times per day ☐ 5+ times per day
2. In the last year, on average, how often did you have a serving of fruit? (excluding fruit juice) One serving is defined as 1 medium -sized fruit or ½ cup chopped, cooked, or canned fruit (excluding juice)
☐ Less than once per week ☐ 1-3 times per week ☐ 4-6 times per week
☐ 1-2 times per day ☐ 3-4 times per day ☐ 5+ times per day
3. In the last year, please identify your most consistent diet for the variety of protein sources you include in your diet from the choices below:
☐ Vegan ☐ Vegetarian ☐ Pescatarian (eat fish, but no poultry or red meat)
☐ Poultry (such as chicken, turkey, but not red meat)
☐ Meat intake including poultry and red meat (such as pork, lamb, beef, bison, or venison)
4. If you do eat red meat (such as pork, lamb, beef, bison, venison), how often in the last year did you eat one serving? (One serving size of red meat is 4 oz.)
☐ Less than once per month ☐ 1-3 times per month
☐ 1-3 times per week ☐ 1-3 times per day

5. In the last year, what kind of fat was used most often for cooking, baking or added to foods in your home?
(Check all that are used consistently)

- ☐ Real butter ☐ Margarine ☐ Olive oil ☐ Vegetable oil
☐ Coconut oil ☐ Vegetable shortening ☐ Lard ☐ N/A

6. In the last year, how many times per week did you eat fried food away from home?

- ☐ Less than once per week ☐ 1-3 times per week
☐ 4-6 times per week ☐ Daily

7. During the past year, in a typical week, how many alcoholic drinks per day did you consume? One alcoholic drink is defined as: one drink with 1.5 fl oz of liquor such as vodka, gin, scotch, bourbon, brandy, or rum; Or 5 fl oz of wine; Or 12 fl oz (i.e. one can or bottle) of beer or wine cooler.

- ☐ <1 per day ☐ 1 per day ☐ >1 per day

8. During the past year, how often do you have four or more alcoholic drinks in the same sitting or occasion?

- ☐ Never ☐ Less than one per month
☐ 1-2 times per month ☐ At least once per week

Physical Activity – When answering these questions, please:

- Write the average number of times per week in the first column, and the average minutes per session in the second column for strenuous, moderate, mild and resistance physical activity.
- Only count physical activity sessions that lasted 10 minutes or longer in duration.
- If you did not participate in any of the following activities, please enter the number “0”.
- Do not include occupational or work-related activities.

Type of Activity	Times per week	Average duration
Vigorous/strenuous exercise (heart beats rapidly, sweating) (e.g., running, aerobics classes, cross country skiing, vigorous swimming, vigorous bicycling).		
Moderate exercise (not exhausting, light perspiration) (e.g., fast walking, tennis, easy bicycling, easy swimming, popular and folk dancing).		
Light/mild exercise (minimal effort, no perspiration) (e.g., easy walking, yoga, bowling, lawn bowling, shuffleboard).		
Resistance exercise (e.g., lifting weights, push-ups, sit ups, therabands).		

Considering an average week, how many hours per day would you spend sitting (for example, working at a desk, doing course work, during leisure activities, visiting friends, in transit, etc.):

During a typical workday? _____ hours

During a typical day off? _____ hours

Demographic and Socioeconomic Information:

1. What is your postal code? _____

2. What is your highest level of completed education?

- ☐ Less than high school ☐ High School
☐ University/College ☐ Professional/Masters/PhD

3. What is your current employment status?
☐ Not employed ☐ Employed part-time ☐ Employed full-time
4. What is your current household income?
☐ <\$60,000 ☐ \$60,000-\$99,999 ☐ >\$100,000 ☐ Prefer not to answer
5. What is your current marital status?
☐ Single ☐ Married or living with partner ☐ Separated or divorced
6. Under which insurance program is your coverage of drugs, devices and/or services?
☐ None ☐ Seniors Pharmacare Program ☐ Family Pharmacare Program
☐ Private program ☐ Other _____

Potential for Intervention:

1. Would you be willing to discuss and implement life style modifications with your health care provider(s) to help lower your risk of breast cancer?

☐ Yes ☐ No ☐ Unknown

Life style modifications include smoking cessation, changes to diet or alcohol intake, improvements in exercise and sedentary time, and more.

2. Would you be willing to discuss and implement endocrine therapy with your health care provider(s) to help lower your risk of breast cancer?

☐ Yes ☐ No ☐ Unknown

Endocrine therapy is related to the hormones that every woman has in her body, estrogen and progesterone, which can act as fuel for certain types of breast cancer to grow and spread. Hormone therapy – also called endocrine therapy – adds, blocks, or removes estrogen or progesterone to treat the disease. Hormone therapies for breast cancer can include either drugs that stop estrogen and progesterone from helping breast cancer cells grow, or drugs that keep the ovaries from making these hormones. Hormone therapy is different from hormone replacement therapy (HRT), a treatment that adds hormones to the body to counter the effects of menopause.

Where do you look for and receive health information?

1. Please indicate where you are most likely to look for information about your health. [Check all that apply]

☐ Family Doctor ☐ Other healthcare provider/clinic ☐ Family/friends ☐ Internet
☐ Social media ☐ Community organization ☐ Other _____
(e.g., Facebook)

2. Please indicate where you would like to receive information about your health? [Check all that apply]

☐ Family Doctor ☐ Other healthcare provider/clinic ☐ Family/friends ☐ Internet
☐ Social media ☐ Community organization ☐ Other _____
(e.g., Facebook)