Health and Fitness for Women Age 45-60

A Curriculum

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Curriculum Development in Occupational Education & Training
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Health and Fitness for Women Age 45-60

Curriculum Foundation

Definition

As the median age of the population in the United States gradually increases, members of the baby boomer generation "Americans born between 1946 and 1964" (Schmitz, 1997, p.1) are beginning to see and feel the effects of aging. Many of them, however, are "trying to redefine middle age as mid-youth, and they are reinventing mid-life by defying the stereotypical image of a 50 year old" (p. 2). They are fighting the aging process with all available tools: diet, exercise, cosmetics, cosmetic surgery, vitamins, herbal and hormonal therapy. They are paying close attention to both mental and physical health, and are making healthy lifestyle choices in an effort to more fully enjoy the middle and later years of life. Preventive measures, which may not have been adhered to, or even realized in younger years, are now being seriously considered. Baby boomers know their life span will typically be between 75-85 years and they want to be both mentally and physically fit as long as possible.

Regular exercise and a low-fat diet consisting mainly of vegetables, fruits, grains and calcium-rich foods seems to be the battle cry of health and fitness professionals nationwide (Brody, 1997, p. 413). In its "Dietary Guidelines for Americans," the United States Department of Agriculture supports moderate consumption of all food groups. At the same time however, fad diets purporting the benefits of protein over carbohydrates, or carbohydrates over protein, continue to assail the general public daily, and quick-fix weight loss programs are available for those who have the financial resources to participate in them. Because of this plethora of information, it may be difficult to decide just what constitutes healthy lifestyle choices. This curriculum is designed to help women age 45-60 to make the best diet and nutrition choices for their lifestyle and health needs.

Women aged 45-60 have special concerns as they enter middle age. Many will experience menopause and the resultant decline in the body’s natural production of estrogen. Common knowledge and experience admits both physical and mental changes and challenges during this natural progression from the childbearing years. Many different components of the generic health and fitness title will be explored in this curriculum in an effort to help women achieve and maintain optimal mental and physical health during the 45-60 age span. These components include nutrition and diet, physical activity, mental and physical health, weight management, and lifestyle choices.

Rationale
This curriculum is designed to address the fitness and health concerns of women age 45-60, recognizing that this gender-specific age group has special needs that impact individuals regardless of ethnic, cultural or socio-economic boundaries. Osteoporosis is one concern, since according to Barondess (2000), women account for 80 percent of all osteoporosis cases (p. 94). Barondess explains that:

Women are more vulnerable to osteoporosis than men because after menopause their bodies experience a huge drop in the hormone estrogen, whose presence helps renew bone tissue. For post-menopausal women, the most common medical response to osteoporosis is hormone replacement therapy. Boosting estrogen levels strengthens the entire skeleton and reduces the risk of hip fracture. (p. 94)

Barondess also reports that cardiovascular disease is now "recognized as the leading cause of death in American women, claiming more of their lives than the next 16 causes of death combined" with "women especially vulnerable to high blood pressure, coronary heart disease (heart attack and heart failure) and stroke" (p. 95). Barondess continues to explain that those women whose bodies are still producing estrogen have a natural defense to cardiovascular disease, since "estrogen combats high blood pressure" and "controls cholesterol levels" (p. 95). This is one reason why many doctors prescribe hormone replacement therapy for post-menopausal women, especially those with a family history of coronary heart disease (p. 95).

There are side effects to this therapy, however, and many women are choosing to explore alternative remedies such as soy and calcium supplements.

The practice of weight-bearing exercise such as walking and aerobics is important for women in this age group because of the positive effect it has on strengthening bone mass, and thus reducing the debilitating effects of osteoporosis. Other healthy lifestyle choices to be considered by women age 45-60 in the battle against cardiovascular disease, osteoporosis, and other age-related health concerns are not smoking, reducing alcohol and caffeine, and maintaining a healthy body weight through a well-balanced diet and exercise.

While both the industrial and information revolutions have provided enormous opportunities for personal and economic growth and development, it has also changed the world of work to the point that manual labor is rare for most workers, especially women. Many sit at a desk, working at a computer for eight hours a day, and for some, the mental stress and physical inactivity of the workplace may lead to a decline in health and physical fitness. Swain (2000) reports that

Exercise is the key. A wealth of scientific research has firmly established that exercise is essential to good health. Individuals who engage in regular exercise have a lower risk for many chronic diseases. Aerobic exercise such as walking, running, bicycling and swimming is best for developing cardiovascular fitness and reducing the disease risk. Resistance
training, such as weightlifting, is necessary for developing muscle strength and maintaining the ability to live independently far into the retirement years. And any type of exercise that places stress on the bones weightlifting as well as certain aerobic exercises, like walking and running will stimulate bone health and reduce the risk of osteoporosis. (p. 9).

Not only does regular exercise help protect women’s bodies against osteoporosis and cardiovascular disease, but "since 1985, the American Cancer Society has recommended regular exercise as part of its 10-step program to prevent cancer (Brody, 1997, p.65). Additionally, experiments have shown that "moderate exercise often results in a temporary increase in blood levels of various immune cells and substances that may improve resistance to infection" (p. 66). In other words, regular physical activity is good for the human body.

Regular physical activity is also one of the major factors in weight management, with diet being the other key to a healthy weight. The word diet is often associated with a restrictive, self-denial measure. In reality, diet is defined by the Oxford Dictionary of Current English (1996) as the "range of foods habitually eaten by a person" (p. 239). Culture, environment and lifestyle all impact the diet of American women age 45-60, and no doubt, the diets are as diverse as the women themselves. According to the U.S. Department of Agriculture (2000), "since there are many foods and many ways to build a healthy diet and lifestyle, there is lots of room for choice" (p. 2). These choices should be guided by the Food Pyramid and based primarily on "vegetables, fruits, grains, skim milk, and fish, lean meat, poultry, or beans with little added fat or sugar" (p. 8). Contrary to many fad diets and weight loss programs, "you can enjoy all foods as part of a healthy diet as long as you don’t overdo it on fat (especially saturated fat), sugars, salt, and alcohol" (p. 3). However, people of all ages and genders are susceptible to eating disorders, and women age 45-60 may be especially prone to poor eating habits when the physiological symptoms of menopause make themselves evident in the female body. This curriculum will provide the information and knowledge necessary to encourage and motivate women age 45-60 to adopt healthy eating habits.

A wide range of mental and physical health issues face women age 45-60. Not only are these women facing the onslaught of menopause and the emotional and physical symptoms it entails, but some may also experience empty-nest syndrome, the responsibility of caring for aging parents, and divorce or death of a spouse. Even those fortunate enough to escape these major life events are faced with their own mortality and age-related health concerns. Aging is a major concern for members of the baby boomer generation; however, "aging is not a disease but a genetically determined process, like changing from a child to an adolescent to an adult. The process can be sped up by bad health habits and psychological stress, but it cannot be prevented" (Laborde, 1999, p.1). Conversely then, good health habits and reduction of mental stress may slow the process, and the knowledge and information in this curriculum may serve as the means by which women age 45-60 endeavor to slow the aging process.
While women age 45-60 living in the United States may differ in their beliefs and values, religious and cultural mores, educational and economic status, as human beings, they will all face the mental and physical health challenges awaiting them as they enter middle age. Specific culture, ethnic or religious beliefs may restrict certain foods in their diet, but all women in this age group can benefit from information and knowledge of food choices, and recognition of the nutritional value of the vitamins and minerals, carbohydrates, fats and proteins occurring in food naturally, and the role it plays in combating disease and age-related health concerns. A wide range of physical activity is possible for women at all levels of physical ability, and may be easily incorporated into everyday life. This combination of diet and nutrition, along with physical activity is essential for women age 45-60 to successfully address the changes and challenges presented by menopause and aging. Adoption of healthy lifestyle patterns and choices is possible even within the confines of social, cultural and religious boundaries.

Content Source

The field of health and nutrition serves as the common body of knowledge for deriving instructional content for this curriculum. To address the aims and goals of this curriculum, the health and nutrition field is sub-divided into three components: nutrition and diet, physical activity, and mental and physical health. The inter-relationship of all three components, and the impact any one has upon the other two, will serve to unify the curriculum.

Content Structure

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Program Aims & Goals

It is the aim of this curriculum to provide women age 45-60 with the information and knowledge necessary to create a healthy lifestyle and to make informed choices concerning physical and mental health, diet and nutrition, and physical activity. This information and knowledge will serve as the tools women age 45-60 may employ to help slow the aging process, where possible, and just as importantly, to help them accept those inevitable changes that cannot be controlled. Such changes may include hereditary and genetic aspects of physical features, such as thinning hair and skin, fat redistribution around the abdomen (Brody, 1997, p. 414) and emotional challenges after estrogen levels drop (p. 425).

Women age 45-60 enrolled in this program will:

- Learn to compare food choices and integrate a variety of foods into a nutritious diet;
- Discover the benefits of regular physical activity and develop a plan to incorporate physical activity into individual lifestyles;
- Evaluate body weight to determine body mass index and recognize the health risk factors associated with weight gain;
- Use information and knowledge gleaned from scientific studies and reports to make informed choices about individual mental and physical health issues.

Health and Fitness for Women Age 45-60

Curriculum Content

Scope and Sequence

This 16-week, 3-credit hour, course will include one hour of lecture and two hours of laboratory time each week. The laboratory time will include such individual or group physical activities as walking, jogging, strength training, tennis, racquetball or aerobics, with the requirement that two additional hours of physical activity be completed by the student outside of class time. This additional physical activity may include any of the aforementioned activities, as well as gardening, push mowing, swimming, water aerobics, bicycling, strenuous housework, golf (pulling/carrying clubs), basketball, etc. Strength training will be required for one hour of the student’s physical activity each week, and may be performed either during the class laboratory time, or on the student’s own time.

The 16-week, one-hour lecture will include, but not be limited to:
Nutrition and diet (five weeks)— review and discussion of the U.S. Department of Agriculture’s Food Guide Pyramid; analysis of students’ current diet based on the Food Guide Pyramid recommendations; development of menus based on inclusion of all food groups; comparison of different cultural, ethnic and religious beliefs and practices, along with alternative lifestyle choices, such as vegetarianism, and various individual life experiences, which will expose students to a variety of food choices; recognition of the role of nutrition and diet in weight management and overall physical and mental health.

Physical Activity (four weeks) review and discussion of benefits of regular physical activity and strength training, and the role of each in weight management and overall physical and mental health; preparation of a customized, individual plan for regular physical activity and/or incorporation of increased physical activity into individual daily routines.

Mental and Physical Health Issues (seven weeks) evaluation of individual body mass index, body fat, blood pressure and cholesterol; review and discussion of menopause symptoms, effects and preventative measures, where applicable; recognition of lifestyle choices/changes that will positively effect overall mental and physical health.

References


Health & Fitness for Women age 40-65

Unit One

Nutrition and Diet

Goal

Recognize the effect of food-based nutrients on overall physical and mental well-being, using the USDA Food Guide Pyramid as a guide to daily food choices.

Rationale for Unit

Many women age 45-60 are beginning to seriously consider and even recognize in themselves the consequences of aging — weight gain, high blood pressure and cholesterol levels, heart disease, osteoporosis and menopause. The old adage "we are what we eat" contains more than just an element of truth. Our bodies need the protein, carbohydrates and fat in food; we need the vitamins and minerals that appear in food naturally. Yet the amount of food we consume, the way it is prepared, and the nutrients and vitamins our food choices contain all play a large role in determining the physical and mental health of women in this age group. The United States Department of Agriculture’s Food Guide Pyramid may be used as a guide to develop healthy eating habits. While heredity and genetics, as well as physical activity, must also be considered equally important factors, nutrition and diet is a manageable component of a healthy lifestyle.
Objectives for the Unit

Use the Food Guide Pyramid to:

1. Compare food choices
2. Select those most nutritious, and
3. Integrate a variety of healthful foods into an existing diet.

Possible Activities

1. Read and discuss one or more of the suggested references pertaining to the importance and role of nutrition and diet on overall physical and mental well-being, including female health issues and weight management.
2. Create menus based on the Food Guide Pyramid and discuss nutritional value of food selections.
3. Experiment with reduced-fat food preparation at-home, and discuss in class the pros/cons of alternative ingredients.
4. Evaluate nutrition labels on commercially prepared food.

References


Health & Fitness for Women age 40-65

Unit Two

Physical Activity

Goals

1. Increase physical activity in order to achieve and/or maintain healthy body weight, and
2. Adopt lifestyle behaviors that incorporate physical activity into daily routines.

Rationale for Unit

Regular physical activity is essential to burn calories from food consumed, and is necessary for successful weight management. Nutritionally-speaking, regular physical activity permits an increase in food consumption and calories, which in turn allows the body to have more vitamins and nutrients, and energy (USDA, 2000, p. 11). Fad diets and starvation are not the answers to weight management. The Harvard Women’s Health Watch (1999) reports that research has consistently demonstrated that, although those who adhere to restrictive diets tend to lose an average of 15-20 pounds, they often gain the weight back in 3-5 years. Moreover, following a restrictive diet can set the stage for eating disorders, such as anorexia, bulimia, and binge eating. (p.1)

According to the American Dietetic Association (2000), "even a small weight loss combined with regular physical activity can deliver big results in reducing health risks" (p. 2). The health benefits of regular physical activity include: minimizing risk factors for cardiovascular disease, colon cancer, type 2 diabetes, and high blood pressure; promoting psychological well-being and self-esteem; reducing feelings of depression and anxiety (USDA, 2000, p.11).

The U.S. Department of Agriculture’s Dietary Guidelines for Americans tells us that as people age they tend to lose muscle mass, and "building or maintaining muscle helps keep older adults active and reduces their risk of falls and fractures" (p. 9). As reported in Prevention, a special concern for women age 45-60, is that "after age 40, women start losing muscle and replacing it with fat at the rate of a pound a year during menopause" (p. 2). Combined with the concomitant drop in estrogen levels, "the body starts storing fat in the abdominal area raising [the] risk for heart disease" (p. 2). An additional consideration of the long-term benefits of regular physical activity is that "staying strong
and flexible can reduce [the] risk of falling and breaking bones, preserve muscle, and improve [the] ability to live independently" (USDA, 2000, p. 12).

Unfortunately, however, "despite common knowledge that exercise is healthful, more than 60 percent of American adults are not regularly active, and more than 25 percent of the adult population are not active at all" (CDC, 1999, p. 2). This curriculum unit is offered to women age 45-60 as motivation and encouragement to adopt a more healthy, active lifestyle.

Objectives for Unit

1. Identify a variety of enjoyable physical activities that fit within cultural/religious parameters, and
2. Increase/incorporate these physical activities into daily routines.

Possible Activities

1. Participate individually or in small groups in the following physical activities: walk, jog, bicycle, swim, tennis, racquetball.
2. Participate in an organized physical activity program: aerobics, weight training, yoga, dance.
3. Establish individual goals to increase the variety and duration of physical activities in daily routines.

References


Health & Fitness for Women age 40-65

Unit Three

Mental and Physical Health

Goal

Recognize the benefits of healthy lifestyle choices in coping with symptoms of menopause and other mental and physical health issues common to women age 45-60.

Rationale for Unit

As members of the baby boomer generation, women age 45-60 are beginning to recognize mental and physical changes in themselves. Concerned with aging well and maintaining productive lives as long as possible, women in this age group must recognize and adopt those lifestyle choices which will enable them to remain mentally and physically healthy within the confines of individual heredity factors and cultural or religious parameters. Regular physical activity and a diet based on fruits, vegetables and complex carbohydrates are two major lifestyle concerns that will help women age 45-60 address such menopausal symptoms as hot flashes, depression and mood swings, insomnia and low sex drive. In addition to these two components of a healthy lifestyle, the Harvard Women’s Health Watch (1999) encourages women age 45-60 to

Be yourself. One of the keys to resilience is authenticity. Some people may put so much energy into maintaining a façade that there is little left to take on life’s challenges. Women who are the same inside and out are more likely to survive reverses than are those whose identities are not dependent upon external factors, such as wealth, social position, or job title. Women who aren’t defined by the externals aren’t devastated when these things are lost. Other qualities of survivors: willingness to accept responsibility, take risks, embrace change, and respond to others. Those
who have a strong belief in a higher cause or power are also more resilient. (p. 3)

Armed with the information and knowledge necessary to make healthy lifestyle choices, women age 45-60 may address the emotional, social and spiritual issues common to females at this stage of life. "Mid-life can be a period of heightened reflection. This important stage in life may also bring regrets about lost dreams or unfulfilled goals, as well as an uneasy vagueness about what lies ahead" (Schmitz, 1999, p.130). A healthy attitude is just as important as a healthy body and the recognition and understanding of those emotional and social factors effecting one’s attitude is crucial to maintaining good mental and physical health.

Objectives for Unit

1. Evaluate lifestyle choices that may provide relief of menopause symptoms, and
2. Explain the impact of lifestyle choices upon long-term mental and physical health.

Possible Activities

1. Read and discuss one or more of the suggested references pertaining to the importance and role of nutrition, diet and physical activity on female mental and physical health.
2. Evaluate both the scientific findings and common practice of hormonal therapy, the use of soy, and other alternative remedies in the treatment of menopause symptoms.
3. Evaluate and describe the effect of newly-adopted lifestyle behaviors upon individual mental and health concerns, including symptoms of menopause, if applicable.
4. Maintain a confidential journal to record emotional, social and spiritual issues.

1. Assess individual stress factors and identify current lifestyle behaviors and alternative lifestyle choices that may assist in coping with stress that cannot otherwise be reduced or alleviated.

References


Health and Fitness for Women Age 45-60

Curriculum Evaluation

Student Evaluation

Comprehensive Final Exam

1. Draw the Food Guide Pyramid and list the food groups and number of daily servings suggested for women age 45-60. (25 points)

2. Using this Food Guide Pyramid, prepare a sample menu for one day including three main meals and snacks. (10 points)

3. Using the Food Guide Pyramid, list alternative foods for individuals who (1) choose to avoid milk products, or (2) choose to avoid all or most animal products. (10 points)

4. Compare personal pre- and post-evaluation measurements of body mass index, body fat, cholesterol and blood pressure, and describe the physical activities and lifestyle choices you feel have contributed to the difference, if any. If there are no measurable differences, cite possible explanations. (10 points)

5. Describe the healthy lifestyle choices that play an important role in helping women age 45-60 address the mental and physical symptoms of menopause. (25 points)

6. What preventive measures can women age 45-60 ascribe to in an effort to avoid and/or minimize such age-related health concerns such as osteoporosis, cardiovascular disease, type 2 diabetes, and some forms of cancer? (20 points)
Document Validation

The sample letter set forth below shall be distributed to the following individuals for feedback, suggestions, and critical analysis:

Ms. Melisa Winters, M.S.
Instructor of Health and Physical Education
Southwest Virginia Community College
Richlands, Virginia

Mr. Hillard Carr, M.A.
Instructor of Health and Physical Education
Southwest Virginia Community College
Richlands, Virginia

Mr. Ron Proffitt, Ed.D.
Professor and Chair, Division of Natural Science/Mathematics/Allied Health
Southwest Virginia Community College
Richlands, Virginia

Mrs. Barbara Fuller, Ed.D.
Professor and Continuing Education Program Developer
Southwest Virginia Community College
Richlands, Virginia

Mrs. Susan Bauer, M.S.
West Virginia University Extension Agent
I/C Bluefield Daily Telegraph
Bluefield, West Virginia
July 1, 2000

RE: Proposed Curriculum entitled "Health and Fitness for Women Age 45-60"

Dear Mr./Ms.:

I have enclosed a curriculum entitled "Health and Fitness for Women Age 45-60" prepared as a requirement for Old Dominion University’s Occupational-Technical Education class "Curriculum Development in Occupational Education and Training" (OTED 785 Dr. John M. Ritz, Instructor).

At your earliest convenience, please review this document and provide me with any suggestions for improvement. As you may well imagine, the curriculum is targeted for women age 45-60, but students may vary as much as 5-10 years in either direction from the target range. I propose to offer this curriculum as a one-semester (16-week), three-hour credit course at Southwest Virginia Community College beginning Fall 2000.

I appreciate your expert, critical analysis of this curriculum, and welcome the opportunity to discuss the same with you, if possible. I have enclosed a curriculum survey to aid in your review, should you desire to use it.

Thank you for your time and consideration.

Sincerely,

Patricia D. Martin

Health and Fitness for Women Age 45-60

Curriculum Survey

Please answer the following questions, and provide any additional comments that you feel will strengthen the curriculum.

- Does the definition set precise boundaries for the knowledge and/or content to be analyzed and conveyed?
- Are the various aspects of knowledge, society, learning theories and individual needs evident in the curriculum rationale, and when combined, do they emphasize the need for study in this area?
- Is the knowledge base sufficient for structuring the program? Are the information, knowledge and skills to be conveyed to the learner clearly delineated?
• Is the content structure logically arranged and easy to follow? Is the content of sufficient breadth and depth?
• Are the program aims and goals clear and well defined? Do they provide direction for the curriculum?
• Are the unit objectives specific and measurable?
• Do the activities provide the learner with adequate experience in the content?
• Does the student evaluation document adequately measure objectives of the curriculum?