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Clean Teens

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HE 3240 Health Promotion Program Planning and Evaluation

Spring 2017
Rationale for *Clean Teens* - A Program to Prevent Substance Abuse Among At-Risk Teenagers

The National Institute on Drug Abuse (NIDA) states that there has been a decline in perceived risk in relation to substance abuse among adolescents; basically, it is not perceived to be harmful by as many adolescents as in previous years (NIDA, 2016). Substance use and abuse among adolescents is a constant concern that needs to receive a greater amount of attention, given that adolescents hold a more relaxed perspective on the harmful behavior, and that the costs associated with substance abuse are phenomenal.

The substances that are being used include tobacco products, alcohol, prescription medications, inhalants, and illegal synthetic drugs. The NIDA states in the 2015 Cost of Substance Abuse Analysis that tobacco yielded $130 billion in health care costs and $295 in overall costs; alcohol yielded $25 billion in health care costs and $224 in overall costs; illicit drugs yielded $11 billion in health care costs and $193 billion in overall costs (lost work productivity, crime activity, and health care costs) (NIDA, 2015). Programs dedicated toward combatting substance use and abuse can help drive down these costs, increase an at-risk teen’s productivity and success in school, and increase their positive overall contribution to society in the future.

According to the National Center for School Engagement (NCSE), a ‘teen at risk’ is generally defined as a teen with a “less than optimal future” ahead of them. Some examples listed by the NCSE include, but are not limited to: teens that are homeless, associated with delinquents, lack social and emotional supports, and teens that are using drugs and/or alcohol (NCSE). By this definition, many high school students from low-income homes in rural Plymouth New Hampshire can fit this description. Substance
abuse among adolescents can lead to greater problems in at-risk teens such as: teenage pregnancy, sexually transmitted diseases, high crime rates, suicide, domestic violence, and many more issues (NCSE).

According to the Department of Health and Human Services Office of Adolescent Health, New Hampshire statistics show that 17% of high school students tried alcohol before they were 13 years old; 33% of high school students had alcohol on at least 1 day in the last 30 days before the survey; 39% of high school students reported marijuana use; 17% reported use of other substances including inhalants, cocaine, and heroin (NIDA, 2016). To put it simply, looking at the collection of statistics compiled in this rationale, 33 out of every 100 students in New Hampshire had used alcohol in the last 30 days; 39 of every 100 had reported past marijuana use, and 17 out of 100 had reported use of inhalants, cocaine, and heroin. Clearly, drug use among New Hampshire teens is an issue that needs to be further addressed. According to the United States Centers for Disease Control and Prevention (CDC), despite all-time lows in drug usage throughout the United States, the rates of opioid induced death (by overdose) significantly increased in the years 2014-2015 by 30.9 percent in the state of New Hampshire (CDC 2016). If substance use and abuse is not addressed in these imperative adolescent years, it could lead to issues with substance abuse disorder down the road, and contribute to the already phenomenal costs of substance use and abuse- especially in at-risk youth.

Clean Teens will promote family communication and healthy connections that will assist in combatting substance use and abuse among at-risk teens in rural Plymouth, NH. During the summer session, parents and at-risk youth will be able to attend free weekly sessions (number of sessions to be determined). At-risk youth will be identified
by referral to the program (by guidance counselors and the judicial system), or anyone generally interested (referral will not necessary to attend). The sessions will consist of two different break-out sessions: one for teens and one for parents. The session for teens will have the goal of preventing future substance abuse. The parent session will be geared toward providing tools to be the intervention and support for their children. A technology component, such as an application on a smartphone, is also under consideration as part of the program. Technology is a big part of society and even success in behavior change. The application component will display articles pertaining to health and substance abuse, as well as resources and solutions for teens and parents to utilize when not in session.

A program targeting the task of decreasing the number of at-risk teens engaging in future substance abuse behaviors is very beneficial to every single city and town across the United States, not because of location, but because of social factors. A study that presents the research of influence and substance abuse supports this idea and suggests that peer pressure and conformity play a large role in social settings and decide what habits teens fall into (Piehler, Véronneau, Dishion, 2012). Substance abuse prevention programs aim to educate and help not only the teens, but parents and teachers within the community as well. Parents and teachers are going to be the guidance required by teens, so their involvement, connection, and understanding is critical. Teens growing up drug free are guaranteed to live healthier lifestyles and raise a future generation the same way. In a guide put out by the U.S. Department of Education and the U.S. Department of Justice Drug Enforcement Administration suggests a variety of factors that this guarantees healthier lifestyles for growing children, one of these factors include the enforcement of having meals together at the table, allowing parents to be available and
build trust with their children (Drug Enforcement Administration and U.S. Department of Education, 2012). When the occurrence of substance abuse decreases in communities, the quality of the school systems and the safety within the community increases. A study looking into the costs of substance abuse reads that cost-benefits of living drug free are obvious. When taking into account the fact that substance abuse is generally one of the most expensive health problems to deal with, early prevention is critical (Miller, Hendrie, 2008). Decreasing the risk of teens abusing drugs will also increase the availability of medical funds to be put elsewhere; according to the NIDA, health care costs associated with substance abuse in 2015 was approximately 166 billion dollars (NIDA, 2015).

This will be a successful program based on results provided by similar programs that have been done in different areas across the United States. Neil McGillicuddy, a senior research scientist and professor at the University of Buffalo states in Addictive Behaviors that “…if a parent learns that their adolescent is abusing substances, he/she may modify how they parent…. [which will] bring about changes in adolescent behavior” (McGillicuddy, 2012). A primary prevention program such as Clean Teens that offers help to the at-risk teen, as well as to the parents, will help create parent support. Our program offers parents to come and actually sit in on our sessions offered to learn what their child is learning. They will be given parent specific pamphlets with information that pertains to them and how they can modify their parenting to help the child out with not using substances. This, in turn, will create a higher chance for success.

According to Thomas Valente, a professor of preventative medicine at the University of Southern California, and colleagues, another key to achieving success with Clean Teens is tapping into technology- such as the application component we have
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outlined in our program. Technology is so prevalent in modern living, that tapping into
the teens’ world interactively has been shown to decrease and prevent substance abuse
over time. Within the Clean Teens program, we will have every adolescent involved
create their own blog. This blog will allow participants to combine information they are
leaning throughout the program with their own thoughts, feelings, personal experiences,
etc. Studies have shown positive changes in substance abuse behaviors due to programs
involving social network characteristics. (Valente, 2007) Though all places are different,
and some programs have had successes and failures, it can be said with confidence that
with all the research to guide Clean Teens, the program will be successful and beneficial
for this community.

Values: Clean Teens values;

1. A happy, healthy, productive society.
2. That all teens deserve a healthy life.
3. That all teens have the resources they need to develop healthy
   habits.
4. Open family communication.

Mission: Clean Teens provides families and at-risk teens with the knowledge, skills, and
connection they need to combat substance abuse and build healthy habits.

Vision: Targeted at-risk teens will be productive members of society, positively
contributing to a more substance-free society. Substance abuse will not be impacting
productivity, negatively adding to health care costs, or hindering positive contributions to
society. Families will have open lines of communication, and use that to aid in happy and healthy living.

**Goal:**

1. Decrease the number of teens at risk that will become involved, or continue to be involved in substance use and abuse.
2. Increase at-risk teens’ resistance to substance abuse behaviors

**Theoretical Basis for the Program**

In examining this collection of primary research, it is clear that after school activities, extracurricular activities, and interpersonal relations and environments (i.e. peer environment, parent and home environment, etc.), have a significant impact on the prevention of substance abuse among at-risk teens. With research findings focusing on environment and social surroundings, *Clean Teens* will use the social ecological model of behavior change. The social ecological model of behavior change focuses on integrating different levels of prevention and influence:

**Social ecological model:**
In the intrapersonal (individual) level of influence, the person’s own knowledge, attitudes and skills are targeted as a primary influence. This will be completed through the general educational portion of Clean Teens, for example through personal blogging, and through health and substance abuse literature distributed to participants and their families. Interpersonal will be influenced through the parenting component, as well as the general social atmosphere of the classes; this six week program will facilitate healthy peer and family relationships, as well as social interactions through team building and communication activities. As far as the organizational level, this program will be in collaboration with organizational and institutional entities such as local schools, local police departments, local resources, etc.; for example, a partnership with CADY (Communities for Alcohol and Drug free Youth). Institutionally, or in this case from a school perspective, this form of intervention is critical. Schools will adopt this program and focus on its objectives within their afterschool and summer programs. Clean Teens can provide schools with program plans, literature, and posters for the program to bring it into that institution. The school’s energy about Clean Teens will make or break the program so the school needs to provide the most support for the program. From a policy standpoint, schools would benefit from a policy put in place requiring schools to have the Clean Teens program available for students and their parents. This would help push schools to be more proactive in their prevention of substance abuse.
Overview:

*Clean Teens* is a primary prevention program that will feature 6 classes (one per week over a 6 week period). The goal is to help participants realize the value of maintaining their health in regards to all dimensions of wellness. Classes will focus on educating participants on the dimensions of wellness as well as substance use, so that maintenance of health becomes a driving factor in the prevention of substance abuse. The program will bring in outside officials and guest speakers as an interactive teaching strategy that will set a good example for participants. A small parent participation part will be brought in the first class, as a way to get to know each other as well as the program, and then again at the last class to celebrate and acknowledge accomplishment. The program will use technology such as blogging to help students summarize and make sense of their learning throughout the course, and material incentives (water bottles, movie tickets, etc.) at each class to encourage regular attendance.

Objectives:

*Process Objectives:*

1. All 6 sessions for participants and their parents will be completely outlined and planned at least one month prior to the first session.

2. At least two months prior to program start date, program implementers will document three possible influential individuals or organizations to involve in the program.
3. One month prior to the start of the program, program planners and implementers will have secured adequate funding (determined by implementers) from federal grants, organizations, and donations.

4. At the program's three week mark, facilitators will distribute surveys to each participant to document feedback about how they are received by participants (positively or negatively, impactful or irrelevant).

5. The *Clean Teens* program will run during the summer, and participants along with program implementers will meet once a week for six consecutive weeks.

*Impact Learning Objectives:*

1. After watching videos about the different dimensions of wellness in class number two (week two), all teen participants will be able to make at least 3 connections between at least two different dimensions (how they impacts each other).

2. When given a pamphlet on drugs at the first class, all teen participants will return to class a week later and will be able to list 3 negative side effects of drug use.

3. By the end of the third session, all teen participants will be able to identify 3 common substances used in schools (alcohol, marijuana, and heroin) and state how those substances are harmful.

4. By the end of the six sessions (end of the program), all teen participants will be able to make a statement of how substance abuse can negatively impact their future, and how it can interfere with optimal living and a high quality of life.
Impact Behavior Objectives:

1. One year after the program launches the percentage of participant substance abuse will be at or less than 10% (two students per class, each class has 20 student max capacity).

2. By third session, 75% of teen participants will be regularly writing on their blog pages (at least once every two weeks) about living healthy, and living substance free.

3. By the end of the six sessions, 50% of participants and their families will report that they are engaging in behaviors directly related to improving their dimensions of wellness on a regular basis (i.e. family walk once a week, trying a new fruit or vegetable every Wednesday, actively practicing good communication habits to foster closer relationships, etc.).

4. One year after the completing the six sessions, when participants have been put in situations where substances are offered, 75% will report having turned them down.

Impact Environmental Objectives:

1. At the end of the six sessions, 75% of student participants will continue to write in their blog about healthy and substance free living, and 50% of those students writing in their blog will share it publicly for other peers and teens to read.

2. After the 6 sessions, the participants (including parents) will be aware of the resources that are available to them regarding substance abuse, and will be able to list at least 3.
3. Throughout all sessions, the participants will form connections and social supports among their peers, creating a supportive environment for themselves as well as others. At the end of the six sessions, all participants will be able to write a short reflection about these connections and social supports, and state at least three reasons why they are beneficial.

4. At the end of the six sessions, teen participants and parents will report that they feel more comfortable discussing the dangers in abusing drugs and the negative outcomes in can cause on one’s life. They will all report at least one instance in the past 6 weeks in which they opened a line of communication regarding substance abuse.

**Outcome Objectives:**

1. 12-months post program, 80% of parents will report that they have built stronger relationships with their teens.

2. Looking 5 years forward, when contacted by phone, 75% of all participants will report that they have remained substance abuse free.

3. During their time in school, the number of school day absences among participants will be 25% less than members of the priority population that do not participate in the program.

4. In a post survey that takes place 1 month after the last class, half of the participants will demonstrate that they have adopted and maintain healthy eating and exercise habits. These habits are those that have a noticeable positive impact on their quality of life, and that help them remain substance free.
Interventions:

Health Communication Strategies:

1. A social media account will be created for participants to follow, find information, and keep in contact with professionals involved in program as well as each other. Posts will include shared articles about substance abuse related issues, as well as posts to encourage healthy living:
   - Try this new recipe using in-season foods!
   - Bored on this summer day? Hit the Rattlesnake trail in Holderness for an easy, family friendly hike! You will be rewarded at the top with great views and of course, exercise.

2. There will be a phone number and email that participants can contact with questions or concerns. Health professionals will be available to answer questions or direct the participants in the right direction.

3. The program will be styled in an interpersonal format- it will resemble a support group where participants are making social connections and sharing ideas, while health education and promotion professionals communicate concepts, ideas, and information to the group.

4. Participants will create informational yet personal blogs* that will be available to the public (challenge by choice), as well as to current and future participants. Blogging will be about living substance free, and how they live a healthy lifestyle to stay clean.

*Blogging technology will be discussed in an in-class tutorial. Arrangements will be made for participants to use local computers, or Plymouth State Computers when
implemented on Plymouth State property. If home-access to computers is an issue, there will be in-class time to blog after each session.

5. Participants will complete surveys to provide feedback before, during and after the program in order to discuss what they expect, things they learned and things they would like to change or learn more about. This will create an open line of communication between implementers/teachers and students.

**Health Education Strategies:**

1. Educational literature will be distributed to parents on the first day of class, so parents are aware of what students will be learning. Literature will include:
   - information on substances commonly used by teens, resources where parents can find help for their teen, coping strategies and parenting techniques to keep lines of communication open, etc.

2. Educational literature to participants will be given out at the end of each session so participants have the information available to them at all times. This will summarize, and help them reflect on what they learned in the session.

3. Students will create educational presentations through a variety of chosen media. This will summarize and synthesize the information they have learned throughout the program, and how that information relates to their personal life.

4. Showcase demonstrations/experiments to show different effects on the body (e.g. nonsmoking lung vs. smoking lung demo).

5. Videos will be used as a visual to convey complex topics and concepts (i.e. physiological effects of substances, long term effects, etc.). Interactive
educational handouts will be used in conjunction with the videos, to be completed in group discussions to help students understand and reinforce the information.

**Behavioral and Social Strategies:**

1. Carefully planned lessons (6 days, over 6 weeks) will include educational and motivational material, as well as ample resources to help participants maintain abstinence from substance abuse:

   - Class 1: Will involve the parents, and focus on teambuilding activities that will facilitate communication and group cohesion among the participants. Blog technology and purpose will be introduced and encouraged (with prize incentives).
   - Class 2: Will be the first class with just students. Lessons will be about the dimensions of wellness, and include activities to reinforce concepts of physical activity, nutrition, and actively working on one's mental and emotional health.
   - Class 3: Will bring in outside partners such as LEAD, DARE, and local police officers to discuss the topic of substance abuse through an interactive lesson plan that is co-planned between Clean Teens and the respective partner agency. This class will focus on teaching about different substances and their physiological, social, and mental consequences.
   - Class 4: Will bring in a guest speaker who was previously a victim to substance abuse, but currently recovered. This will be informative and motivational to the participants, and will bring in a personal experience to the face of substance abuse.
   - Class 5: Will tie together wellness and substance abuse. It will help participants to answer questions such as: “how can substance abuse negatively impact my health? My future?” etc. A final project will be introduced to the students that will encourage them to creatively display what they have learned, and how they will apply it to their own lives.
   - Class 6: Will include certificates of completion, and allow students to share their projects. This session will be open to parents and family, and feature more family based activities.
2. Participants will be asked to keep a journal throughout their experiences in order to see how their ideas, behaviors, perceptions and knowledge have changed through the duration of the program.

3. Have a local Police Officer come in and speak to the participants about the consequences (legal and lifelong) of doing drugs. This will convey valuable information through interactive presentations. This will also create positive rapport between participants and police officers.

4. Participants have a sit down discussion with an individual (guest speaker) that had a substance use issue, and learn how detrimental it can become.

5. Material incentives will be given to students for regular participation (i.e. movie tickets, water bottles, etc.)

Policy and Environmental Strategies:

1. Local schools and/or youth centers will adopt the program after the session is complete. This will keep the program in the local environment for future participants from the priority population.

2. Blogs will be posted (by consent of the participants and their parents) online to be accessed publicly. This will allow a larger population to access the information, as well as personal input from the priority population’s perspective.

3. By introducing local officials like LEAD, DARE, and Police Officers, the program will create dialogue and social connections between those authorities on the subject of substance abuse and the participants.
**Logic Model:**

<table>
<thead>
<tr>
<th>Inputs and Stakeholders</th>
<th>Outputs &amp; Activities</th>
<th>Outcomes: short term</th>
<th>Outcomes: long term</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Promotional materials</td>
<td>Promotional materials, introductory event</td>
<td>Recruited Participants &amp; Parents/Guardians</td>
<td>Improved group cohesion &amp; communication w/ families.</td>
<td></td>
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<tr>
<td>- Incentives for recruitment and retention</td>
<td>Participatory Workshops</td>
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<tr>
<td>- Participants</td>
<td>Week 1: team building activities w/ parents.</td>
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<tr>
<td>- Local teens at risk for future substance abuse</td>
<td>Week 2: just students, dimensions of wellness.</td>
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<td>- Parents of teens</td>
<td>Week 3: LEAD/DARE</td>
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<td>- Facilities for meetings</td>
<td>Week 4: Motivational speaker. Families welcome.</td>
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<td>Professional staff</td>
<td>Week 5: Introduction of final project; overview</td>
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<td>- Volunteer support staff</td>
<td>Week 6: Project presentations and celebration with families</td>
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<tr>
<td>- Police/LEED/DARE officials</td>
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<td>- Motivational guest speaker fighting substance abuse</td>
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<td>- Educational Materials</td>
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<td>- Resources for drug free living</td>
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**Outcomes: short term**
- Recruited Participants & Parents/Guardians
- Improved group cohesion & communication w/ families.
- Increased awareness about the importance of all dimensions of wellness.
- Skills for decision making for healthy choices
- Established connections with local authorities
- Increased interest in the issues of substance abuse
- Access to accurate information regarding substance abuse and healthy life choices.
- Blogs created by students

**Outcomes: long term**
- Established social supports and healthy communication skills
- Skills for advocating for drug free living, communication and self-reflection
- Awareness of the relationship between health behavior and quality of life
- Improved wellness and QOL
and/or health
- Resources for blogging
- (computers and web-based training)

sharing of the impact that substance abuse and drug free choices

<table>
<thead>
<tr>
<th>Critical Questions</th>
<th>Indicators</th>
<th>Data Sources</th>
<th>Performance Criteria</th>
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</thead>
<tbody>
<tr>
<td>Was the program implemented as planned?</td>
<td>Following the workshop schedules</td>
<td>-Summary of each class&lt;br&gt;-Pictures documenting each class</td>
<td>100% of the planned events in the sessions are completed</td>
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<tr>
<td>What was the impact on participants?</td>
<td>-Changes in attitude towards information on substances learned.&lt;br&gt;-Consistent participation</td>
<td>-Pre and post assessment&lt;br&gt;-Attendance records</td>
<td>-100% of participants will be blogging weekly throughout the course of the program.&lt;br&gt;-90% of participants will attend every session.</td>
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<tr>
<td>How did the program impact the community as a whole?</td>
<td>-Community member involvement (teen and family participation).&lt;br&gt;-At least 3 local organizations/hospitals/schools distribute information about the program and literature about substance use provided by <em>Clean Teens</em>.</td>
<td>-Consistent attendees due to literature/resources in local spaces.&lt;br&gt;-Attendance records with address information (to see where participants are coming from).</td>
<td>-In a survey sent out to community members (not just participants), 50% will say they have heard of the program, and 1 in 4 will report that they have been impacted in some way by the program and its resources.</td>
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</tbody>
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Bibliography


http://schoolengagement.org/school-engagement-services/at-risk-youth


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Fuel the First Year
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A Rationale for: Fuel the First Year

Young adults on college campuses face a challenge to adopt and adhere to healthy eating choices and behaviors as they move away from home and become the exclusive caretaker of their health (Deliens, Clarys, Bourdeaudhuij, & Deforche, 2014). The average first-year student is eating in the school's dining hall, easily becoming overwhelmed by the abundance of choices; often choosing the familiar foods (Deliens, Clarys, Bourdeaudhuij, & Deforche, 2014). Cost, convenience, and availability are the key components college students look for in their food purchases which causes them to gravitate towards foods that are prepackaged, readily available, high-fat, and calorie-dense (Lacaille, Dauner, Krambeer, & Pedersen, 2011). According to the 2016 American College Health Association National College Health Assessment, only 50% of college students reported being very healthy and 22.4% reported being overweight. The nutrition initiative of Healthy People 2020 expresses a goal of promotion of health awareness and reduction in chronic disease risk through the consumption of healthful diets (Healthy People 2020, 2014). To increase the health in first-year students, one should eat about 3 cups of vegetables and 2 cups of fruits per day (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015). Although there are many guidelines as to what people should and should not eat, there are just as many reasons as to why students are unable to make the health choice. One study found that, “Men and women identified motivation to eat healthy and self-control as facilitators of the behavior; alcohol use, convenience, cost, lack of time due to college life, and a lack of healthy options on campus as barriers to eating healthy...” (Lacaille, Dauner, Krambeer, & Pedersen, 2011).

The reporting on first-year college student’s difficulty in maintaining nutritional health based on personal and environmental determinants, drives this program in the promotion of health and nutrition education for first-year college students.

First-year college students are limited in their healthy food options and are often unable to make the proper nutritional choices, due to time, convenience, and social environment (Kicklighter, Koonce, Rosenbloom, & Commander, 2010). Students find it difficult to make healthy choices when it comes to their meals as foods are highly limited to campus resources and place blame on the dining hall services (Das & Evans, 2014). Furthermore, the average college student in the United States is paying upwards of $4,500 or $18.75 per meal throughout the academic year (Matthewson, 2017). The vast amount of money deposited for meal plans could be spent by students on foods that support their physical growth and mental development. The food service, Sodexo provides nutritious options and tools, but there needs to be more widespread promotion on college campuses about what is offered. For the price college students are paying for meal plans, a program to provide knowledgeable skills about how to navigate the abundance of choices will prove beneficial. Fuel the First Year aims to construct first-year college students’ ability make health conscious decisions and habits regarding their nutrition.
Fuel the First Year promotes optimal individual health for the first-year college student through educational promotion and nutritional resources on campus. The overall goal of this program is to educate first-year college students on healthy nutritional choices offered at Plymouth State University. Fuel the First Year will facilitate health communication targeted at the first-year college students’ meal and snack choices. There is evidence that highlighting options in vending machines by creating a system of identification increases purchasing of nutritious snack and decreases purchasing in the unhealthy options (Brown, Flint & Fuqua, 2014). The program will be successful by making the healthy choice the easy choice. Studies have shown nutritional “point of purchase” poster strategies have successfully impacted food purchase behaviors (Freedman, & Connors, 2011). Indicating the healthy choice in a clear way for all to understand can improve purchasing of the more nutritious options.

Nutrition interventions will be performed through campus wide changes of food choices and meals offered. By adding nutritional information regarding calories per snack, on vending machines, studies have shown to increase sales of healthier options offered (Freedman, & Connors, 2011). Adding nutritional information to menus can also be done to improve menu literacy in making healthy choices in the community. Promotion and community communication of Sodexo nutritional choices and educational tools will guide the program. To guide the program, there will be healthy choice indicators, large signs, flyers and colorful photographs with “benefit-based messages” to promote targeted foods in the dining hall (Peterson, Duncan, Null, Roth, & Gill, 2010). Response rate to both surveys was 38%. The program will be further implemented by providing access to healthy foods and encouragement for associated healthy behaviors. The program increases consumption of nutritious foods through publicity of MyPlate, proper protein diets, the dangers of high fat, high sugar, and highly processed foods, and how to identify nutrients in meals. Fuel the First Year will provide an abundance of healthy choices and promotion of such, in dining halls and all other food stations across campus.

The Fuel the First Year program is strongly rooted in the values of making the healthy choice the easy choice in the best interest of supporting healthy lifestyles of first year college students. The values and dedication to the wellbeing of Plymouth State University college students through the program, provides support for the Healthy PSU initiative. The environmental and social changes made through Fuel the First Year can allow Plymouth State University to continue growth to becoming a destination of choice because of its exceptional values on student health and wellness. Creating an environmental change in how nutrition is seen across campus will inspire individual behavior changes. In correlation with the Healthy PSU program at Plymouth State University, the values of Fuel the First Year are grounded in providing students with knowledge and skills to make healthy food choices for their mind and body. The program promotes change in the available food choices to change eating habits that will support total-body wellness. Fueling the body, fuels the mind; thus, optimizing academic performance.
Mission

The Plymouth State University Fuel the First Year program provides information for first year college students on basic nutrition and ensures easy access to healthy food choices.

Goals

To create an environmental change throughout the Plymouth State University campus by initiating an individual change through the students and changing what food choices are available to improve eating habits. By doing so it will:

1. Increase access and options for health-promoting foods on campus.
2. Increase the frequency of healthy food choices made by students at PSU.

Values

Fuel the First Year values easy access to healthy foods, informed students who are able choose nutritious foods, and affordable options.

Theoretical Basis for the Program

The Social Cognitive Theory model refers to the idea that people learn by watching others. It explains personality in terms of how a person thinks about and responds to one’s social environment by helping people acquire and maintain certain behavioral patterns. The influence of observational learning, self-efficacy, goals, and outcome expectancies evoke behavior change reinforced by internal and external factors. This unique combination of influential motivators driven by the Social Cognitive Theory provides the framework for how nutritional behavior of first-year college students can be improved. The interventions are being modeled after the needs assessed from face to face interviews, surveys, and observations of the healthy foods that are available around different parts of campus from vending machines to the dining services. Interventions used will be designed around teaching first-year students the nutritional value of vending machine snacks on campus, promotion of the healthy foods added to food stations, and improving awareness of healthy choices across campus. Cognitive factors and observational learning will include knowledge of the foods available, where they are available, and how they contribute to a healthy lifestyle. Changing the nutritional environment to make the healthy choice the easy choice will provide students with readily available, easily accessible, and affordable food choices. Individual health behaviors are influenced by community behaviors, therefore increasing convenience and awareness of health-promoting foods on campus can create health conscious students.
Overview

*Fuel the First Year* provides students with support to make health conscious decisions and the necessary resources to achieve and maintain optimal nutritional wellness while at college. Fueling the body, fuels the mind; thus, optimizing academic performance. The environmental changes of healthier vending machine snacks, health promoting layout of the dining hall, and low cost healthy meals and snacks will support optimal wellness for first-year students. Making the healthy choice the easy choice will influence and support healthy lifestyles. Providing and marketing a health promoting environment will guide individual behaviors towards making healthy food choices for the mind and body from the start of the college career to the years following graduation. *Fuel the First Year* promotes change in the available food choices to change eating habits that will support total-body wellness.

Objectives

**Process and Administrative**

1. Five times a semester, workshops will be placed in the HUB, teaching students how to choose the healthier option.
2. By the end of each semester, at least 30 Facebook and Twitter posts will be delivered to campus participants.
3. By Spring 2018, nutritional information guidance stickers will be placed on vending machines.
4. Twice a semester, at least 30 promotional posters will be placed in campus buildings to promote the healthy food choices on and around campus.

**Impact- Learning Objectives**

By the conclusion of the program:

1. Participants will be able to determine the higher protein choices for post workout snack.
2. Students will be able to describe 2 resources for accessing nutritious meal choices on campus.
3. Students will be able to describe 2 resources for accessing nutritious meal choices off campus.
4. Students will be able to describe at least 4 nutritious snacks available on campus.
5. Participants will contribute at least one nutritious recipe to a collective cookbook.

**Behavior objectives**

1. At each informational booth session, at least 30, first-year students will provide feedback of what healthy foods they would like to see on campus.
2. During semester surveys, one out of two students state they made a healthy choice at the dining hall by describing the nutrition of the meal.
3. Each semester, ⅓ of the healthy food discount coupons will be redeemed at an on campus food station.
Environmental objectives
1. Every day, Sodexo provides one low cost, high density food at every meal.
2. By spring 2018, the dining hall presents a layout showcasing at least one healthy meal.
3. By spring 2018, vending machines each have at least one high protein option.
4. By spring 2018, Sodexo will have set up feeding stations in at least four key locations on campus.

Outcome Objectives:
1. After one year, most first year students can recognize at least three healthy option on campus.
2. After the first semester, students will be able to describe the dining hall layout, knowing where the healthy food options are located.
3. After the first year, students will be to describe the daily recommendation of MyPlate for their age group.

Interventions
Health Communication Strategies:
- A *Fuel the First Year* Facebook, Twitter page provides students and family members with the ability to be in contact with the program and aware of the nutritious foods being offered. The social media page post Sodexo healthy meal of the day, vending machine changes, low cost-high nutrient snacks or meals, nutrition guidelines, nutritional facts of food around campus and the community, and ask for feedback from the student population. – See Appendix A. for photos
  - “Healthy meal of the day is: Sweet potato and spinach quesadilla!! First 10 people to guess how many grams protein are in them get a coupon for 10% off dinner!”
  - “Eating healthy is expensive- MYTH. Check out some awesome tips on eating healthy on a budget! [https://www.choosemyplate.gov/budget](https://www.choosemyplate.gov/budget) “
  - “What’s MyPlate? Take a look! *insert diagram about MyPlate from Apendix A.*”
- Twice a semester, educational posters promoting My-Plate, healthy food choices that are currently being offered by Sodexo, new healthy foods placed in vending machines, and ways to make health conscious food decisions are posted around campus. – See Appendix A. for photos
- The food inside of the vending machines are labeled in order to provide the information on how nutritious the food is with a color-coded scale and identification of high protein choices.
- The Dining Hall uses labels such as colored stickers, to categorizing foods as the healthiest choice, the moderate choice and the unhealthy choice. Accompanying the labels is an identification table of which each color means.
Health Educations Strategies:

- One hour workshops, five times a semester will include information on MyPlate, daily recommendations, and information highlighting healthy foods offered on and off campus. Students can gain resources about healthy meal choices and snacks at various locations on and off campus.
  1. MyPlate
  2. Sugars in food
  3. High fat foods
  4. High processed foods
  5. Protein

- Tabling sessions in the HUB will provide students the ability to ask or write down questions about nutrition and how proper nutrition is supported on campus. The questions can be answered at the table or at a later time anonymously on one of the social media pages. In contribution to the student authored cookbook, students will be asked to share a low cost, well balanced, nutritional meal or snack recipe.

- During each freshman student orientation session, a presentation about transitioning to college dining will be provided. Along with nutritional information about what types of food provide good nutritious energy that new students should look to consume. The presentation will include touring of the dining facility to point out where the healthier choices are and identification of healthy food choices around campus food stations.

Presentation outline:

- Presentation starts with a short PowerPoint discussion in a classroom to discuss the feeding stations across campus, identification of how nutritional values are labeled in the feeding stations, and daily recommendations of food groups.

- Students will be lead to the dining hall for a tour of the layout, with emphasis on where the healthier choices are located. Dining hall nutritional value labels are pointed how to show students how to identify the nutritional values of what they are eating.

- Following the dining hall, students will be shown a vending machine to highlight the labeled snack information on how nutritious the food, the color-coded scale and identification of high protein choices.

- Through collaborate with nutrition courses offered on campus, and input from students during tabling sessions, Fuel the First Year will create a student authorized cookbook. The cookbook will highlight the student’s favorite well-balanced, low cost, nutritious meals and snacks. The nutrition courses are asked to provide recipes, along with guidelines and information about what makes a meal healthy to share with the other students to help influence entries to the cookbook. Fuel the First Year will take nutrition courses out of the classroom to tour campus and the town with education purposes of identifying where healthy choices can be made by the college students.
Behavioral and Social Strategies:
- The Dining hall layout will be changed to promote the healthier options. This includes making the healthy food bars (i.e. salad bar or vegan bar) more visible allowing the student to have equal opportunity when choosing foods to eat.
- A student authored, cookbook will be created with the guidance of nutrition courses on campus. Entries of nutritious, well-balanced, low cost meals and snacks will be provided by students from tabling sessions in the HUB, from social media, and the nutrition course. The cookbook will be produced for distribution to members of the college and community.
- Students who visit the tabling sessions, will have the opportunity to be entered into drawings or participate in small activities for Flex-Cash, dining hall coupons, discounts off healthy foods purchased on campus or off campus. First-year students who enter a recipe to the cookbook will receive a coupon or money off select nutritious meals/foods. Participants will also have the opportunity to receive coupons, discounts, or money for asking questions, sharing information, providing feedback and input about nutrition on campus.

Policy and Environmental Strategies:
- The ambassadors from Fuel of the First Year will work with Sodexo to provide lower cost of nutritious foods offered at the University to increase sales and student consumption.
- An open line of communication with ambassadors and Sodexo is maintained to orchestrate new feeding stations on campus, implementation of new snacks in vending machines, and lower prices of the healthy foods. Contract agreements will be made to maintain fluid communication and collaboration on making Plymouth State University a healthy destination of choice for students.
Carpenter, J., Longolucco, E., Roberge, M., Simeti, N. - *Fuel the First Year*

**Logic Model**

**Inputs**
- People:
  - Contracted food service
  - Planning group
  - Students
  - Student Affairs
  - Leadership team
  - Orientation committees
  - Dietitians
  - Professors of nutrition courses

- Facilities:
  - HUB
  - Dining Hall
  - Vending Machines

- Resources:
  - Printing supplies
  - Print quota
  - Markers, pens, pencils
  - Tables
  - Chairs
  - Trifold posters
  - Leadership team
  - Technology-Computer
  - Microsoft office programs
  - Twitter page
  - Facebook page
  - Access to Sodexo recipes/meal plans
  - Space and time for meetings
  - Calendar
  - Access to vending machines
  - Place to store materials

- Incentives:
  - Discounted healthy food
  - Meal coupons
  - Free fresh fruit

**Outputs**
- Promotional posters
- Facebook group
- Twitter page

- Orientation Session:
  - Presentation about “healthy foods”
  - Dining hall tour
  - Vending machine identification

- Workshops:
  - 5 times a semester for one hour
    - MyPlate
    - Sugars in food
    - High fat foods
    - High processed foods
    - Protein

- Student authored nutrient dense, healthy food cookbook - collaboration with nutrition courses for nutrition guidelines

- Semester surveys emailed
  - Suggested improvements
  - Awareness identification
  - Health knowledge

- Meetings/engaging discussions with contracted food service and student affairs

**Outcomes/Impact**

**Short Term**
- Increased awareness of the program.
- Increased awareness of healthy food changes on campus.
- Planning for healthy eating.
- Submissions for student authored cookbook.
- Knowledge of MyPlate recommendations
- Nutritional guiding labels on vending machines.
- Nutritional guiding labels in dining hall

**Long Term**
- Identification of nutritional value of meals offered in vending machines and the dining hall.
- Increased consumption of nutrient dense meals and snacks.
- Low cost, nutrient dense “meal of the day” everyday.
- Dining hall layout to promote healthy options first.

**Goals**
- Increase access and options for health-promoting foods on campus.
- Increase the frequency of healthy food choices made by students.
Influential factors that could affect the program and should be taken into consideration before or during implementation include cultural restrictions, time restrictions, flexibility of meeting times, student involvement, and the contracted food service’s willingness to participate. First, cultural restrictions need to be considered always when creating and promoting healthy meals of choice. There should be alternative choices available that meet the same nutritional guidelines. Time restrictions should be considered regarding leadership group involvement as they most likely partake in work or classes. Workshops may need to be adjusted in length of time based on availability of space. Flexibility of meetings and contracted food service’s willingness to participate go hand in hand as the environmental changes are significant. Student involvement can affect the program as it takes the needs and wants of the student body to influence changes that will be lasting. If the student’s do not provide adequate feedback or participate in semester surveys, assessment of learning may be difficult. Student involvement is needed for the cookbook as well, indicating that if student’s do not participate, there will be no cookbook. Promotion of the program will influence involvement greatly which is why incentives are very important to gain involvement.
## Evaluation Matrix:

<table>
<thead>
<tr>
<th>Critical Question</th>
<th>Indicators</th>
<th>Data Sources</th>
<th>Performance criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Was the program implemented as planned?</strong></td>
<td>Changes in vending machine foods</td>
<td>Observations and photos of vending machine changes, dining hall layout update, participants at workshops.</td>
<td>100% of the program was implemented as planned</td>
</tr>
<tr>
<td></td>
<td>Labeling of vending machine nutrition and dining hall meal nutrition</td>
<td>Promotional social media posts delivered.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased awareness of accessibility to nutritious food on campus</td>
<td>Attendance records of orientation nutrition introduction session (first year students).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promotional posters hung around campus</td>
<td>Attendance records from workshops. (admin written feedback and evaluation)</td>
<td></td>
</tr>
<tr>
<td><strong>What was the impact of the program on the first-year college students?</strong></td>
<td>Increased knowledge of nutrition recommendations</td>
<td>Semester survey</td>
<td>75% of first year students can identify the healthier choice in the vending machine. 75% of participants can identify one healthy meal option off campus. 75% of participants can identify recommendations of MyPlate. 75% of coupons/discount tickets were redeemed by participants for nutritious snacks/meals. 30 recipes that are provided for the cookbook. 60% of first year students are a part of the Facebook page.</td>
</tr>
<tr>
<td></td>
<td>• Able to pick healthier options</td>
<td>Number of coupons/discount tickets redeemed for nutritious snacks/meals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Able to plan for healthy eating</td>
<td>Student authored cookbook published</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Able to identify healthy options in the dining hall</td>
<td>Recipes submitted</td>
<td></td>
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<tr>
<td></td>
<td>• Able to describe nutrition recommendations based on MyPlate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What was the impact of the program on the physical environment?</strong></td>
<td>Healthier options were more available in vending machines.</td>
<td>Sales records of vending machines</td>
<td>Two high protein snacks are stocked in vending machines. One low cost, high nutrition density meal is offered every day in the dining hall.</td>
</tr>
<tr>
<td></td>
<td>Dining halls are rearranged to promote healthy options first.</td>
<td>Photos of dining hall layout changes.</td>
<td></td>
</tr>
<tr>
<td>What was the impact of the program on the sociocultural environment?</td>
<td>Increasing awareness of the importance and knowledge of nutrition in first year college students.</td>
<td>Observation record and photos of dining hall layout changes.</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Increase accessibility of nutrient dense food on campus.</td>
<td>Photos of dining hall labeling (poster/displays)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase affordability of nutrient dense food on campus.</td>
<td>Photos of vending machine labeling</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Key informant interviews</td>
<td></td>
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<td></td>
<td>Salad bar is located at the entrance of the dining hall.</td>
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<td></td>
<td></td>
<td>4 high protein snacks are stocked in vending machines.</td>
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<tr>
<td></td>
<td></td>
<td>100% of Vending machines are labeled.</td>
<td></td>
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<td></td>
<td></td>
<td>100% of meals in the dining are nutritionally labeled.</td>
<td></td>
</tr>
</tbody>
</table>
Carpenter, J., Longolucco, E., Roberge, M., Simeti, N. - *Fuel the First Year*

**Bibliography**


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Appendix A.

Carpenter, J., Longolucco, E., Roberge, M., Simeti, N. - *Fuel the First Year*
Appendix A continued:

Each meal is a building block in your healthy eating style. Make sure to include all the food groups throughout the day. Make fruits, vegetables, grains, dairy, and protein foods part of your daily meals and snacks. Also, limit added sugars, saturated fat, and sodium. Use the MyPlate Daily Checklist and the tips below to meet your needs throughout the day.

1. Make half your plate veggies and fruits
   Vegetables and fruits are full of nutrients that support good health. Choose fruits and red, orange, and dark-green vegetables such as tomatoes, sweet potatoes, and broccoli.

2. Include whole grains
   Aim to make at least half your grains whole grains. Look for the words "100% whole grain" or "100% whole wheat" on the food label. Whole grains provide more nutrients, like fiber, than refined grains.

3. Don’t forget the dairy
   Complete your meal with a cup of fat-free or low-fat milk. You will get the same amount of calcium and other essential nutrients as whole milk but fewer calories. Don’t drink milk? Try a soy beverage (soymilk) as your drink or include low-fat yogurt in your meal or snack.

4. Add lean protein
   Choose protein foods such as lean beef, pork, chicken, or turkey, and eggs, nuts, beans, or tofu. Twice a week, make seafood the protein on your plate.

5. Avoid extra fat
   Using heavy gravies or sauces will add fat and calories to otherwise healthy choices. Try steamed broccoli with a sprinkling of low-fat parmesan cheese or a squeeze of lemon.

6. Get creative in the kitchen
   Whether you are making a sandwich, a stir-fry, or a casserole, find ways to make them healthier. Try using less meat and cheese, which can be higher in saturated fat and sodium, and adding in more veggies that add new flavors and textures to your meals.

7. Take control of your food
   Eat at home more often so you know exactly what you are eating. If you eat out, check and compare the nutrition information. Choose options that are lower in calories, saturated fat, and sodium.

8. Try new foods
   Keep it interesting by picking out new foods you’ve never tried before, like mango, lentils, quinoa, kale, or sardines. You may find a new favorite! Trade fun and tasty recipes with friends or find them online.

9. Satisfy your sweet tooth in a healthy way
   Indulge in a naturally sweet dessert dish—fruit! Serve a fresh fruit salad or a fruit parfait made with yogurt. For a hot dessert, bake apples and top with cinnamon.

10. Everything you eat and drink matters
    The right mix of foods in your meals and snacks can help you be healthier now and into the future. Turn small changes in how you eat into your MyPlate, MyWins.
10 tips for healthy eating in the dining hall

Dining halls are full of healthy food options. You just need to know which foods to put on your tray. Use these tips to plan your food choices and know which options are best for you.

1. **know what you’re eating**
   Many dining halls post menus with nutrition information. Look at the menus ahead of time, so you can be ready to create healthy, balanced meals when you get there. Having a plan is the first step in making smarter eating decisions! Visit ChooseMyPlate.gov to find information and tools like SuperTracker to help you make meal selection a breeze.

2. **enjoy your food, but eat less**
   Everybody loves the all-you-can-eat dining hall! To resist the urge of eating too much, take smaller portions and use a smaller plate. Remember you can always go back if you are still hungry.

3. **make half your grains whole grains**
   Whether you’re at the sandwich station or pouring yourself a bowl of cereal in the morning, make the switch to whole grains like 100% whole-grain bread and oatmeal.

4. **re-think your drink**
   Americans drink about 400 calories every day. Consider how often you drink sugary beverages such as sodas, cappuccinos, energy drinks, fruit beverages, sweetened teas, and sports drinks. Drinking water instead of sugary beverages can help you manage your calories.

5. **make half your plate fruits and veggies**
   Fruits and veggies can make your meals more nutritious, colorful, and flavorful. Add to pastas, eggs, pizza, sandwiches, and soups. Try spinach in a wrap or add pineapple to your pizza.

6. **make it your own!**
   Don’t feel like you have to choose pre-made plates. Design your own meal! Fresh veggies from the salad bar can be thrown into your omelet for brunch, or grab some tofu on your way to the pasta station for lean protein.

7. **slow down on the sauces**
   Sauces, gravies, and dressings tend to be high in fat and sodium. Watch out for foods prepared with a lot of oil, butter, or topped with heavy condiments, such as mayonnaise. You don’t have to do away with sauces and condiments all together; just ask for less or put them on the side. Reducing extras will help you manage your weight.

8. **be on your guard at the salad bar**
   Most veggies get the green light but limit foods high in fat and sodium such as olives, bacon bits, fried noodles, croutons, and paste or potato salads that are made with mayo and oil. Stick to fat-free or low-fat dressings on the side.

9. **make dessert special**
   Save dessert for a Friday night treat or on special occasions. When you can’t resist, opt for something healthy, such as a fruit and yogurt parfait.

10. **don’t linger**
    Dining halls should be just that, where you eat. Although it’s great to chat with friends while you eat, avoid staying for long periods of time to reduce your temptation to keep eating.

Go to www.choosemyplate.gov for more information.
Appendix A continued:

Fuel the First Year

Changes to vending machines will be made to show consumers the nutritional value of all their desired snacks.

Fuel the First Year

What’s happening?

Start the week off right, with Make your Own Monday! Work with Sodexo to create the ultimate burrito to provide the nutrients you need for the start of a successful week!
Appendix A continued:

Make Your Own MONDAY
- Create your own burritos with fresh veggies, meat, beans and whole wheat tortilla

Fuel the First Year Workshop!
When: Wednesday, 2:00
Where: in the HUB

*Free Snacks

Learn to Fill your Plate with Optimal Nutrition at a Low Cost
Blue Plate:
A nutrition initiative for Holderness School

Nicholas Laurence

Plymouth State University
HP 5020
Summer 2017

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**Rationale for Blue Plate:**

Studies have demonstrated that student-athletes have nutritional deficiencies in their dietary intake. (Valliant, Emplaincourt, Wenzal, & Garner, 2012; Rossi et al., 2017; Hinton, Sanford, Davidson, Yakushko, & Beck, 2004.) These deficiencies are often due to lack of nutritional knowledge, and environmental barriers such as timing of meals or access nutritious foods. (Abood, Black, Birnbaum, 2004; Hinton et al., 2004; Rossi et al., 2017; Valliant et al., 2012.) Qualitative and quantitative data has evidenced that lack of knowledge, and environmental barriers, are contributing factors to poor dietary and nutritional habits of Holderness School student-athletes. (Laurence, 2014; Evans, 2016.) In conjunction with the removal of environmental barriers, nutritional knowledge and dietary practice can be improved with educational programs that teach, reinforce, and empower student-athletes. (Valliant et al., 2012; Abood et al., 2004; Rossi et al., 2017; Karpinski, 2012.)

**Mission Statement:**

The Blue Plate nutrition initiative provides education and resources, through a social-ecological approach, for students at Holderness School to fuel their pursuit of intellectual curiosity and athletic excellence.

The Blue Plate program is mindful of the mission of the school, “foster equally in each student the resources of the mind, body, and spirit…” and the athletic department’s mission of “providing...skill building, wellness, and nutrition
coaching.” (Holderness.org, 2017). Additionally, this program addresses initiatives identified in the school’s strategic plan surrounding school life, wellness, and athletics.

**Vision Statement:**

Through the Blue Plate initiative’s vision, Holderness students have a knowledge base to empower healthy decision-making around nutritional choices, and have appropriate access to healthy foods to be able to act upon their decisions. Students are able to use their nutritional practices to power their performance in daily pursuits at Holderness, and the remainder of their lives. Additionally, the presence of the Blue Plate initiative helps to guide the greater Holderness School community’s conscious choices surrounding nutrition.

**Goals:**

- Improve the nutrition knowledge of Holderness students, particularly pertaining to performance.

- Teach students skills for sound nutritional decisions.

- Remove barriers that may be prohibitive of proper nutrition.

**Theory applied to Blue Plate:**
Influences upon behavior can be examined through the socio-ecological perspective. Intraperonal factors, interpersonal relationships, and the environment of the surrounding community must be taken into consideration while designing interventions. Here we will take a closer look at the models and theories to be applied to the Blue Plate nutrition initiative.

The intrapersonal level of influence includes factors within an individual including knowledge, skills, behaviors, and motivation. Abood, et al. (2004) were able to improve dietary intake of student-athletes, perhaps to a greater extent than other studies, by building a level of self-efficacy surrounding dietary skills and practices. In addition Abood et. al (2004), as well as other research studies, were able to improve nutritional knowledge through education programs. Providing motivation, education, and building skill are the basis of the information-motivation-behavioral (IMB) skills model to be applied in Blue Plate.

The interpersonal level of influence describes how an individual’s behavior is influenced by the feelings and behaviors of others. The social network theory further outlines how one individual's action may affect the actions of other individuals. Thus, if students observe other individuals practicing good dietary habits, then their peers may influence their decision to adopt better habits as well.

Studies have noted that there may be institutional or environment factors limiting adequate nutrition and dietary practices of student athletes. (Rossi, et al., 2017;
Hinton, et al., 2004). Institutional and environmental barriers can be addressed at the community level of influence, which includes institutional rules, regulations, and factors that may constrain or promote recommended behavior. Changes to the school’s rules and physical infrastructure may help promote optimal eating behavior.

The nine stages of the community readiness model are: No awareness, denial or resistance, vague awareness, pre-planning, preparation, initiation, stabilization, confirmation, expansion, and professionalism. Prior projects by Laurence (2012) and Evans (2016) have positioned the school in the “vague awareness” phase. The purpose of Blue Plate is to bring the school through the pre-planning, preparation, and initiation phases, and to position the school to move through the final three phases.

**Blue Plate Objectives:**

**Process Objectives:**

- *By the start of the program:*
  - A registered dietitian will be hired.
  - An advisory group including Holderness Students, the Holderness kitchen staff, and at least one expert in nutrition will be formed.
  - Educational signs and info-graphics will be printed.
o Dates will be selected in the fall, spring, and winter athletic seasons for team captains to eat one “family-style” meal at a table led by a registered dietician.

o The school will learn, through a survey of the student body, at least two barriers that students perceive as negatively affecting their access to nutritious foods or ability to practice sound dietary habits.

o Policy will be changed to allow under-formers to attend the Snack Bar during after-dinner hours

• By the end of one year:
  o Captains from each team will participate in one “family-style” meal at a table led by a registered dietician. Discussion topics include how to navigate a “family-style” meal from a nutrition standpoint.

  o Each grade level will have attended three seminars about nutrition

Impact-Learning Objectives:

• By the end of one year students will be able to:
  o Identify nutrient rich food sources for at least two daily meals
  o Identify three levels of caloric density in foods that they like to eat
  o Identify optimal time in minutes to consume foods for fuel and recovery
  o Identify two methods of hydration
  o Identify at least three sources of electrolytes
Impact-Behavioral Objectives:

- *By the end of 6 months*, student advocacy for healthy eating will be provided through at least 100 posts to social media.
- After their “family style” meal with a registered dietician, captains will talk to their team about nutrition at least twice each season.
- *By the end of one year* each student will share his or her understanding of nutrition with at least one non-Holderness individual.

Impact-Environmental Objective:

- *By the end of the first month*:
  - At least one sign and/or info-graphic providing nutritional and dietary education will be posted at all sites where food is served on campus.
  - One granola bar and one yogurt will be issued with each uniform.
- *By the end of the second month* healthy foods will be available in the Snack Bar after dinner hours.

Outcome Objective:

- *At the end of one year* students who take the Evans (2016) nutrition-knowledge survey will score at least 80%.
**Inputs, Resources, Partners, Stakeholders:**

**Resources and Personnel:**

- *Athletics Staff:* Athletic trainer, athletic director, equipment manager, strength coach, team coaches
- *Health Team:* School physician, nurse, counselor/human development teacher, athletic trainer
- *Administration:* Head of School, Dean and Assistant Dean of Students, Communications Office
- *Kitchen Staff:* Head chef, servery staff, Snack Bar staff

- *Athletics Facility:* Equipment room
- *Weld Hall:* Kitchen, servery, Snack Bar.

- *Equipment and costs:* Refrigerator to hold yogurts (~$200), granola bars and yogurt tubes (collaborate with Kitchen to determine cost).

**Partnerships:**

- *Dartmouth College:* Peak Performance dietician
- *Plymouth State University:* Nutrition students (potentially)

**Stakeholders:**

- Holderness student-athletes
• Team coaches
• Parents
• Board of trustees (school life committee)

**Intervention Strategies**

**Communication Strategies:**

*See Interventions Appendix at the end of this section for examples of communication strategies.*

These communication strategies focus on written information and info-graphics placed at strategic locations for students, and all consumers, to use as reference and guidance while going through the nutrition and dietary decision process.

• *Com.1-* MyPlate signage in servery area showing recommended food group percentages and portion sizes.

• *Com.2-* Signage at equipment room (nutrition dispensary) showing when to eat granola bar and when to eat yogurt (Bar: grains/fuel, 30 min before warm up; and Yogurt: protein/recover, within 30 min after game). (See Env.3)

• *Com.3-* Signage at Snack Bar with healthy menu options and their nutritional benefit (eg. protein/recover; green leafy/vitamins; etc). (See Env.1)
• *Com.4*- Quick description on sneeze guard in servery with nutritional information and benefit (eg. chicken sandwich: chicken- protein- rebuild and recover, bun-carbohydrates- fuel for activity). This can be done by servery staff with at the cost of an estimated additional 30 seconds per food item. Food items/labels can be pre-identified the week prior when the head chef publishes the menu, perhaps in conjunction with Plymouth State University nutrition students.

• *Com.5*- Instagram account to which students post examples of their healthy plates. (Cross index with Soc.2).

**Education Strategies:**

Education strategies include small group discussions and larger group seminars. Each session is intended to impart nutrition and dietary knowledge to participants, as well sense of self-efficacy.

• *ED.1*- Captain's Meal- Partner with dietician from Dartmouth College's athletic program/Peak Performance program to bring to campus each sports season. Dietician eats a “family-style” meal with that season's team captains while providing practical experience and discussing nutrition and dietary practice, specifically pertaining to athletic pursuits, and how to navigate the dining hall. This gives captains knowledge, confidence, and self-efficacy in
eating healthy “family-style” meals (something that is perceived as difficult by the student body). Captains can model, and even have conversations about, their new skill set with their peers. (See Soc.1).

• ED.2- Seminars- Partner with dietician from Dartmouth College’s athletic program/Peak Performance program to deliver one seminar each term to each of the four class levels. Seminar can take place during the “meetings” block and be tailored to the learning level of each grade. Topics include nutrition and dietary practice, specifically pertaining to athletic pursuits, and how to navigate the dining hall. Details of seminars should include functions of macronutrients and examples of food sources, as well as appropriate proportions and serving size. Each class having a seminar each term allows for building upon and reinforcement of concepts.

• Recommendation- It is recommended, for long-term sustainability of the education components, that the Human Development curriculum be re-developed to include a nutrition unit focused on knowledge and practical skills, and offered to all grade levels. This can take the place of seminars (ED.2) and cover the same material, saving money while utilizing internal resources.

Behavioral/Social Strategies:
These behavioral and social strategies are designed to use social influence and reinforcement through peer demonstration of positive nutrition behavior.

- **Soc.1 - Peer influence**- Team captains who have gained practical skills at the Captain’s Meal (ED.1) are encouraged to provide a positive influence to their teammates through good dietary practices. Team captains who have completed the Captain’s Meal (ED.1) are asked to talk about their own positive dietary habits with their peers. This could be in a team setting, or in casual conversation at a meal.

- **Soc.2 - Social Media**- Students are encouraged to post a picture of their healthy plate to a Blue Plate Instagram account. Incentivize by using exemplary posts as the “Head's Photo of the Day”. (Cross index with Com.5).

**Policy and Environmental Strategies**

These strategies are designed to create an optimal environment for positive nutrition and dietary behavior. In some cases policy change or removal of barriers must occur in order to facilitate the process.

- **Env.1 - Provide healthy options** such as nuts, fruits, salads with lean protein (eg. chicken Caesar wrap), and smoothies, protein (eg. grilled chicken) in Snack Bar. Setting a low price for healthy options can be subsidized by raising the price of unhealthier options like ice cream. Increased prices of
unhealthy options may discourage students from buying them, while low priced healthy options may encourage students to purchase healthy options. Signage will be posted in Snack Bar to re-enforce knowledge about healthy options (Com.3).

- **Env.2-** Change policy to allow all grades to visit Snack Bar after evening study hall. This policy change, paired with healthy options in the Snack Bar (Env.1) will allow all students access to healthy food at night and may reduce reliance on unhealthy options (eg. ordering pizza at night).

- **Env.3-** Issue a granola bar and a portable yogurt with each uniform. This provides a source of fuel, building blocks to rebuild, and calories for athletes who may be beginning and/or ending their competition with a significant stretch of time from a meal. Signage with instructions and knowledge re-enforcement will be posted (Com.2). Coaches should also encourage this practice and possibly incorporate it as part of warm ups and cool downs.

- **Recommendation-** As the athletics facility undergoes upgrades, add a Snack Bar type area that can provide foods that fuel and aid recovery and can be accessed by student-athletes before and after games and practices. Staffing and provisions should be considered making this a cost-intensive recommendation. Fundraising can be organized around the success of Blue Plate.
Interventions Appendix

• *Com.1- MyPlate materials to be hung around the Servery:*

  o *MyPlate:*

    https://choosemyplateprod.azureedge.net/sites/default/files/printable materials/mini_poster.pdf

    Shows portions of five food groups on one plate

  o *School Lunch Visual:*


    Shows example of healthy and complete lunch, with descriptors.

  o *Navigate the Buffet Poster:*

    https://choosemyplateprod.azureedge.net/sites/default/files/printable materials/MPMW_Tipsheet_7_navigatethebuffet.pdf

    Five tips to healthily navigate a lunchroom buffet.

  o *Ten Tips Poster, “My Plate, My Wins”:*

    https://choosemyplateprod.azureedge.net/sites/default/files/printable materials/DGTipsheet1ChooseMyPlate_0.pdf
Ten tips on healthy eating, with information including foods with important macronutrients.

- High Five Serving Size Poster:
  

  Information about how to use your hand to estimate portions while eating.

- Com.2 - Athletics Signage (working draft)

  This is an example of a poster showing when to eat the snacks issued with uniforms, and their benefit.

Images through Google

**Grains for fuel**

Eat 30 minutes before warmup

**Yogurt: Protein and Carbohydrates**

Eat within 30 minutes of the end of your game to rebuild and refuel
• **Com.3- Snack Bar signage example (working draft)**

This is an example of a poster advertising a healthy snack and some of the nutrients gained.

Image through Google

**Chicken Caesar Wrap**

![Image of Chicken Caesar Wrap]

**Protein, Vitamins**

---

**Blue Plate Overview**

Blue Plate is a program designed to improve nutritional knowledge and dietary practices among Holderness students, particularly as those knowledge and skill bases pertain to athletic performance. The program’s mechanisms of education, communication, social influence, and policy and environmental changes feedback and support each other to create a strong and comprehensive program. Although Blue Plate is targeted to students, many of the strategies involved are overt and will likely positively influence the greater Holderness community. Blue Plate allows Holderness to build upon its relationship with Dartmouth Peak Performance, and opens up the possibility of establishing a relationship with Plymouth State's
nutrition education classes. As Blue Plate gains a foothold there is room for it and Holderness to grow together, fully integrating nutrition into the curriculum. Blue Plate can also serve as a mechanism to promote fundraising for a new athletics facility.
Blue Plate Logic Model

Logic Model Addendum

The timing of some aspects of this program may be delayed as final costs are evaluated for food items such as granola bars and yogurts for athletics, and chicken Caesar salads or wraps in the Snack Bar. This should not delay other interventions.
such as educational signage, which will help to increase awareness as soon as they are posted. It is anticipated that it will take at least a year, and likely two, to build a culture that will achieve long-term goals.
### Critical Questions

**Nutrition/diet education:**
- Knowledge of healthy food choices
  - We expect our students to be able to choose healthy options that meet nutritional needs.

**Social media campaigns:**
- Every student body, when surveyed, will report feeling comfortable guiding a friend or guest through healthy food options at the dining hall.

**Performance Criteria**

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>Indicators</th>
<th>Critical Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student survey</td>
<td>Educational programs were implemented as planned?</td>
<td>Were positive feedback from students?</td>
</tr>
<tr>
<td>Observations, student focus groups, faculty focus groups</td>
<td>Educational signage posted in high-traffic areas</td>
<td>We expect students to be able to choose healthy options that meet nutritional needs.</td>
</tr>
<tr>
<td>Receipts from purchasing snacks for athletics</td>
<td>Snacks fueling athletic performance and recovery issued with each uniform.</td>
<td>We expect our students to be able to choose healthy options that meet nutritional needs.</td>
</tr>
<tr>
<td>Recruited student focus groups</td>
<td>Snacks at each table, where food is served, are well-mixed and healthy options are visible.</td>
<td>We expect our students to be able to choose healthy options that meet nutritional needs.</td>
</tr>
<tr>
<td>Student self-reports, surveys on Instagram account</td>
<td>At least 75% of students will report feeling comfortable guiding a friend or guest through healthy food options at the dining hall.</td>
<td>We expect our students to be able to choose healthy options that meet nutritional needs.</td>
</tr>
<tr>
<td>Notes from student focus groups, faculty focus groups</td>
<td>At least 100 posts on Instagram account</td>
<td>We expect our students to be able to choose healthy options that meet nutritional needs.</td>
</tr>
<tr>
<td>Results from Evans Survey (2016) and compared to 2016 results</td>
<td>At least 75% of the student body, when surveyed, will report feeling comfortable guiding a friend or guest through healthy food options at the dining hall.</td>
<td>We expect our students to be able to choose healthy options that meet nutritional needs.</td>
</tr>
</tbody>
</table>

**Critical Questions**

- Were educational programs were implemented as planned?
  - Educational signage posted in high-traffic areas
  - Snacks fueling athletic performance and recovery issued with each uniform.
  - At least 75% of the student body, when surveyed, will report feeling comfortable guiding a friend or guest through healthy food options at the dining hall.

- Were barriers to healthy nutrition/diet addressed?
  - Policy change allowing under-formers access to the snack bar
  - Nutritious food options available at the snack bar.
  - Snacks fueling athletic performance and recovery issued with each uniform.

- Are positive social influences to diet and nutrition being utilized?
  - Social media campaigns via Instagram
  - Student survey
  - Posts to Instagram account

- Are students able to use their knowledge to make informed nutrition/dietary decisions?
  - Surveys
  - Observation
  - Student self-reports

- Performance Criteria

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Reference List


Evans, S. (2016). *Holderness school nutrition survey*


nutrition knowledge, body composition, and performance during off season training in NCAA division I baseball players. *Journal of sports science and medicine, 16*, 60-68.


Preparing to Launch
Felicia Muse, Alexandra Ambrosino, and Elizabeth Daly
HE 3240 Health Promotion Program Planning & Evaluation
Plymouth State University
May 2017

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Appendix:

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Preparing to Launch - Promoting responsible drinking and a professional lifestyle in older college students!

A RATIONALE for Preparing to Launch:

According to the National Institute on Alcohol Abuse and Alcoholism (2015), about 1,825 college students between the ages of 18 and 24 die from alcohol-related unintentional injuries, including motor-vehicle crashes. Another study was conducted that analyzed the findings from the National College Health Assessment, in which excessive drinking patterns were examined in students. The results of the surveys showed that nearly one out of two students reported excessive drinking within the past nine days. According to the Centers for Disease Control and Prevention (2015), excessive alcohol consumption increases health care costs, and reduces workplace productivity. The cost of excessive drinking reports that in the United States an average of $249 billion per year. The concluding evidence derived from each study directly correlates college students with unhealthy decision-making involving alcohol. This societal stigma of uncontrolled drinking in college must be addressed to ensure a prosperous future for scholars to thrive. Preparing to Launch will target students on a personal, communal and, societal level to promote awareness to healthy drinking through various seminars, surveys and informational flyers. The program created will provide a thorough understanding on personal alcohol limitations and build skills necessary for continual professionalism. By inviting guest speakers to come and share personal experiences behind decision-making, the audience will connect through a sense of truth and vulnerability. This will impact students in regards to the life they choose to live, the choices they make, and future they will create. At such an impressionable age, students need to understand the importance of
how poor decisions made while under the influence will affect future careers, relationships, and overall success.

Another effective strategy that impacts binge drinking in adolescents involves changing behaviors of the public. The cohort of students targeted varies in countless ways and each individual is going to be inspired differently. By engaging the community, *Preparing to Launch* will effectively build a foundation of educated members who will demonstrate self-awareness towards drinking and professionalism.

1. **Values:** The coordinators of this program value the idea that older college students deserve the right to be well educated and have access to information on the determinants of health binge drinking can result in. This population has the ability to drink responsibly and live a happy life.

2. **Mission:** *Preparing to Launch* will promote the premise of professional alcohol related decision-making and students will demonstrate a thorough understanding of personal alcohol limitations.

3. **Vision:** The vision of this program is aimed to increase responsible drinking and promote a professional lifestyle. The program will target students to make changes on a societal, cultural and behavioral level.

4. **Goal:** Older college students will develop professional skills for healthy living.

5. **Needs Assessment and Theoretical Basis:** An electronic survey was sent out to all PSU upperclassman. The survey was posted on the Class of 2018 and 2019 Facebook pages and received 54 responses. Most of the questions were based upon how much students drank and how often. However, the information that was used to revise the mission statement, goal and vision was *why* students drank. Most students said that the
reason they consumed alcohol was to reduce stress and to “fit in” with other college students. Interviews were conducted with multiple upperclassman students here at PSU. It was helpful hearing about students on a personal level and how binge drinking has affected them.

6. **Program Focus:** Overall, after reviewing primary and secondary data around drinking in older college students, it was decided to base the program around leading students to healthier lifestyles. It is believed that by focusing on other behavior changes (reduce in stress, exercising more, healthy social interactions, etc.), binge drinking will reduce even after college. The goal of the program will be for graduating seniors to develop professional skills for healthy living. The mission is to promote the premise of professional alcohol related decision-making and students will demonstrate a thorough understanding of personal alcohol limitations.

7. **Transtheoretical Model:** The Transtheoretical Model will be used to shape the behavior change in students. The Transtheoretical Model assesses an individual’s readiness to change; it was created to act on healthier behaviors. The model fits the program perfectly with helping students develop healthier lifestyles and progressively create changes.

    **Precontemplation (Students show no interest to change behavior or unaware of the benefits of changing behavior):** College students show no intention in changing lifestyle behaviors.

    **Contemplation (Students show interest in changing behavior in the near future):** College students think about attending workshops to change professionalism and lifestyle behaviors.
Preparation (Students begin to take steps to change behavior): College students attend workshops to become educated on how to positively change.

Action (Students adapt behavior change): College students take initiative of workshops and participate in extra activities the whole month of March.

Maintenance (Students adapt changed behavior for up to six months): College students demonstrate healthier habits and professional lifestyles at least six months after the last workshop.

8. Learning Objectives:

Process Objective:

1. By the first week of February, program planners should have at least five stakeholders committed to sponsoring the workshops

2. By the first workshop, there should be at least four donations from stakeholders to help workshops provide incentives to participants (ex. Membership to Planet Fitness).

3. By the last week in January, have at least 2 stakeholders to be guest speakers during workshops to speak to participants about experiences with alcohol consumption.

Behavioral Objective:

1. By the last workshop, participants will be able to journal and document four alternative choices to alcohol consumption for social activities.

2. By the end of the third workshop, students will report no more than two drinks per week for three weeks.
3. After the workshop participants will be able to list two people to call when in need of a safe drive home.

Learning Objective:

1. By the end of the workshops, students will be able to describe the relationship between blood alcohol levels and intoxication.

2. By the end of the workshop series, participants will be able to describe the alcohol content in at least four different types of consumable sources of alcohol.

3. By the end of the workshop series, students will list three reasons why excessive drinking impairs performance.

4. When the workshop is complete participants will show at least five ways that you can break the law while consuming alcohol.

Outcome:

1. After all workshops, the audience will understand and demonstrate knowledge surrounding one's personal alcohol limits based on their individual body characteristics and limitations for driving within legal limits.

2. After the first two workshops, students will have one resume that is professional and ready to submit to an employer.

3. By the last workshop, participants will be able to give three good reasons as to why they should stop excessively drinking.

Environmental:

1. After workshops are completed, at least two dorms will have an established campaign for smart drinking.
2. After the first workshop, the students will be able to get higher than an 85% on their interviewing skills quiz.

3. By the end of the second workshop, participants will have at least two new alumni to network with and get help finding a career in their major.

9. **Intervention Strategies:**

   **Health Communication Strategies:** A Facebook event for our workshops was created and sent out to all of PSU students. It is an open group so multiple people can join even if they were not invited. The group was shared on the Class of 2018 and 2019 to help market the event while focusing on our target audience. A Twitter account is also useful to easily send out short messages to make people interested in our program. Some of the tweets read: “Want to leave college professionally? Come to the professional workshop tonight!” “Who wouldn’t want a free membership to their local Planet Fitness?” “Life past college, how to get out of the college mentality” “Ways your life is going to change post graduation”. With every tweet or post made about the workshop, the poster promoting the workshops were also attached to give specific details on where and when the workshops are on and what is going to be discussed at each one. Instagram was useful because the poster was also shared and promoted through Instagram with a certain hashtag that was #PostCollegeSuccess.

   **Health Education Strategies:**

   1. It is crucial that our program is effective and educational. It was have decided to host educational and group activity workshops that both raise awareness and teach individuals their own personal limits when it comes to drinking and what is appropriate and responsible. Meetings are designed to impact and educate the
targeted audience in a fun and engaging way, ensuring comfort and openness and
to provide insight on responsible drinking after college and how to be social and
remain professional.

2. Social media outlets were created on Instagram, Twitter, and Facebook that
promote awareness and allow followers to get further information. Each day a
new post is created that elaborates on the promotion of the workshops and why
they are important to older college students.

3. Participants will learn how to journal their thoughts and feelings around their
drinking habits. They will be asked to log how much they drink from the start of
the workshop series to the end. The goal of this is to make them more self-aware
about their current drinking habits and how it is negatively impacting their lives.

**Behavioral and Social Strategies:** Going into this program plan, it was clear that
there was a problem with excessive drinking in college students. There are multiple ways
to approach this problem, however, it is clear that students are more susceptible to
attending workshops if they are around career building and professionalism rather than
drinking. These workshops will be focused on after graduation and how to build a
“professional” lifestyle. For incentives, there will be a dinner provided at each workshop.
This will add to the program because the meals will be all healthy so students will get an
idea of easy different nutritious meals to make. Another incentive will be raffle tickets at
every workshop so that participants can enter into a drawing to win a free gym
membership for six months to the Planet Fitness closest to their home.

**Policy and Environmental Strategies:** The workshops brought together a
motivated group of students to change the social norms of drinking. It is clear that there is
an issue on college campuses when it comes to drinking excessive amounts of alcohol. Ways that students can change the social norms of drinking is by making smarter lifestyle choices. By using resources around the campus’ environment such as a free gym membership, PACE events, intramural sports, clubs and organizations on campus can keep students away from binge drinking on the weekends. For policy students are not allowed to drink on campus already so it is hard to implement another policy. However, there can be a policy for zero tolerance on alcohol with higher consequences around students getting caught drinking on campus.

10. **Dorm and Campaign:** After getting the residential hall staff members involved in these workshops, they should be able to take what they learned throughout the workshops and apply them to each individual residential hall. This is an easy way of getting student leaders involved in a healthier lifestyle and promoting it to the students. It is good for underclassmen to learn professionalism while they are starting college because they will be able to adapt this lifestyle earlier rather than later.

11. **Stakeholders:**
   - Health and Wellness Club
   - CA’s and RA’s
   - Student Affair Staff
   - Alumni
   - Students
   - Career Services Staff
   - Local Police (UPD)
   - HUB Staff
12. **Overview:** Post College Success is a program created to promote student success after college. The targeted behavior change is excessive drinking. By creating an idea for healthy living, it will support the idea of responsible drinking. The goal of the workshop series is to enhance the education of older college students around how being healthy can produce a more ideal work ethic. Each workshop will teach participants how to be successful in various aspects of professionalism and social life post college. Stakeholders will provide information and perspective on the ways that adapting a professional lifestyle can benefit life in the “real world”. For the first two workshops (“Spiffing Up Your Professionalism” and “How to be Successful in the Work Environment”) participants will come in and work in groups talking about interviews/resume building. Members from Career Services and Student Affairs will attend the workshop to help the students create a better promotion for the professionalism with their careers. PSU Alumni are going to join to network with participants and give insight to what the transition is like from college to working. The last two workshops, (“Drinking in the Real World” and “Having Fun While Drinking Less”) will support the idea of healthier drinking habits. Fun alternative drinking games and education on understanding the science of alcohol will be presented. The University Police Department will raise education around how to legally drink. Health and Human Performance professors will share their ideas on how to “drink healthier” and show evidence on how alcohol affects your body. Numerous incentives and food will be provided at each workshop to keep the participants excited about obtaining the professional, healthy lifestyle.
## 13. Evaluation:

<table>
<thead>
<tr>
<th>Evaluation Questions</th>
<th>Indicators</th>
<th>Data Source</th>
<th>Performance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the program implemented as planned?</td>
<td>● Regular attendance each of the 4 workshops</td>
<td>● Take attendance records for each session on Sundays</td>
<td>● Participants attend all 4 sessions</td>
</tr>
<tr>
<td></td>
<td>● Upper classman participants at PSU</td>
<td>● Facebook group page</td>
<td>● Profiles on all participants</td>
</tr>
<tr>
<td></td>
<td>● Workshops were held every Sunday of March from 5pm-7pm</td>
<td>● Instructors reflection</td>
<td>● All planned sessions implemented with reflections</td>
</tr>
<tr>
<td></td>
<td>● Promote awareness around professional lifestyle</td>
<td>● Twitter</td>
<td>● At least one implication on stall street journal</td>
</tr>
<tr>
<td></td>
<td>● Raise education on how to drink responsibly</td>
<td>● Facebook</td>
<td>● Get at least 50 followers on Twitter and Instagram</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Instagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Stall Street Journal</td>
<td></td>
</tr>
<tr>
<td>Did participants change their behavior?</td>
<td>● Accurate answers on quizzes</td>
<td>● Quizzes</td>
<td>● Students all received an 80% or higher on the quizzes</td>
</tr>
<tr>
<td></td>
<td>● Resume includes certificate of completion</td>
<td>● Resume</td>
<td>● 9/10 Students will obtain a certificate of completion for their resumes</td>
</tr>
<tr>
<td></td>
<td>● Drinking logs to monitor behavior</td>
<td>● Assessment sheets at the end of the workshops</td>
<td>● 80% of participants create and keep log</td>
</tr>
<tr>
<td></td>
<td>● Students report reduced drinking</td>
<td>● Drinking logs</td>
<td>● 50% report reduced drinking</td>
</tr>
<tr>
<td>What impact did the program have on the PSU community?</td>
<td>● Alumni remember and recommend program</td>
<td>● Alumni survey</td>
<td>● 50% response rate from alumni surveys</td>
</tr>
<tr>
<td></td>
<td>● Increased opportunities for fun without drinking</td>
<td>● Student activities calendar</td>
<td>● 2 activities per week added to student activities calendar</td>
</tr>
<tr>
<td></td>
<td>● Students drinking responsibly publicly</td>
<td>● Student attendance at Panther Pub</td>
<td>● At least 75 students attending the Pub Friday and Saturdays</td>
</tr>
</tbody>
</table>
## 14. Logic Model:

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs/Activities</th>
<th>ST Outcomes</th>
<th>LT outcomes</th>
<th>Program Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources</td>
<td>Marketing plan</td>
<td>Campus wide awareness of the program and goals</td>
<td>Obtain successful career skills</td>
<td>Develop professional skills for healthy living</td>
</tr>
<tr>
<td>Recruitment materials and systems • Workshop supplies/videos • Guest speakers</td>
<td>Press releases</td>
<td>Improved resumes and interview and skills</td>
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<tr>
<td>Web presence</td>
<td>Workshops</td>
<td>Increased awareness of the importance of personal habits and presentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Spiffing Up Your Professionalism</td>
<td></td>
<td>Awareness of healthier drinking habits</td>
<td></td>
<td></td>
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<tr>
<td>• How to be Successful in the Work Environment</td>
<td></td>
<td>Entertainments and activities as alternatives to alcohol consumption</td>
<td></td>
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</tr>
<tr>
<td>• Drinking in the Real World</td>
<td></td>
<td>Getting an internship/career</td>
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<tr>
<td>• Having Fun While Drinking Less</td>
<td></td>
<td>Practicing moderate alcohol consumption</td>
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<td>Stakeholders</td>
<td>Marketing plan</td>
<td>Developed professional skills for healthy living</td>
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<td>• Health and Wellness Club</td>
<td>Press releases</td>
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<td>• Students</td>
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<td>• Career Services Staff</td>
<td>• Drinking in the Real World</td>
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<td>• Local Police (UPD)</td>
<td>• Having Fun While Drinking Less</td>
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<td>• HHP Professors</td>
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<td>• Representative on Student Senate for HHP</td>
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15. Bibliography:


Pose for Posture
Jeana DiBona, Ali Garfano, Annie Guerette, Amber Lena
Health Promotion Planning and Evaluation
HE 3240

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Rationale for: Pose for Posture

Are workplaces the cause for poor posture? Establishing and maintaining postural health has profound and long-term effects on minimizing back and neck pain. Imbalanced muscles along with poor posture all have the potential effect of overloading muscles, causing them to become fatigued, tight, weak, and eventually unhealthy. Positive postural health also ensures that muscles are put under the least amount of stress possible, and will help recognize areas of the body that need to be targeted for self-treatment, along with specific stretching techniques and exercises (Mulligan, 2012). According to Mulligan, about 45% of Americans between the ages of 35 and 55 suffer acute back pain each year. According to a study from the University of Washington, the Social Security Administration identified back pain as the top cause of disability in those under the age of 45 in the United States.

A health promotion program that focuses on improving postural health for career-aged adults has many benefits. According to Millar (2015), working adults complain of musculoskeletal pains and many of them are aware that they are directly related to their inadequate posture. A Pose for Posture health promotion program will raise awareness on the risks associated with poor postural health and educate workers on proper techniques and stretches to improve their postural health. Career-aged adults who are working at a desk all day can increase their postural health by simply standing up and doing shoulder rolls and scapular squeezes (Millar, 2015). Back pain, wrist/hand pain, and neck and shoulder pain all cause distress throughout the body. Left untreated this can lead to physical symptoms and chronic disease (Millar, 2015). A postural health program is a great intervention to relieve pain associated with posture and avoid any further debilitating symptoms or disease. Implementing this program will not only assist in decreasing the amount of employees absent from work but also improve their personal lives.

The difference between feeling healthy and dealing with chronic neck or back pain is a matter of inches, when it comes to posture and ergonomics in the workplace (Thorp, 2016). If poor posture in the workplace continues, workers will eventually develop chronic pain. Many people do not realize that posture is one of the main causes of chronic neck and back pain. A crucial solution to this problem is raising awareness and education on risks factors, prevention measures, and techniques and skills to improve poor posture (Rezagholi, 2012). The more educated people are, the more inclined they will be to change and spread awareness and education to others.

There is well-developed, factual evidence that health promotion programs aiming to improve posture have been successful. One example of a successful posture program
implemented in a workplace was a “stretching program.” In this program, female employees were taught proper stretching techniques to increase flexibility in their hamstrings and improve spinal posture (Muyor, 2012). Another study shows the improvement of posture through a low cost fitness program. At the beginning of the program, all subjects had musculoskeletal disorders of the neck, back or wrist. Throughout the program, they exercised for 15 minutes 3 times per week. The results concluded that the subjects had less pain and discomfort in their neck, back, and wrists at the end of the eight-week program (Macedo, 2011). As explained in the previous studies, there is proven information showing the benefits of implementing a postural health program.

Program planners obtained a baseline understanding of PSU employee’s postural health through a questionnaire survey.

Middle-aged female PSU employees provided the majority of the feedback. 75% responded that they might want to attend a program to improve their posture. They responded saying they feel neck and back pain only some of the time. The majority spend 5-10 hours a day sitting. This contributes to their poor feelings surrounding posture and how it has negatively affected them. 90% of the responses concluded that they have considered improving their posture but that they are unsure how to improve. Workshops that received the most interest were proper stretching techniques and walking to improve posture. One question asked was, “If you feel as though you have poor posture, why do you feel that way?” Responses included: too much time sitting at a desk/computer, constantly slouching and being hunched over, scoliosis, desks being too high at work, and the workplace in general. Observations concluded that the majority of PSU staff members spend more than sixty minutes sitting at their desks without standing or walking around. Hunched over posture was observed in those sitting at their computers. Hunched over posture was more severe in those who were writing or reading a paper closely. Relaxed posture was seen when answering a phone or taking a break. The subject’s eyes always seemed to be looking downward, which can cause strain on the neck. Subjects using a standing desk did not appear to be hunch-over or in a slouched position. Their arms were outstretched to reach the keyboard, posture was tall and straight, and eyes were facing forward at the screen.

Values:

1. PSU recognizes that healthy employees are happy employees
2. A culture of health attracts and retains employees
3. Productive long term employees are an asset to the institution
**Mission:**

The *Pose for Posture* program educates Plymouth State University (PSU) employees on the importance of healthy posture and safe biomechanics to improve their overall postural health. This is accomplished through various individual assessments, group workshops, social support and educational support.

**Vision:**

PSU employees recognize the importance of healthy posture and participate in healthy posture techniques.

**Program Goals:**

1. *Pose for Posture* will improve overall postural health of PSU employees.
2. The *Pose for Posture* program educates employees on the importance of healthy posture and safe biomechanics. This will be accomplished through various individual assessments, group programs, social support and educational support.

**Theoretical Basis for the Program:**

Through primary and secondary data, we found risk factors relating to chronic neck and back pain such as:

1. Poor/Insufficient posture
2. Insufficient rest breaks
3. Forceful exertions

The program will use the Social Ecological Model of Behavior Change to support healthy postural habits. The Social Ecological Model of Behavior Change is made up of five levels. First is intrapersonal which is something that exists within one person; someone having awareness of how they affect the world around them. Next there is interpersonal which is relating to relationships or communicating between people. Also included is Institutional; something expressed or organized in the form of institutions. Community is another included which is defined as a feeling of fellowship with others. Lastly is Public Policy, which is the principles, often unwritten, on which social laws are based. Examples of this theory include:

1. Intrapersonal
   - Hanging various posters in employee offices to show simple stretches they could do at their desk
2. Interpersonal
   - Proper stretching technique classes held in AllWell North
3. Institutional
• Standing desks will be provided to PSU employees

4. Community
   • Inviting the Plymouth community to be involved with proper posture programs

5. Public Policy
   • Free yoga classes available to all PSU employees

Overview:

A Pose for Posture is designed for PSU staff, specifically targeting those with a sedentary job. The purpose for this plan educates employees on the importance of healthy posture and safe biomechanics. In order for this to be accomplished program planners will hold a total of six workshops for six weeks. These classes will stipulate various individual assessments, group programs, social support and educational support. Program planners will stress the importance of postural health, balance, strength, and flexibility through all six workshop assessments and follow-ups. Podcasts will be sent out to all participants to reference during and after the workshop is completed. This program will provide participants with life-long skills to help them successfully maintain and achieve correct posture. Becoming aware of the importance of postural health and practicing proper stretching and biomechanics will help to live a long, healthy, and happy life. PREPARE,PRACTICE,POSE,POSTURE.

Objectives:

a) Process
   • By the start of the program, participants will have received educational booklets from the National Institutes of Health (NIH).
   • Prior to the start of the program, program planners will have established and secured educational and learning session space in AllWell North.
   • Prior to the start of the program, program planners will have developed a calendar designating each member’s specific duty.
   • Prior to the start of the program, program planners will have proper advertising organized across campus by posters hung in the HUB, academic buildings and Stall Street journal.

b) Impact-Learning – See Appendix A for booklet
   • After the workshop in week 3, participants will be able to perform 2 exercises to improve balance.
• Participants will be able to perform 3-4 proper postural stretches independently at the completion of the program.
• After receiving educational booklets in week 4, participants will be able to identify 2 to 3 risks associated with strength.
• After attending the workshop in week 4, participants will be able to perform and identify exercises to improve overall strength,
• By the completion of the program, participants will be able to identify at least two ways standing desks will improve their posture.

  c) Impact-Behavior
  • One-year post program, those who participated in activities and educational sessions on improving balance were able to decrease the overall amount of falls.
  • One year after the program, participants will report practicing stretching techniques every day.
  • During a telephone interview following the program, participants will report having reduced pain during work time through standing and posture exercises.
  • After one year of informational class sessions, participants will be continuing to practice at least 2 of the exercises learned each week.

  d) Impact-Environmental
  • After this program, PSU will provide postural health training workshops to employees at least twice yearly.
  • By the end of the program, PSU will increase the number of standing desks each year by 10%.
  • By the end of the program, participants will have access to all 4 podcasts on postural health.

  c) Outcome
  • After the follow-up assessment, participants will have reported that they are continuing postural exercises at least twice weekly.
  • By 2020, participants will be able to teach peers how to use postural health techniques to properly sit and/or stand at their work desks.
  • At the end of the program, participants report that they have sufficient knowledge in postural health and techniques to continue their healthy behavior change.
  • By the end of the program, participants will be educated and have the ability to perform strengthening exercises to improve their posture.
• By the end of the program year, PSU will have established a policy to provide standing desks to all employees.

Intervention Strategies:

a) Health Communication Strategies -

Text message reminders:

• Good alignment is important when sitting since most people spend a minimum of 8 hours a day sitting. Maintaining proper alignment can relieve a significant amount of postural discomfort.

• Proper posture while sitting begins with a proper chair. Chair height should allow feet to be rested comfortably on the floor. Hips and knees should incline 10 degrees and be at a 90-degree angle relative to the back of the chair. Armrests should allow the arms to rest comfortably along the side of the body. Armrests that are too high create extra strain in the neck region.

• Some of the most common incorrect postures while sitting include: leaning too far forward in a chair creating excessive strain of the lumbar spine, sitting in a slumped position due to lack of lumbar support creates incorrect head and neck position.

• Sitting for a long period of time causes knees and hips to stay in a flexed position putting strain on them. It is important to get up frequently and walk around to allow extension of these joints.

• If a significant amount of time is spent standing, postural muscles can fatigue leading to incorrect alignment. Lack of body awareness can lead to improper posture while standing.

• When standing for long periods of time, it is important to shift your body weight from one leg to another.

• Computer work adds a significant amount of stress in the neck and shoulders and contributes to a rounded shoulder position, collapsing the anterior chest.

• Most people spend a large portion of their day sitting at a computer. Improper posture can lead to neck aches, headaches, frozen shoulders and frustration.

Posters: See Appendix C for posters

• Posters to be hung in employee offices of easy, quick proper stretching techniques
Twitter page:

- Sharing and retweeting articles on ways to improve posture from other Twitter pages
- Encourage participants to follow: @PostureMonth @BestPosture @PosturalHealth @Physiodesk @PostureByDesign

Tweet examples:

- *Strong posture helps to look and feel healthy and move without pain.*
- *Habits at work, during exercise, and at play shape the body.*
- *People with good posture enjoy pain-free movement and have more energy!*
- *Core strength and good balance are needed for great posture.*
- *The body is designed to move, not sit in a folded, cramped position for hours.*
- *Most people sit about 13 hrs. and sleep 7 hrs. each day, leaving only 4 hrs. be active.*

Feedback forum:

- Online forum available for participants to provide any feedback, evaluate the program planners and workshops

b) **Health Education Strategies** -

- Workshops to assess postural health and develop skills and techniques for healthy posture and improved overall balance, strength, and flexibility.
  - Week 1: Importance of postural health (knowledge & skill)
  - Week 2: Baseline assessment: general fitness (skill)
  - Week 3: Importance of balance: enhancing balance (knowledge & skill)
  - Week 4: Importance of strength: enhancing strength (knowledge & skill)
  - Week 5: Importance of flexibility: enhancing flexibility (knowledge & skill)
  - Week 6: Summative assessment of knowledge and skill

c) **Behavioral and Social Strategies** –

- In addition to assessments, workshops will include setting goals for changing postural habits at work.
- Participants recruit at least one other staff member to participate in the stretch of the week.
• During the workshops, program planners will encourage participants to look at postural health resources to share at the next workshop or on their social media accounts.
• Build a calendar of events for participants to be active together during breaks.

d) Policy and Environmental Strategies -
• Make standing desks available upon request.
• Allow staff 15-minute breaks in the morning and afternoon.
Logic Model:

**Inputs**
- Plymouth State employees seeking postural health improvement
- Physical therapists
- Healthy PSU wellness coordinator
- Personal trainers
- Health educators

**Outputs & Activities**
- Recruitment communications
- Interactive Educational Workshops
  - **Week 1:** Importance of postural health
  - **Week 2:** Baseline assessment general fitness, Assessment of CV fitness & flexibility
  - **Week 3:** Importance of balance: enhancing balance; balance testing
  - **Week 4:** Importance of strength: enhancing strength; strength testing
  - **Week 5:** Importance of flexibility: enhancing flexibility with exercise
  - **Week 6:** Keeping healthy posture at work. Use of standing desks; workshop evaluation survey

**Outcomes**

**Short-term goals**
- 25 participants recruited for workshops
- Increased awareness of factors affecting posture; sources of pain from poor posture habits
- Awareness of the role of strength and flexibility for healthy posture
- Knowledge of exercises to improve posture and balance
- Demonstrated use of standing desks for healthier posture

**Program Goals**
- Improved postural health
- Improved quality of life

**Long-term goals**
- 25 participants complete all workshops
- Knowledge and regular practice of strength and flexibility exercises to improve and maintain postural health
- Regular practice of balance exercises
- Increased use of standing desks or workstations for postural health

• Plymouth State employees seeking postural health improvement
• Physical therapists
• Healthy PSU wellness coordinator
• Personal trainers
• Health educators

• All Well North
• Space for discussion and activities
• Space for walking and stretching
• Standing desks with information about standing desks
• Resistance bands
• Resources for podcast production
• Educational posters
• Booklets/handouts and flyers
• Assessment equipment
• Training booklets
• Certification for recruitment and retention
• Evaluation survey
## Evaluation Matrix:

<table>
<thead>
<tr>
<th>Critical Questions</th>
<th>Indicators</th>
<th>Data Sources</th>
<th>Performance criteria</th>
</tr>
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<tbody>
<tr>
<td><strong>In what way was the program implemented as planned?</strong></td>
<td>• Regular attendance and participation</td>
<td>• Attendance records</td>
<td>• 100% of the planned events and sessions are presented and completed</td>
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<td>• Completed baseline assessment tests</td>
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<td><strong>What effects is the program having on the participants?</strong></td>
<td>• Participants are aware of the health risks of postural health</td>
<td>• Baseline assessment at the start of the program</td>
<td>• Participants are able to perform techniques</td>
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<td>• Participants are aware of stretching, flexibility, and balance techniques</td>
<td>• Follow up assessment when the program is complete</td>
<td>• Participants will be able to apply knowledge and techniques learned</td>
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<td>• Participants are able to describe the health risks associated with postural health</td>
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<td><strong>What was the impact of the program on the PSU community?</strong></td>
<td>• Increase awareness and education on postural health issues</td>
<td>• Podcasts were created and emailed to all participants</td>
<td>• The community is aware of the AllWell North facility and all it has to offer</td>
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<td>• Reduced the amount of postural related injuries</td>
<td>• Six workshops were implemented at AllWell North</td>
<td>• Participants are aware of all health issues related to posture</td>
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<td>• Feedback from participants</td>
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<td><strong>What was the impact on the regional community?</strong></td>
<td>• Personal trainers and physical therapists from Pemi-Baker Community Health</td>
<td>• Health care professionals attended all six workshops</td>
<td>• Participants can now resource Pemi-Baker Community Health and Mid-State Health for future reference</td>
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<td></td>
<td>• Health educators from Mid-State Health</td>
<td>• Feedback on program improvements provided at the end of the program</td>
<td>• Participants built relationships with health care professionals</td>
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<td>• Increase sponsorships from regional community members</td>
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References:


Appendix A

How to CORRECT YOUR POSTURE
Practical Guide on How to Fix Back Pain, Look Attractive and Improve Your Energy Levels

Appendix B
Appendix C

POSTURAL HEALTH

Spinal Rehabilitation and Postural Flexibility Exercises

This protocol of exercise is designed specifically for spinal strengthening and postural flexibility training. The protocol is intended for everyday use at least once per day.

Please note any exercise should not be continued if painful.

If you have any questions regarding your exercise regime please don’t hesitate to ask.

- Hold each stretch for 15-30 sec
- Stretch slowly
- Stop if you feel pain

1. GLUTEAL & LOW BACK
   - Pull arm down on side of neck: stretch hold 30 seconds
   - Turn head: hold for 15 seconds – repeat 3 times on each side
   - Feel stretch across back of shoulders: hold for 30 seconds
   - Slowly rock head back then forward 5 times each direction

2. GLUTEAL & ABDUCTORS
   - Place hands on hips: attempt to touch elbows, CHIN BACK: hold for 60 seconds
   - Hold for 30 seconds on both sides
   - Feel stretch in front of thigh: hold for 30 seconds

3. GLUTEAL & ABDUCTORS
   - Hold for 60 seconds on both sides
   - Hold for 60 seconds on both sides
   - Keep heel on floor: stretch for 30 seconds

4. GLUTEAL & ABDUCTORS
   - Keeping your spine straight: hold for 60 seconds
   - Rest for 2 minutes
   - Stretch feet away from hands: hold for 30 seconds

5. BACK & LATS
   - Hold on to a doorway: stretch chest and arms as you lean forward for 60 seconds
   - Place hands on hips: attempt to touch elbows, CHIN BACK: hold for 60 seconds
   - Hold for 30 seconds on both sides
   - Feel stretch in front of thigh: hold for 30 seconds

6. OBLIQUES
   - Hold for 60 seconds on both sides
   - Hold for 60 seconds on both sides
   - Keep heel on floor: stretch for 30 seconds

7. BICEPS & FOREARMS
   - Hold for 60 seconds on both sides
   - Hold for 60 seconds on both sides
   - Keep heel on floor: stretch for 30 seconds

8. SHOULDER & RHOMBOIDS
   - Hold for 60 seconds on both sides
   - Hold for 60 seconds on both sides
   - Keep heel on floor: stretch for 30 seconds

9. NECK
   - Hold for 60 seconds on both sides
   - Hold for 60 seconds on both sides
   - Keep heel on floor: stretch for 30 seconds

10. TRICEPS
    - Hold for 60 seconds on both sides
    - Hold for 60 seconds on both sides
    - Keep heel on floor: stretch for 30 seconds

11. SHOULDER & CHEST
    - Hold for 60 seconds on both sides
    - Hold for 60 seconds on both sides
    - Keep heel on floor: stretch for 30 seconds
Pain-Free Posture

- Top of monitor at eye level or just below
- Monitor roughly arm’s length away
- Back straight
- Elbows close to body
- Backrest supporting lower back
- Minimal bend at wrists
- Front of seat not pressing on back of knees
- Adjustable swivel chair
- Feet flat on ground or resting on a footrest
Ready, Let’s Get Steady!

Hope Larson, Taylor Martin, Stacey Oliveria, Reyna Pollak

HE 3240 Health Promotion Program Planning and Evaluation

Spring 2017
Rationale for: Ready, Let’s Get Steady!

According to Healthy People 2020, falls are the leading cause of injury among older adults in the United States. Falls among older adults lead to an emergency room visit every 13 minutes and a death every 20 minutes (CDC, 2016). In New Hampshire alone, over 200 deaths were reported in 2015 as a result of fall-related injuries (New Hampshire Department of Health and Human Services, 2016). It is clear that the number of falls among older adults are rising, as well as the costs and unnecessary deaths. “Over 27,000 deaths were reported last year related to a fall and the financial toll is expected to rise from $34 billion to over $67.7 billion by 2020” (National Council on Aging, 2017). According to that cost statistic, falls are costing the U.S. over $93,000 a day! It is imperative for the general public to know that falls are not a normal part of aging and with proper physical activity and nutrition, falls are preventable.

Physical activity can lower the risk of high blood pressure, stroke, type 2 diabetes, depression, osteoporosis, and early death (Healthy People 2020, 2017). If these risks are lowered, falls can be better prevented. The 2008 Physical Activity Guidelines for Americans recommends that older adults should aim for 150 minutes of moderate-intensity physical exercise per week (Office of Disease Prevention and Health Promotion, 2017). This level of activity is necessary to slow the loss of muscle strength, flexibility, coordination, speed, and endurance, which causes unnecessary falls (Hollmann, et al., 2007). Many older adults do not exercise regularly in fear of a fall occurring. The authors of this program want all older adults to know that, regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. In a study from the Journals of Gerontology, King (2001) found that “psychological and behavioral attributes and skills may facilitate or impede efforts to participate in physical activity regularly. Older adults are more likely to participate in physical activity if the interventions are tailored to their needs and delivered in a sensitive manner.” Regular physical activity can be achieved through simple exercises such as: walking, bicycling, walking stairs, yoga, stretching, standing leg lifts, heel raises, and standing hamstring curls (Harvard Health Publications, 2014). The evidence-based A Matter of Balance (MOB) program supported by The National Council on Aging helps reduce the fear of falling among older adults by teaching them simple, yet effective exercises, which encourages them to increase their activity levels in order to decrease falls. Over 70% of the participants reported that they are more mobile and active, and more aware of how to avoid falls at home (CDC, 2007). Falls are clearly a major problem among older adults that needs to be readily addressed.

The Ready, Let’s Get Steady! program incorporates many evidence-based physical activity programs such as A Matter of Balance (MOB), to encourage individuals over the age of 65 to increase their level of physical activity. The program also represents a collaboration between Plymouth State University and the Pemi-Baker Community Health center, to accomplish the goal of introducing a
population over the age of 65 to disease preventing, strength improving exercises in a safe and supportive manner to meet the ultimate goal of decreasing falls. By providing a dedicated time, convenient space, and socially supportive environment, participants of all activity levels, strengths, and abilities will learn ways to improve their physical strength, coordination, flexibility, and balance. Participants will also learn why it is necessary to continue physical activity, regardless of one’s age.

The Ready, Let’s Get Steady! program is designed to apply evidence-based concepts to educate older adult participants about the importance of physical activity for the aging body. Evidence-based interventions such as walking in groups, sit-to-stand chair exercises, yoga, stretching, standing leg lifts, heel raises, and standing hamstring curls will be used to promote physical activity and increase muscle strength as well as balance. This program will be delivered through educational workshops and group exercise activities. Educational and intervention strategies target older adult participants at the intrapersonal level by providing the knowledge of why physical activity is necessary and the skills necessary to safely exercise. Strategies will also target the interpersonal level in hopes that the group will share learned knowledge and skills with friends and family. The more friends and family involved in this process, the more likely the participants are to adopt and adhere to regular physical activity behaviors learned from this program. The community needs assessment (see appendix A) indicated that older adults prefer to exercise and learn with others who are the same age/activity level. Participants will discover, experience, and practice disease preventing, muscle strengthening exercises in a way that is accessible, convenient, and inexpensive to support long-term physical activity.

This program also promotes and supports Plymouth State University – Center for Active Living and Healthy Communities (CfALHC). The CfALHC “aims to enhance active living, health, and wellness in New Hampshire’s North Country and Lakes Region through research, education, and outreach with community partners” (Plymouth State University, 2017). The community needs assessment (see appendix A) indicated that there are few to no places where older adults can comfortably exercise with social supports and encouragement in the Plymouth region. This program will use PSU’s ALLWell North classrooms and indoor track to provide a comfortable, convenient place for all older adults in the surrounding communities to access. The needs assessment (see appendix A) indicated that it is imperative that the Plymouth community offers low cost or free exercise opportunities to older adults. This program will be successful by collaborating with CfALHC and Pemi-Baker Community Health to provide participants with continuous access to future community physical activity programs and resources. In addition, ALLWell North will provide a stable environment for long term physical activity participation with our program, as well as with future CfALHC events. Funding will be used to promote this program within the community through radio ads and promotional flyers (see appendix B) around the Plymouth area. Funding will also be used to gain partnership with certified exercise instructors through Pemi-Baker
Community Health as well as with health education teachers. *Ready, Let’s Get Steady!* will provide health education and dedicated physical activity times for all older adults in the community. This will result in a smarter, stronger older adult community that will decrease the risk of falls.

**Values**
The philosophy of this program is that every older adult participant is entitled to:
1. Compassionate, respectful care.
2. Up to date, evidence-based resources, interventions, and services.
3. A socially supportive environment that focuses on overall group development.

**Mission**
To improve the overall health and wellness of older adults by providing the support, resources, and services necessary to promote their independence in aging while also increasing their social connections and reducing their risks of falls and disability.

**Vision**
A society in which the older community feels independent, safe, and strong enough to prevent unnecessary falls.

**Goal**
To improve the strength and balance of older adults by providing personalized assessment and structured group exercises.

**Theoretical Basis for the Program**
The Self-Efficacy Theory is about the situation, activity, and self. Past performance, vicarious experiences, social persuasion, physiological/affective states, behavior, cognitions, and affect all play into challenging the behavior and the activity the person is involved in. Past performance means the person has done it before and is confident that they can do it again. Vicarious experiences occur when you see someone who is around the same age, same physical strength, and same health condition performing the physical activity or behavior that gives the person confidence they can also do the behavior or activity. Social persuasion is getting positive feedback from others while doing the behavior. How one feels during the physical activity is the perception of the person's physiological and/or affective state during the act. Not every older adult is the same. There are outside factors that play into effect with every individual.
older adult such as health conditions, environment, physiological perception of the physical activity, etc. The Self-Efficacy Theory relates to older adults because it adapts to all the possible factors in their life. The Ready, Let's Get Steady! program will attempt to reduce falls through physical activity. This theory will greatly help the program adapt to every individual participant by using past performance, vicarious experiences, social persuasion, and physiological state while performing physical activities to reduce falls. For example, during a group exercise session, one older adult may be able to successfully perform a sit-to-stand test. This will instill confidence in the other participants so they will be more willing to try the test as well. With social persuasion and encouragement, all of the participants will feel confident and safe preforming simple, yet effective physical activity interventions such as walking, walking stairs, stretching, standing leg lifts, heel raises, and standing hamstring curls. Interventions will be modified and driven by this theory because participants will gain confidence after routinely preforming the exercises and watching others similar to them preforming as well.

Overview

Ready, Let’s Get Steady! is a program that will help the older adult population reduce the risk of falling by promoting physical activity and fitness. Participants will enjoy a variety of physical activity workshops as well as classroom based workshops focusing on personal fitness, balance, and home safety. Based on individual assessment and goal setting, group activities will foster a socially supportive environment through fun, interactive activities for participants and their family and friends.

According to the Centers for Disease Control and Prevention (2017), older adults should complete at least 150 minutes of moderate-intensity physical activity a week. For substantial health benefits and decreasing the risk of falls, they also need to complete muscle-strengthening exercises on 2 or more days each week. This program is grounded in these exercise recommendations, using evidence-based fall reducing exercises promoted by the National Institute of Aging (2017). Group exercises include but are not limited to: chair exercises including leg raises, knee curls, chair stands, heel-to-toe walks as well as dancing, yoga, walking, and cycling. Each exercise will be modified specifically for each person. Participants will be evaluated periodically based on how they feel they are progressing towards their own personal fitness goals.
Objectives

Process:
1. Prior to the start of the program, 2 certified fitness instructors will be contacted in order to teach the participants evidence-based exercises to promote balance.
2. Prior to the start of the program, there will be 30 members signed up to participate in the program.
3. By the first day of the program, the program planners will distribute informational booklets containing exercise and balance guidelines to participants (see appendix C).
4. Prior to the start of the program, Pemi-Baker Community Health, Blissful Yoga, and Ninth State gym will be contacted in order for participants to try out their facilities.

Impact Learning:
1. By the end of the first workshop, older adults will be able to explain the three systems that control balance.
2. By the end of the program, older adults will be able to demonstrate proper execution of at least three muscle strengthening exercises.
3. During one of the group exercise sessions, at least 50% of the participants will be able to physically demonstrate an example of a muscle strengthening, fall reducing exercise.
4. By January 2018, the older adult participants will have learned at least 3 possible techniques to significantly better their posture, increasing their balance and decreasing their falls.

Impact Behavioral:
1. By the end of the program, older adults will be able to meet the recommended CDC guidelines for moderate-intensity physical activity for the week.
2. By the end of the program, older adults will provide evidence of their attendance with a sign in sheet of visits to various exercise programs/facilities.
3. By the end of the program, participants will show a consistent or improved score on the balance confidence assessment.

Environmental:
1. Through this program, students will provide a free exercise program for older adults.
2. Older adults will have access to student trainers for fitness testing and balance training at no cost.
3. By the year 2018, 20% of the older adults participating in the program will, on a regular basis (3-4 times a week), utilize exercise facilities available in the community.
4. By the end of the first month, the adults participating in the program will find at least 3 people to walk with at least 3 days a week.
5. By the end of the program, participants will have incorporated their children or other family members into their weekly exercise routines for physical and emotional support.

Outcome:

1. By the year 2018, older adults utilizing the program will understand and be able to overcome their weaknesses with balance and physical activity to ultimately decrease the number of their falls per year.
2. By the end of the first month, 80% of the participants that signed up prior to the start of the program, will still be participating.
3. This program will be sponsored by the active aging initiative at Plymouth State University.
4. One year after the program has started, 50% of participants in the program will still be involved in regular muscle strengthening activities on their own time.
5. After this program, participants will report feeling stronger and more confident in their abilities.

Interventions

Health communication strategies:

1. Participants will be recruited through Pemi-Baker Community Health and Mid-State Health
2. Promotion flyers will be given out and posted at AllWell North, Mid-State Community Health, and Pemi-Baker Community Health (see appendix B)
3. Promotional flyer posted in the local newspaper
4. Promotion of word of mouth sharing by participants
5. Printed educational materials (see appendix C)
   - Health benefits of walking
   - How to avoid falls at home
   - Human balance system
   - Enhancing motivation
   - Safety factors and injury prevention

Health education strategies:

1. Dedicated series of workshops with guest speakers and fitness instructors
   - Fitness instructors will show participants fun and effective ways to exercise
   - Guest speakers (doctors, gerontologists, other older adults) will speak about their experiences with aging, falls, and fall prevention
2. Group exercises
   - Direct instruction and participation of proper body mechanics
• Lower body muscle strengthening exercises
• Balance promotion exercises
• Group walking
• Strategies to avoid falling in everyday life

3. Oral presentations regarding importance of fall reducing exercises and aging
• Fall statistics
• Group discussions regarding fear of falls, what to do if you fall, and coping mechanisms after a fall

Behavioral & social strategies:
1. Incentives given for continuous attendance and consistency of exercising
   • T-shirts, water bottles, pedometers, etc.
2. Group formations
   • Participants will be encouraged to form groups to increase social supports through social media (Facebook groups) and/or email
3. Using personal logs for tracking exercise participation by hand or using cell phone applications
4. After each day in the program, participants will demonstrate one exercise or piece of pertinent information they have learned

Policy & environmental strategies:
1. Group field trips to show participants where they can exercise around Plymouth, NH. Participants will be able to try out places such as:
   • Pemi-Baker Community Health center gym and pool
   • Plymouth State University gym and pool
   • Blissful Yoga
   • Ninth State gym
   • Hiking, biking, walking trails
2. Incorporating family and friends into the program
   • Family members and friends are encouraged to join group field trips and/or group exercise classes
   • Activities involving family and friends will be available for participants
## Logic Model

<table>
<thead>
<tr>
<th>Inputs: What we Invest</th>
<th>Outputs: What we produce/activities</th>
<th>Short term objectives/outcomes (Weeks 1-5)</th>
<th>Long term objectives/outcomes (Weeks 6-8+)</th>
<th>Goal</th>
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<tbody>
<tr>
<td><strong>People:</strong></td>
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<tr>
<td>- Patients from MSH &amp; Pemi-Baker</td>
<td>• Recruiting of participants</td>
<td>After the week 2 workshops, participants will be able to explain the 3 systems that control balance</td>
<td>Participants will report feeling stronger &amp; have an improved score on the Balance Confidence assessment</td>
<td>Increase participant’s awareness and knowledge about age-related falls and fall prevention, to increase their physical activity, in order to reduce their risk of falls and increase their quality of life.</td>
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<tr>
<td>- Fitness instructors</td>
<td>• Fall/Risk assessment</td>
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<td>- Geriatric doctors/nurse</td>
<td>• Workshops on fall statistics &amp; importance of fall prevention</td>
<td>After week 4 workshop, participants will be able to demonstrate at least 3 fall reducing exercises</td>
<td>Participants have learned muscle strengthening, fall reducing exercises to do on their own time</td>
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<tr>
<td>- PSU student interns</td>
<td>• Group exercises</td>
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<td>-</td>
<td>• Records of daily attendance/walking</td>
<td>After week 5, participants will understand fall prevention &amp; make their homes safer</td>
<td>Participants will exercise regularly with new peers from this program or family/friends</td>
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<tr>
<td><strong>Workshops</strong></td>
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<tr>
<td><strong>Week 1:</strong> Getting started, introductions, discussions on fear of falls/fall experiences.</td>
<td>After the week 2 workshops, participants will be able to explain the 3 systems that control balance</td>
<td>Participants will report feeling stronger &amp; have an improved score on the Balance Confidence assessment</td>
<td>Increase participant’s awareness and knowledge about age-related falls and fall prevention, to increase their physical activity, in order to reduce their risk of falls and increase their quality of life.</td>
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<td><strong>Week 2:</strong> Benefits of exercising workshop, Human balance system workshop, Balance &amp; strength assessments, Goal setting &amp; handout of personal journal</td>
<td>After week 4 workshop, participants will be able to demonstrate at least 3 fall reducing exercises</td>
<td>Participants have learned muscle strengthening, fall reducing exercises to do on their own time</td>
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<td><strong>Week 3:</strong> Participants bring a friend/family member! Social support workshop, effective stretching workshop, walking &amp; group exercises on the AllWell track</td>
<td>Participants will share new knowledge with family/friends, gaining social support</td>
<td>Participants will exercise regularly with new peers from this program or family/friends</td>
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<tr>
<td><strong>Week 4:</strong> Fitness instructors come and demonstrate exercises focusing on balance &amp; lower body strength</td>
<td>After week 5, participants will understand fall prevention &amp; make their homes safer</td>
<td>Participants will report feeling safe enough at home and in the community to meet the CDC’s physical activity guidelines for the week to reduce the risk of falls</td>
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<td><strong>Week 5:</strong> Instructor taught yoga class, guest speaker geriatric physician on fall prevention at home</td>
<td>After week 5, participants will understand fall prevention &amp; make their homes safer</td>
<td>Participants will report feeling safe enough at home and in the community to meet the CDC’s physical activity guidelines for the week to reduce the risk of falls</td>
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<td><strong>Week 6:</strong> Revisiting &amp; change of goals if necessary, group walking on the track</td>
<td>After week 5, participants will understand fall prevention &amp; make their homes safer</td>
<td>Participants will report feeling safe enough at home and in the community to meet the CDC’s physical activity guidelines for the week to reduce the risk of falls</td>
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<td><strong>Week 7:</strong> Group field trips to Pemi-Baker Community Health, PSU gym/pool, Blissful Yoga, Ninth State gym, hiking/biking trails</td>
<td>After week 5, participants will understand fall prevention &amp; make their homes safer</td>
<td>Participants will report feeling safe enough at home and in the community to meet the CDC’s physical activity guidelines for the week to reduce the risk of falls</td>
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<td><strong>Week 8:</strong> Reassess if goals were met, Discussion about what can be done to reach goals, program conclusion, balance &amp; strength assessments, confidence assessment</td>
<td>After week 5, participants will understand fall prevention &amp; make their homes safer</td>
<td>Participants will report feeling safe enough at home and in the community to meet the CDC’s physical activity guidelines for the week to reduce the risk of falls</td>
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<td><strong>Resources:</strong></td>
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<td>- Flyers posted at MSH, Pemi-Baker, AllWell ad</td>
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<tr>
<td><strong>AllWell North:</strong></td>
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<tr>
<td>- Classroom with table &amp; chairs</td>
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<td>- Large walking/exercising areas</td>
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<td><strong>Local fitness centers:</strong></td>
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<td>- PSU gym &amp; pool</td>
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<tr>
<td>- Pemi-Baker gym &amp; pool</td>
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<tr>
<td>- Ninth State Gym</td>
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<tr>
<td>- Blissful Yoga</td>
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<tr>
<td>- Hiking &amp; walking trails</td>
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<td><strong>Equipment:</strong></td>
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<td>- Pedometers</td>
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<td>- Water bottles</td>
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<td>- T-shirts</td>
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<td>- Refreshments</td>
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<td>- Certification of completion</td>
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## Evaluation Matrix

<table>
<thead>
<tr>
<th>Evaluation Questions</th>
<th>Indicators</th>
<th>Data Sources</th>
<th>Performance Criteria</th>
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</table>
| **Was the program implemented as planned?** | • Regular attendance from instructors and participants  
• Full participation from instructors and participants | • Attendance records (formative)  
• Photos of participants in action (formative) | • At least 20 out of 30 participants came to every session  
• At least 85% of the workshops in the program were performed |
| **What was the impact of the program on participants?** | • Participants set a physical activity goal  
• Participants found the program enjoyable and informative  
• Participants know how to complete the exercises  
• Participants continued to build on goals that were made | • Record goals in a journal log (summative)  
• Muscle strengthening assessment records (summative)  
• Feedback from participants (summative)  
• Demonstration of exercises (formative)  
• Physical activity and balance assessment records (summative)  
• Instructor observations (formative)  
• Photo journals; home improvements for fall reduction (summative) | • At least 75% of participants showed improved muscle strength  
• At least 65% of participants have reduced their need for assistance while walking |
| **Were balance and muscle strengthening goals set by the participants achieved?** | • Participants are successfully able to perform activities and exercises | • Weekly log recorded (formative)  
• Physical activity and balance assessment records/Progress reports (summative) | • 80% of participants achieved their goals  
• 80% of participants report improved feelings of health |
| **What was the impact of the program on the community?** | • Free exercise opportunity for older adults  
• Internship opportunities for students  
• Health promotion collaboration opportunities between PSU, Pemi-Baker, and Mid-State Health | • Attendance records (summative)  
• Internships for students (summative)  
• Student weekly reflection papers (formative)  
• Increase in programs for community members (summative)  
• Increase in facilities available to the community (summative) | • 85% of participants will continue to participate in physical activity after the program  
• 85% of participants will have recruited at least 2 other people to partake in physical activity  
• At least 2 students interns from 2 different disciplines |
Bibliography:


Center for Active Living and Healthy Communities, Plymouth State University. (2017). About the center. Retrieved from https://www.plymouth.edu/center-for-active-living-and-healthy-communities/


Appendix A – Needs Assessment

Observations by Taylor Martin

This needs assessment was done by directly and unobtrusively observing older adult male and females, ages 60-80 exercising at Plymouth State University’s AllWell North facility on a few different occasions. Exercise at any age is beneficial for the body and prevents early death, according to research. Regular exercise even just walking, helps slow the loss of muscle strength, flexibility, coordination, and endurance, which helps prevent unnecessary falls among older adults (Hollmann, et al., 2007). Barriers to physical activity for older adults include lack of physical activity knowledge, fear of falling, and lack of money and resources. AllWell North and the Plymouth State University campus gym provide a great and inexpensive place for people of all ages and activity levels to exercise. There are a few other places in Plymouth such as Blissful Yoga and the Pemi-Baker Community Health center which also support physical activity for all ages at the community and institution levels. However, these places may be more costly, which poses a barrier for older adults who are already on fixed incomes. Another barrier to physical activity for older adults is the fact that the Plymouth area is very rural and there are not many very well maintained sidewalks for older adults to walk on. These unsteady, unmaintained, or even nonexistent sidewalks enforce the fear of falling among older adults. During my observations, I joined in with the older adults and walked around the indoor track in order to closely observe them. I noticed many people talking and praising this safe and convenient facility. AllWell North provides a safe and simple structured place for older adults to walk, run, or bike at their own convenience. I noticed older adult participants seemed to have a feeling of being safe and happy, which supports physical activity at the individual level. I immediately noticed that everyone performed better in a group, whether it was just two people or more. The group structure promoted physical activity through socialization and encouragement at the interpersonal level. I noticed that groups preferred to stay with people of their same sex. Men were walking with men and women were walking with women. I thought it was interesting that everyone had a different physical activity level but they were able to incorporate everyone, no matter what physical
activity level, into their walking groups. Although most of the older adults preferred to do less intense cardiovascular activities (walking vs. running or biking), I noticed that people were more apt to push themselves to work harder and faster if the other group members were walking harder and faster. It seemed as if most people preferred to do whatever the rest of the group was doing, even if they did not want to. I overheard one woman say, “let’s pick up the pace for this last lap” and they began walking faster even though the other women clearly said, “do we really have to?” The group dynamic promotes socialization, support, and encouragement which will help reinforce positive attitudes towards physical activity. The Ready, Let’s Get Steady! program uses the convenient AllWell North facility to provide older adult participants the knowledge and resources to effectively exercise to prevent falls within a supportive group setting.

**Interviews by Reyna Pollak**

This needs assessment is the result of the interviews of three people over the age of 65. The questions prepared in this interview investigate their sense of balance and their fears of falling when they are active. Emotional and physical support may not be completely present for these individuals but it plays a huge factor in becoming more fearless and decreasing the amount of falls. I have noticed through research and the answers in this interview, that one participant was explaining how older individuals seem to be perceived as not being incredibly active by younger generations. This makes it harder for them to get out of their comfort zone and become healthier.

Through my research, I have learned that older adults face several barriers when it comes to physical activity but they also have some opportunities that younger individuals do not. Retirement gives many older adults the extra time to get active if they wish to. Some older adults have incredibly low self-efficacy which can be due to a few things. One reason for this, is that they have little support. Another reason is that they have been injured in the past and refuse to get hurt again. They think less of themselves because they could not successfully exercise or complete the task the first time, so why would they try it another time and risk falling again? The lack of parks, bicycle trails, sidewalks, and safe and pleasant areas to exercise is another barrier when it comes to lack of physical activity in older adults.

The most important thing that I have learned through all of this is that as a health promoter, every older person has to be treated as an individual. They are all different and all require separate recommendations. I have also found that older people love to socialize. It provides them extra encouragement and support to invite a friend to work out with them. It is also much safer to be physically active that way. The interview questions are listed on the next page.
Person 1, Age 85:
- How many times have you fallen in the past month? 0
- How would you rate your overall physical strength? Good
- How often are you physically active during the week? I like to get out for walks with my dog so I do that every day but not for too long and that’s about the extent of it
- Do you have a fear of falling? No, I am pretty comfortable with my ability to get around on my own
- If you’re not physically active, why? I fell down the stairs at night when I was going to get a drink of water a year ago and broke my arm in a few spots. I also bashed up my head pretty good and really hurt one of my legs. Not too sure what I did to my leg but it still hurts today so it makes it very difficult to accomplish all the things I would like to get done, including being more physically active than I am
- If there were exercise opportunities within your community, would you take advantage of that? I absolutely would. I love getting out of my house and being as social as possible, especially because this is such as small town. I have lots of friends that I am sure would take advantage of that as well
- Do you need assistance in your everyday routine? No, I am slowing down but am still perfectly capable of getting by on my own
- Can you walk up and down the stairs without assistance of another person? Yes
- Can you walk on an uneven surface? I think that I could but it would be very hard
- Do you have a fear of falling when walking in a dark area? No, I am pretty comfortable with my ability to get around on my own

Person 2, Age 86:
- How many times have you fallen in the past month? 1, I was making lunch for my wife and I went to go get more wood for the fire by the kitchen and bent down and my knees ended up giving out and I fell and hit my head on the stove
- How would you rate your overall physical strength? In between poor and good, I used to be strong but my muscles are deteriorating a little bit
- How often are you physically active during the week? I try to get outside every day but I can’t walk far because of my back so I walk up and down my driveway a few times. My daughter and physical therapist say it is better than nothing.
- Do you have a fear of falling? On occasion, yes
- If you’re not physically active, why? I recently had back surgery and I honestly think I am in denial of how fast my health is declining and it depresses me that I can not do what I used to be able to do. I hiked Mount Washington for my 80th birthday, it has only been 6 years and I could not imagine being able to complete that today which saddens me quite a bit. I have also had 2 eye surgeries in the past month because I think that I am starting to go blind
- If there were exercise opportunities within your community, would you take advantage of that? I think that I would want to but I am not sure if I would be able to. I was a part of a group in our community called over the hill hikers. I would give anything to be able to hike with them again
- Do you need assistance in your everyday routine? No, but if there is someone at my house besides my wife like children or grandchildren, I always take advantage of that. I don’t like to call it “taking care of me” but I just let them get everything for me while I sit down and relax. I have a cane as my assistance when walking so I don’t have to rely on
everyone else
- Can you walk up and down the stairs without assistance of another person? Yes, but I use the railing
- Can you walk on an uneven surface? I do not believe that I could
- Do you have a fear of falling when walking in a dark area? Absolutely

**Person 3, Age 65:**
- How many times have you fallen in the past month? 1, I fell on the ice outside of my house
- How would you rate your overall physical strength? I would rate it pretty excellent right now
- How often are you physically active during the week? Every day, my daughter got me back into going to the gym so I am trying hard to lose weight and work out as much as possible
- Do you have a fear of falling? Sometimes if I am on a slippery floor or something
- If you’re not physically active, why? I am physically active despite all of this back pain I have been having, so it puts a bit of a damper on my routine at times
- If there were exercise opportunities within your community, would you take advantage of that? Yes, right now I play basketball at the community center with a bunch of guys half my age and I feel real old
- Do you need assistance in your everyday routine? No
- Can you walk up and down the stairs without assistance of another person? Yes
- Can you walk on an uneven surface? Yes
- Do you have a fear of falling when walking in a dark area? Of course, it has never happened but I wouldn’t say the thought never pops into my head when walking the dog or from my car to my house

**Survey by Stacey Oliveria:**

This needs assessment was a survey generated through the online program *Survey Monkey*. The questions prepared for this survey were used to assess the individual's fear of falling and weaknesses, as well as how often they are physically active throughout the week. One of the big concerns in older adults is falls. The interview questions:

1. How many times have you fallen in the past month?
2. How would you rate your overall physical strength?
3. How often are you physically active during the week?
4. Do you have a fear of falling?
5. If you are not physically active why?
6. If there were opportunities to be physically active within your community would you take advantage of it?
7. Do you need assistance in your everyday routine?
8. Can you walk up and down the stairs without assistance?
9. Can you walk on an uneven surface?
10. Do you have a fear of falling when walking in an unlit area?

The *Ready, Let’s Get Steady!* program not only is designed to educate older adults on the importance of physical activity but will overall decrease one’s risk of falls. While looking at the results of this survey, I noticed that when 17% of the individuals responded that they had fallen 0-5 times in the past month, it directly correlated with the 83% who said that they exercise 3-5 times a week. This not only goes to show that the more older adults exercise, the stronger they are; it shows that being physically active decreases one’s risk of falls. Often times we make a generalization that all older adults are weak and that they are not physically active; but this research has proven otherwise when 83% claimed that their physical strength was moderate. With the proper support and guidelines, the older adult population can become one of the strongest which is what *Ready, Let’s Get Steady!* plans to do. The *Ready, Let’s Get Steady!* program plans to use evidence-based concepts to educate the older adult population, not only on the importance of physical activity but also the right amount and type of physical activity they can do to reduce their risks of falling by making them stronger.

After collectively conducting this needs assessment, we have learned that many older adults do not participate in physical activity for various reasons such as health related issues, lack of funds and resources, learned helplessness after a fall, lack of knowledge regarding physical activity, and fear of falling. After completing this needs assessment, it is clear that every person is at a different level of physical activity with their own barriers to overcome. Each participant will be assessed and treated as their own unique self, incorporating their own wants, needs, attitudes, and fears within our program. Exercise modifications will be made for each person as necessary. It is also apparent that group exercises will be beneficial. When people see that other people their age are able to complete physical activities, they are more likely to persevere and try it themselves. Group exercises will allow participants to socialize and support one another. The *Ready, Let’s Get Steady!* program aims to improve the overall health and wellness of older adults by providing the support, resources, and services necessary to promote their independence in aging while also increasing their social connections and reducing their risks of falls and disability. Our main goal is to improve the strength and balance of older adults by providing personalized assessments, resources, and structured group exercises to improve the knowledge and attitudes our participants have towards exercising.

**Focus Group by Hope Larson:**

I organized a focus group of older male and female adults that resided at Brooksby Village in Peabody Massachusetts. Five people participated in the focus group, their ages ranged from 69-77. Brooksby Village provides multiple different services for their residents depending on the level or type of care that they need. Conducting the focus group was easier due to the fact that they all somewhat knew
each other already so discussions flowed very well. The participants were asked a total of twelve questions: three engagement questions and nine exploration questions. The questions that were asked inquired about the participant’s physical strength, health concerns, what physical activities they participate in, and if they have any concerns with falling. Within the group their physical fitness levels and health concerns vary which will give good statistics for the Ready, Lets Get Steady! program.

Location: Common area in Brooksby Village

5 Participants:
1. Barbara Wiburg (F) age: 71 (participant #1)
2. Chuck Garrior (M) age: 76 (participant #2)
3. Marie Foss (F) age: 73 (participant #3)
4. Joe Pinet (M) age: 69 (participant #4)
5. Suzanne Walker (F) age: 77 (participant #5)

Engagement Questions
1. What physical activities do you enjoy doing?
   - #1: I enjoy going for walks around the complex. There are a lot of buildings to walk throughout and walkways all throughout the property. I also like to go to the pool, its only 4 ft. deep but you can still do laps and exercises in it.
   - #2: I do not do much physical activity besides walking around in my everyday life.
   - #3: Due to my loss of eyesight, I do not do much physical activity. I walk around the complex like many of us do and I try to go in the pool but it is hard if others are in the pool as well.
   - #4: The only physical activity I am involved in is my rehab program that I have to be involved in due to my open heart surgery that I had.
   - #5: I cannot do much physical activity. I walk with a cane so it definitely limits my mobility.
2. Do you have any health concerns or conditions? If so, what do you do to help or overcome them?
   - #1: I had triple bypass surgery last year. It made me realize how I needed to change my lifestyle and diet. I went through my rehab program and I try to continue to follow the exercises and diet my doctors have given me.
   - #2: *No response*
   - #3: Other than my eyesight, I am in very good health besides some high blood pressure.
   - #4: I had open heart surgery a couple of months ago that is the only condition I have.
   - #5: I have had two heart attacks, both of my knees have been replaced, and I have arthritis in both my hands.
3. Do you have any concerns when it comes to falling?
• #1: I do not.
• #2: I do not as well.
• #3: I have fallen a couple of times because of my eyesight. I do get nervous sometimes when I am alone walking.
• #4: I do not have a fear of falling.
• #5: I do and I don’t. I rely on my cane a lot to support me and to help me get around.

Exploration Questions
1 How is your overall physical strength?
• #1: I believe I have good overall strength because I keep up with my exercises and physical therapy.
• #2: I don’t think I have very good physical strength. I am not very physically active.
• #3: I do not have very good physical strength. I have had to cut down on the activities that I do because of my eyesight.
• #4: I am working on my strength through my rehab program that I have had to do from my surgery.
• #5: I do not have good physical strength. My mobility is limited.

2 How often are you physically active during the week?
• #1: 3-4 times.
• #2: 1-2 times maybe.
• #3: 1 time maybe.
• #4: 3 times.
• #5: none.

3 Do you have a fear of falling? If so, why?
• #1: No. I have had no issues with falling
• #2: I have fallen due to tripping but other than that I do not have a fear.
• #3: I do because of my eyesight.
• #4: I do not have a fear.
• #5: I do because I rely on my cane to get around if I don’t have it I have a lot of issues walking or getting around.

4 Do you need assistance in your everyday life? If so, what kind of assistance and for what?
• #1: No.
• #2: No I live alone but if I need assistance I can get it.
• #3: Yes, when I get meals or need to go to the store I get some assistance.
• #4: No.
• #5: Yes, I do. I need help carrying things and getting around from place to place.
5 Do you feel you have the support you need if you need help?
  • #1: Yes, where we live provides a lot of support if needed.
  • #2: Yes, I have my family and the staff in our facility.
  • #3: Yes!
  • #4: Yes, where we live accommodates everyone’s needs.
  • #5: Yes, I am able to get support whenever I need it.
6 What kind of physical activities do you have access to?
  • #1: I have access to walking paths, physical therapy, pool, and a gym.
  • #2: We all have access to those facilities.
  • #3: Same.
  • #4: I have the same access.
  • #5: I also have the same access, I am just unable to use most of the facilities.
7 If there were opportunities to be physically active within your community would you take advantage of that?
  • #1: Yes, I would. I like to have a variety of activities so I don’t get bored of doing the same thing.
  • #2: Probably not.
  • #3: Maybe depending on what is offered.
  • #4: Maybe after my rehab program.
  • #5: No I do not like to leave the property unless I have to.
8 Are you currently in a rehab program or recovering from any operations you’ve had to undergo?
  • #1: No I was earlier this year.
  • #2: No.
  • #3: No.
  • #4: I currently am in a rehab program from my open heart surgery.
  • #5: No.
Appendix B – Promotional flyer

READY, LET’S GET STEADY!

Group exercise program for adults ages 60+

Participants will be learning:
- The benefits of exercise
- How to avoid falls at home
- Lower body strengthening exercises
- Balance promoting exercises
- Places to exercise in the community

Join us every Tuesday & Thursday 6:30-8am at the AllWell North Track!

Bring a friend!

Come join us for fun and interactive group exercises that could change your life!

PLYMOUTH STATE UNIVERSITY
(603) 535-3488
healthy-psu@plymouth.edu
Appendix C – Informational booklet for participants

EXERCISE, FALL PREVENTION, AND MORE!

READY, LET’S GET STEADY!

Falls among older adults lead to an emergency room visit every 13 minutes and a death every 20 minutes (CDC, 2015).

Over 27,000 deaths were reported last year related to a fall (National Council on Aging, 2017).

Falls cost the U.S. over $34 billion in healthcare dollars a year (National Council on Aging, 2017).

Falls are NOT a normal part of aging!

Get active & avoid falls, disability, and illness.

The Importance of Exercise
Exercise is important no matter your age! Exercise prevents muscles from shrinking (atrophy).

When you lose muscle tone, your risk for falls, illness, and disease increases greatly. We want everyone to know that falls are 100% preventable with proper physical activity and nutrition.

Physical activity can also lower the risk of high blood pressure, stroke, type 2 diabetes, depression, osteoporosis, and early death.

Physical activity can be fun and easy!
Exercise Recommendations
- At least 150 minutes of moderate aerobic activity every week: cycling, walking, biking, swimming, pushing the lawn mower, kayaking and
- Strength exercises on 2 or more days a week that work all major muscle groups: legs, hips, back, abdomen, chest, shoulders, and arms

OR
- 75 minutes of vigorous aerobic activity: running, tennis, dancing, football, hiking and
- Strength exercises on 2 or more days a week that work all major muscle groups: legs, hips, back, abdomen, chest, shoulders, and arms

*Rule of thumb is that 1 minute of vigorous activity provides the same health benefits as 2 minutes of moderate activity

OLDER ADULTS AT RISK FOR FALLS SHOULD COMPLETE BALANCE & COORDINATION EXERCISES 2 DAYS A WEEK: YOGA, TAI CHI, DANCING
Simple, yet effective exercises for fall prevention

For more information, go to www.go4life.nia.nih.gov

Exercises like these help improve lower body muscle strength, balance, flexibility, and coordination.

1. Leg lift without balance
2. Leg lift with balance
3. Thigh stretch
4. Heel-to-toe walk
Appendix C Continued

5. Heel lifts

6. Practice getting on the floor, as if you have fallen

7. Now, practice getting up from a fall