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Exercise and depression

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Master’s Scholarly Project

Exercise and Depression

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# TABLE OF CONTENTS

Chapter 1: Introduction .................................................. 3

Chapter 2: Review of Literature ........................................... 5

Chapter 3: Activities/Methodology ....................................... 20

Chapter 4: Products/Results ............................................. 21

Chapter 5: Summary ...................................................... 22

References ................................................................. 23

Introduction for the Occupational Therapist .................. Appendix A

Fitness is Tops ............................................................ Appendix B
CHAPTER 1: INTRODUCTION

Depression is a mental disorder that affects millions of individuals across the United States. According to Husseini (2000) depression will affect one in five persons at some point throughout their lives. Due to the overwhelming significance of this disorder and the fact that approximately 20% of the population in the United States will come across depression in their lifetimes, different types of treatments are being continually studied and developed. One such treatment that has shown to be effective in reducing the symptoms of depression is exercise. Exercise has been shown to not only be healthy physically but also mentally. It has also been proven to effectively reduce the symptoms of depression.

The main focus of this project was to develop a home exercise program to reduce the symptoms of depression for individuals with this disorder. The object was to create an occupational therapy based program that was user friendly and easy to understand. The exercise booklet could be used by medical professionals, families and by the individuals themselves to develop more effective coping strategies for dealing with depression. The manual was designed with step-by-step instructions and pictures to facilitate understanding and engagement in an exercise program.

The following chapters describe the process of developing the home program. Chapter two provides a comprehensive review of literature. The methodology of developing the home program and overview of the final product are described in chapter three and four respectively. The final chapter includes a summary of the product, a
proposal for implementation and evaluation of the outcomes of using the home program with areas for further research.
CHAPTER 2: REVIEW OF LITERATURE

According to the National Ambulatory Medical Care Survey, more than 7 million primary care visits were made annually in the early 1990s for the treatment of depression, double the number 10 years earlier (Pincus, Tanielian, & Marcus, 1998). Despite this large number, this disorder remains under diagnosed and it is estimated that only one third of those with depression are diagnosed and receive treatment (Artal & Sherman, 1998). Individuals with depression also have decreased engagement in physical activities and are more likely to develop disorders like cardiovascular disease and diabetes (Artal & Sherman).

Depression is one of the most treatable mental disorders. Because many available treatment options have negative side effects there is a need for options that decrease the negative aspects of depression without the side effects associated with medications. Exercise is one treatment option for those diagnosed with depression that most individuals can engage and achieve positive results.

This literature review will address the effects that exercise has on the symptoms of depression. The review will describe the statistics of depression, the main types of depression, theories of depression, treatments of depression, and current research studies documenting the effects of exercise in treating individuals diagnosed with depression. It will also focus on occupational therapy and research describing the integration of an exercise program into the treatment for an individual diagnosed with depression. Finally, the literature review will focus on different forms of exercise, the function of exercise and the meaning it can have to individuals who engage in exercise.
Depression is characterized as a disorder that causes a disturbance in a person’s mood (American Psychiatric Association, Diagnostic and Statistical Manual Text Revision [DSM-IV-TR], 2000). There are three main types of depressive disorders. Major Depressive Disorder, “is characterized by at least two weeks of depressed mood or loss of interest accompanied by at least four additional symptoms of depression” (DSM-IV-TR, 2000, p.345). To be diagnosed with Major Depressive Disorder, an individual must have five or more of the following symptoms within the same 2-week period: depressed mood most of the day everyday, diminished interest and pleasure in activities, significant weight loss or gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or guilt, diminished ability to think or concentrate or recurrent thoughts of death (DSM-IV-TR).

Dysthymic Disorder is another depressive disorder and “is characterized by at least 2 years of depressed mood for more days than not, accompanied by additional depressive symptoms that do not meet criteria for a Major Depressive Episode” (DSM-IV-TR, 2000, p.345). An individual with Dysthymic Disorder must have two or more of the following symptoms: poor appetite or overeating, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor concentration or difficulty making decisions or feelings of hopelessness (DSM-IV-TR).

Bipolar I Disorder, is the last depressive disorder and is “characterized by one or more Manic or Mixed Episodes, usually accompanied by Major Depressive Episodes” (DSM-IV-TR, 2000, p.345). To be diagnosed with this disorder the person must have had a manic episode and no past Major Depressive Episodes and the disorder cannot be accounted for by Schizoaffective Disorder or Schizophrenia (DSM-IV-TR).
There have been many attempts to determine if the cause of depression is environmental, genetic or psychosocial in nature. One environmental theory regarding the cause of depression involves the modernization of our culture. It is believed that modernization results in "greater passivity and feelings of helplessness, hopelessness, despair and low self-esteem" (Johnsgard, 1989, p. 22). Cultures that are not as modernized show significant lower numbers of depressed individuals, while depression is unheard of in primitive cultures. Johnsgard studied the Amish in Pennsylvania and found that depression rates are only one fifth to one tenth of the rates seen in other areas of the United States. He theorized that depression rates are lower because the Amish are not modernized and in their culture, electricity, cars, and other machines have no place.

According to Johnsgard, the occurrences of depression since the rise of the Western lifestyle have increased immensely. Studies have shown a 10 to 20-fold increase in depression in America during the 20th century. In 1945, people were 50 times more likely to suffer from depression than those who lived 50 years prior and they showed depression rates of only 1% (Johnsgard). Depression currently affects 18.8 million Americans or 9.5% of the population (National Institute of Mental Health [NIMH], 2003).

Genetics has also been introduced as a theory as to why depression occurs. According to the NIMH, individuals who have relatives who have depression are more likely to develop depression themselves (2003). Individuals are also more likely to develop depression if their relatives have Bipolar I Disorder (NIMH). The NIMH states that physical changes in the body can be related to mental changes, which can lead to depression. For instance if a person were to suffer from a stroke, Parkinson's disease, a
heart attack, hormonal disorders, cancer, etc. this could make the person become apathetic and unwilling. Strawbridge, Deleger, Roberts, and Kaplan (2002) found that those with a physical disability showed a strong association with depression and are four times more likely to be depressed than were those with no disability.

Psychological theories have also been suggested. One theory is that if a person were to suffer a loss of a loved one, go through a tough divorce, have financial problems or encounter any stressful situation that they are more likely to develop a disorder like depression. Also, people who are easily overwhelmed by stress, those with low self-esteem, and those that consistently view themselves and the world with pessimism are prone to depression (NIMH, 2003). Nemeroff (2004) also found that there is evidence to suggest that adverse early life events that induce stress can lead to depression. Nemeroff found that children exposed to sexual or physical abuse or the death of a parent have an increased risk of developing depression later in life. Strawbridge et al. (2002) found that those who are unsatisfied with friendships and have fewer than three close friends or relatives were more likely to be depressed than those who were satisfied with their friendships. Another theory stated that insomnia is related to depression (Riemann & Voderholzer, 2003). Insomnia can be triggered by psychiatric/organic illnesses, the intake of prescribed/illicit drugs or alcohol, or by a psychophysiological hyperarousal process (Riemann & Voderholzer). Riemann and Voderholzer found that those with insomnia have an increased risk of depression. Many times, environmental, genetic and psychological factors are involved in the onset of depression (NIMH).

Regardless of the cause of depression it is a fact that it is increasing in the United States and because of this, emphasis needs to be placed on the different methods of
treatment for depression. A traditional treatment for depression that is often used is the use of antidepressants. According to the NIMH (2003), antidepressants alter the neurotransmitters such as beta-endorphins and serotonin, which effect mood in the brain. Neurotransmitters are chemicals that send signals between cells in our brains. These cells do not work properly when a person is depressed. There are two different types of antidepressants, tricyclics and Selective Serotonin Reuptake Inhibitors (SSRIs). Examples of tricyclics include: Trypitzol, Anafranil, Gamanil, Molipaxin, and Tofranil. Common side effects of these tricyclics include: dry mouth, slight tremor, fast heartbeat, constipation, sleepiness, and weight gain. Examples of SSRIs include Prozac, Seroxat, Lustral, Efexor and Cipramil. Common side effects of these SSRIs include: indigestion, interference with sexual functions, feelings of anxiousness and in rare cases aggression (NIMH, 2003).

Aside from the side effects of medications, Husseini (2000) reports that antidepressants take approximately six weeks to start to alter the chemicals in the brain to decrease the symptoms of depression. Although it is estimated that when used properly, antidepressants can raise a person’s mood anywhere from 60-80%, many individuals try several different medications before finding the right one for their body (Husseini). Another negative aspect of antidepressants is noncompliance. According to Babyak et al. (2000), past studies have shown that between 20% and 59% of patients in primary care facilities stop taking antidepressants within three weeks of them being prescribed. Researchers suspect individuals with depression begin feeling dependent on medications, which then leads to losing a sense of personal mastery. This loss of personal mastery may lead to noncompliance with medications (Babyak et al.).
Psychotherapy is a common treatment that has shown to be effective in treating depression. The focus of psychotherapy is teaching the individual how to identify his or her issues and feelings and develop more effective methods of coping. Cognitive Behavior Therapy (CBT) combines both cognitive therapy and behavior therapy. According to Bush (2003, p.12), behavior therapy helps a person “weaken the connections between troublesome situations and their habitual reactions to them.” These reactions include fear, depression, rage, and self-damaging/defeating behavior. Cognitive therapy teaches an individual how symptoms such as anxiousness and feelings of depression are caused by certain thinking patterns. CBT takes the best of both of these therapies and focuses on finding out what needs to be changed and what doesn’t and then focuses on those targeted changes (Bush). CBT is a form of therapy in which a therapist works directly with the patient to determine how negative thinking affects the person’s behavior. By determining which element of thought or behavior is deterring the person’s happiness, the therapist teaches the individual how to alter the thinking patterns thus changing the way the individual perceives and manages various situations (Husseini, 2000).

Alternative treatment approaches for mild to moderate depression such as over the counter herbal medicines have become more commonly used in the treatment of depression. St. John’s Wort is a natural herbal medicine that is used to relieve the symptoms of depression. According to the American Herbal Pharmacopoeia and Therapeutic Compendium (1997), St. John’s Wort is a long-living plant with yellow flowers that has been used for centuries for medicinal purposes. It is not well understood how this herbal medicine works. Preliminary studies indicate that St. John’s Wort might
work by preventing nerve cells in the brain from reabsorbing serotonin or by reducing levels of protein involved in the immune system functioning. According Linde (1996), it was found that St. John’s Wort might be useful in cases of mild to moderate depression. Linde reported that St. John’s Wort was more effective than a placebo and had fewer side effects than antidepressants. However, according to Shelton, Keller, and Gelenberg (2001) St. John’s Wort was found to be of no benefit to reduce the symptoms of depression.

Electroconvulsive therapy (ECT) is typically used as a last resort in treating depression once it has been determined that other treatment options have not been effective. ECT is known as shock therapy and is used to alter certain areas of the brain by sending tiny currents of electricity to the brain. ECT typically causes short-term memory loss initially but has been shown to reduce the symptoms of depression and may help prevent relapse in many patients (Husseini, 2000).

Depression physically impacts the human body in many ways. According to Artal and Sherman (1998), depression causes an individual to fatigue more easily, have insomnia, decreased appetite, decreased sexual interest, weight change, and constipation. A way that has been found to decrease these symptoms of depression is exercise.

Exercise has been shown as an effective treatment for treating mild to moderate depression (Husseini, 2000). Exercise is defined as “any physical activity that is planned, structured, repetitive and purposeful” (McArdle, Katch, & Katch p.498, 1991). Exercise has numerous benefits or functions. Some of these include: promoting sound sleep, improving fitness, increasing self-esteem, releasing a natural muscle relaxant, controlling
weight, maintaining blood pressure, relieving stress, reducing cholesterol levels, elevating mood, and increasing energy levels (Wigers, Stiles, & Vogel, 1996). Wigers et al. also found that exercise is an effective mood regulating behavior and has been demonstrated to be effective in the relief of pain and stress related disorders. In order to produce these benefits, individuals can participate in a number of different forms of exercise.

Brollier, Hambrick, and Jacobson (1994) examined the effect of an occupational therapy aerobic exercise program on individuals who were diagnosed with major depression. The program consisted of brisk walking three times a week for a total of 65 days along with individual, family and peer group psychotherapy, and an individually designed educational program. The program started with a brief warm-up of approximately five minutes followed by ten minutes of stretching. The length of the walking slowly increased from ten to twenty minutes, as the subjects felt more comfortable. The last five minutes of the program consisted of slow walking and ten minutes of stretching. It was found that after the 65 days of participation in the program that every individual had a decrease in depression (Brollier et al.). Although studies show that exercise can reduce the symptoms of depression, researchers are still unclear as to the exact mechanism.

Using exercise as a treatment for depression has been proven to be beneficial in reducing depressive symptoms (Husseini, 2000). Psychosocial and physiological theories have been established identifying the ways in which physical activity reduces the symptoms of depression (Bear, Connors, & Paradiso, 2001, Brugman & Ferguson, 2001, Johnsgard, 1989).
According to Bear et al. (2001), individuals who are depressed have decreased levels of neurotransmitters such as norepinephrine, dopamine and serotonin in their brain. These neurotransmitters modulate mood, emotion, sleep and appetite and are implicated in the control of numerous behavioral and physiological functions. Johnsgard (1989) theorized that through participation in physical activity, such as exercise, these neurotransmitter levels become normalized, therefore regulating mood, emotions, sleep and appetite. He also theorized that exercise reduces physiological stress, which in turn decreases psychological stress, which also reduces the symptoms of depression.

According to Brugman and Ferguson (2002), one psychological theory indicates that improved physical fitness provides a sense of mastery, control, and self-sufficiency. The authors theorized if an individual feels a sense of mastery, control, and self-sufficiency they will in turn experience a sense of accomplishment and increased self-esteem, which are important in counteracting the symptoms of depression and improving their overall outlook. Brugman and Ferguson also suggest exercise is a form of meditation that triggers a more relaxed state of consciousness. By feeling more relaxed, stress is decreased which will positively impact depressive symptoms. Exercise has the ability to provide distraction, or diversion, which gives individuals time out from unpleasant thoughts and feelings and brings them into contact with potential positive reinforcers that increase positive thoughts and enhances mood (Brugman & Ferguson).

There are three basic types of exercise. Cardiorespiratory or aerobic exercise (e.g. walking, jogging, swimming) is where oxygen is metabolized to produce energy. Muscular strength or anaerobic exercise (e.g. weightlifting, sprinting) is a type of exercise in which energy is provided without the use of inspired oxygen. Flexibility
exercise (e.g. Yoga, Pilates) is a form of exercise that is designed to improve range of motion (Brosse, Sheets, Lett, & Blumenthal, 2002). Studies have reported engaging in any one of these types of exercises is beneficial in reducing the symptoms of depression (Babyak et al., 2000, Brollier et al., 1994, Pelham, Campagna, Ritvo, & Birnie, 1993).

Pelham et al. (1993) completed a 12-week study comparing aerobic exercise, anaerobic exercise and an informal independent exercise program with clients diagnosed with depression. The clients were evaluated using a structured interview with specific questions regarding the effects of exercise and with the Beck Depression Inventory (BDI). Pelham et al. found that the majority of the clients reported that exercising had anxiety reducing effects, anti-depressant effects, and it helped them feel more energetic and less distressed. Clients in the study also showed significant reductions in depression scores on the BDI. This study found that those involved in the aerobic and anaerobic exercise programs showed significant reductions in depression, while those in the third group had the greatest decrease in depressive symptoms (Pelham et al.).

Exercise is has shown to be a positive intervention for depression for the reason that is has many positive benefits for most individuals. “It has been known that participating in regular exercise is a virtue: the depressed person who engages in regular exercise may, as a result, get positive feedback from others and an increased sense of self worth, therefore increasing their sense of personal mastery” (Lawlor & Hopker, 2001, p. 771). Researchers have also found that physical exercise may be more effective than the standard drug treatment for some patients, because of the minimal side effects. Exercise has demonstrated effectiveness with clients diagnosed with depression and has been found to be safe when used in conjunction with the medications (Johnsgard, 1989).
Mather et al. (2002) conducted a study, which was comprised of weight-bearing exercises performed to music. The exercise group began with a warm-up period of 5 to 10 minutes and lasted for 45 minutes, with a cool down at the end. Mather et al. found that 10 weeks of twice weekly exercise is associated with a reduction in depression symptoms in individuals and that exercise can offer a useful supplement to antidepressant therapy.

Babyak et al. (2000) found similar results in a study comparing three groups of individuals diagnosed with depression. One group participated in a 4-month course of aerobic exercise, another group was prescribed Sertraline (Zoloft) while the third group combined both the medication Zoloft and aerobic exercise. Each aerobic exercise session began with a 10-minute warm-up period followed by 30 minutes of continuous bicycling or brisk walking. The session then concluded with 5 minutes of cool down exercises. Babyak et al. found that after 4 months, patients in all three groups exhibited significant decreases in depression, with the patients in the exercise group having significantly lower relapse rates than the subjects in the medication group.

Occupational science is “the study of the human as an occupational being including the need for a capacity to engage in and orchestrate daily occupations in the environment over the lifespan” (Yerxa et al., 1990, p. 13). Occupational science is comprised of three areas; form, function, and meaning. Occupational form is a directly observable feature of occupation. Occupational form looks at what people do, circumstances under which they do it, and how they do it in relation to time, space and performance. Daily logs, diaries, and observation of performance are some examples of ways in which to observe occupational form, while engaging in an exercise program.
Occupational form also looks at the different forms of exercise that are utilized. These forms include: aerobic, anaerobic, and flexibility exercises (Clark, Wood, & Larson, 1998).

Function is the next area of occupational science and it is the way in which an occupation serves adaptation. Engaging in an exercise program is an occupation that can influence an individual in many ways. Occupations have three main functions. One is to provide the body with basic needs, e.g., self-care, shelter and safety. Another function of occupation is the need to be superior over predators and the environment by developing skills, technology and social structures. The last function of occupation is to find ways in which to maintain superiority and to allow them to prosper. Without these functions, humans cannot engage in occupations without dysfunction. This is why an exercise program would be beneficial because it would decrease the symptoms of depression, allowing the individual to engage in occupations without dysfunction. Engagement in occupations allows for better health, cognitive functioning, and overall well-being. The main functions of exercise include: weight and blood pressure control, increased activity level, decreased symptoms of depression, and increased socialization (Clark et al., 1998).

The final area of occupational science is meaning. Occupations are seen as meaningful to individuals when they are seen as important to them, when they allow them to express their emotions through them, and when they provide them with a choice. Through engagement in an exercise program individuals are able to express their emotions and make choices. Individuals can choose a place they would like to exercise that has meaning to them or they can adapt their exercise routine to fit their needs, which could also increase the meaning to them. Exercise can also be done in a group or
individually. Exercise can be done in a group to increase socialization or it can be done individually to allow the person quiet time to focus on themselves, both of which may increase meaning to the individual (Clark et al., 1998).

Those that experience depression have decreased engagement in physical activities due to the lack of energy and a loss of interest and pleasure. Occupational therapists often work with clients who lack the energy to engage in physical activities. Many of these individuals have sedentary lifestyles and have difficulty completing simple tasks. Therefore, an intervention is needed that benefits clients by decreasing the symptoms of depression while minimizing side effects. Exercise is one intervention that can accomplish both of these goals. Applying Occupational Science to exercise allows the individuals to incorporate meaning into their routine while making it occupation based.

Individuals are referred to occupational therapy when they are unable to perform their daily occupations due to physical or psychosocial dysfunction. Occupational therapy focuses on helping individuals achieve a balance of meaningful activities and occupations in daily life (Clark et al., 1998). One way to explore meaningful occupations is by engaging individuals with depression in an exercise program.

An occupational therapist could engage the individual in an exercise program using an establish, restore approach. This approach is “designed to change client variables to establish a skill or ability that has not yet developed or to restore a skill or ability that has been impaired” (American Occupational Therapy Association [AOTA], 2002, p. 627). When developing an exercise program for a depressed individual, the occupational therapist must first take into account the areas of occupational science.
Due to the symptoms of depression an individual’s ability to engage in occupations becomes impaired causing them to be physically sedentary and engage in fewer leisure and fitness activities than the general population. Depression can impair a number of areas of occupation, for example, psychosocial components such as social conduct, coping skills, roles and values may all be affected. One potential intervention that could remedy the symptoms of depression and prevent the disruption that it causes is to engage in an exercise program (Brollier et al., 1994). One way to develop an exercise program is to use the concepts of occupational science.

Occupational science stresses the importance of incorporating form, function, and meaning into an exercise program in order for the program to be viewed as important and meaningful to the individuals participating in it. Types of exercises that are commonly used in an exercise program include walking, bicycle riding, swimming, muscle strengthening, and flexibility exercises. All of these types of exercise have been shown to be effective in addressing the symptoms of depression. In order for individuals to comply with an exercise program it is important to provide choices in the type of exercise activity. This choice will make the program more meaningful, and will increase the likelihood they will continue to engage in exercise.

Artal and Sherman (1998) describe guidelines for developing an exercise program for a depressed individual. These guidelines include: anticipating barriers such as lack of energy, fatigue, and psychomotor retardation, keeping expectations realistic so the client does not see this as another expectation for failure, introducing a feasible plan so the exercise is realistic and practical, not a burden, accentuating the pleasurable aspects of
exercise, stating specifics of when and how much the patient should exercise, and encouraging compliance.

The majority of research compiled consisted of exercise groups that lasted eight to twelve weeks, with the average being ten weeks in length (Brollier et al., 1994, Pelham et al., 1993, Mather et al., 2002). The theory behind the timelines was based on the assumption that engaging in a routine for an extended period of time becomes a habit that will continue and become part of the individual’s lifestyle.

Occupational therapists work with individuals to encourage engagement in occupations. Exercise is an occupation that can increase energy and productivity in clients diagnosed with depression. Increasing awareness of the benefits of exercise and engaging clients in a consistent exercise program can help individuals effectively manage their symptoms. The following chapter describes the process of designing an exercise home program for clients diagnosed with depression. The Fitness is Tops (FIT) home program incorporates occupational science by specifically addressing the form, function, and meaning of various types of exercise.
CHAPTER 3: ACTIVITIES/METHODOLOGY

An extensive literature review was conducted to develop the Fitness is Tops (FIT) outpatient exercise program for individuals with depression. Research studies were obtained describing the effects of exercise on depression from a number of medical journals and textbooks. Following completion of the literature review, the home program was developed using the findings from the literature.

The guidelines reported by Artal and Sherman (1998) were incorporated into the protocol to increase motivation and ensure compliance from the individuals participating in the program. FIT was structured using the concepts of occupational science, form, function, and meaning. Form was included to give the individuals a choice in the type of exercise they participate in. Function was included to inform the individuals of the benefits of the different exercises and was also incorporated in setting goals for themselves to accomplish. Meaning was integrated into the program by allowing individuals to identify different places to exercise, and by giving them the choice of exercising with others or individually.

The exercise program was designed using a 10-week model so individuals would have sufficient time to incorporate exercise into their daily routines. A step-by-step manual was developed explaining how to perform each exercise so the individual could easily understand how to do each. Chapter four provides an overview of FIT.
CHAPTER 4: PRODUCTS/RESULTS

Based on these findings in the literature, Fitness is Tops (FIT), an outpatient occupational therapy exercise program for individuals with depression was designed. The program provides information for the occupational therapist (Appendix A) and the client (Appendix B). The therapist information provides a guideline for structuring an exercise program that will be effective in reducing the symptoms of depression. Also included are suggestions for specific sessions that can be adapted and used to implement the exercise program.

The client section contains information on the exercise program. The FIT program was designed to be a 10-week exercise program and includes 8 different types of exercises. Each exercise includes a general overview, a step-by-step manual, and ideas of how to adapt the exercise. The exercises include: stretching, walking, bicycling, swimming, strengthening, resistance training, yoga, and Pilates. Activity sheets were included to make the manual more unique and provide the occupational therapy perspective. The activity sheets include: exercise interest inventory, positive affirmations and self-esteem, personal leisure activities, goal setting worksheets, an exercise log and a buddy list. Reflective questions were added to encourage exploration of the individual form, function, and meaning of each exercise for the client. The reflective questions also serve as a guideline for weekly sessions with the occupational therapist.

The goal of this project was to develop a program that was occupational therapy based and is easy to understand and incorporate into an individual’s daily routine. Chapter five provides a summary of the FIT program and includes suggestions for measuring the outcomes of the exercise program.
CHAPTER 5: SUMMARY

FIT was designed to be an occupational therapy based exercise program for individuals with depression. The goal was to decrease the symptoms of depression while increasing the both the physical and mental health aspects of the individual. A step-by-step manual with pictures was developed so individuals would be less likely to feel overwhelmed. FIT was designed to give clients a choice and to provide meaning to increase engagement and enjoyment in the program.

The FIT program is not a cure for depression, rather it is a tool to reduce the symptoms of depression. This program was designed to be implemented into a long-term outpatient psychiatric setting, but it can be easily adapted to other types of settings. In implementing the program it is important to monitor clients to measure the effectiveness of the FIT program in reducing the symptoms of depression. Possible outcome measures could include the Beck Depression Inventory, qualitative review of the clients’ journals and surveys of client satisfaction. This would allow researchers to determine if this program is effective in reducing the symptoms of depression.

Depression affects many individuals throughout the U.S. Currently there is a need for research to develop approaches that are effective and affordable in treating depression. Although further research is necessary, indications support exercise programs as being effective in reducing the symptoms of depression. Ongoing investigation of how exercise programs can be delivered successfully and efficiently to the client is needed. The FIT program provides a starting point for occupational therapists in implementing an exercise program with their clients.
REFERENCES


FIT Program

Introduction for the Occupational Therapist

By: Amy Gustafson
FIT Program

This is a booklet designed for occupational therapists to use as a home program with individuals who have been diagnosed with depression. It is formatted to accompany the Fitness is Tops (FIT) Booklet for clients. This booklet contains information on how to structure an exercise program that will be effective in reducing the symptoms of depression. It is designed as a ten week long program; however, the exercises can be adapted to meet the needs of the clients or the structure of the treatment setting.

Exercise has shown to be an effective treatment in reducing the symptoms of depression by increasing the levels of neurotransmitters, such as monoamines and endorphins in the brain, in order to elevate mood. Additional benefits of exercise include assisting in the prevention and management of chronic conditions such as diabetes and heart disease. Exercise may help increase an individual’s self-esteem therefore increase their self-confidence and providing them with a feeling of accomplishment and personal mastery. The social aspects of exercise can encourage increased motivation and support in sustaining and exercise program.

The FIT Program was developed by incorporating principles from Occupational Science. Each section includes the form, function, and place for clients to explore the personal meaning of various exercises. The following worksheets are included in the booklet:

- *Exercise Interest Inventory and a Personal Leisure Activities Worksheet* to provide the therapist an idea of what activities clients have pursued and enjoyed and what types of experiences they have had with exercise in the past.
- *Positive Affirmations and Self-Esteem Boosters* worksheet with tips on how to increase clients’ self-esteem.
- *Goal Worksheet* in which the therapist and the client will make a list of goals to accomplish throughout the exercise program.
An exercise log is included to allow clients to record daily the type and amount of exercise. Recording this provides a visual display of exercise and will hopefully serve as a motivator to clients. Throughout the course of the exercise program, clients will be asked to answer reflective questions and record their thoughts and feelings. Weekly sessions are scheduled with the client to review reflective questions, assess progress in the program and to problem solve any difficulties.

Exercise: Getting Started

Prior to beginning any form of exercise, a physical examination should be completed by a physician to determine the individual's level of physical fitness. It is important to advise your clients to wear comfortable clothing appropriate for the environmental conditions and ensure they have a good pair of walking shoes that fit well, are well cushioned, have good arch support, and have adequate toe room.
Program Outline for the Occupational Therapist

The following outline of sessions is intended to be used as a guideline for the occupational therapist. The sessions are structured to fit a forty-five minute therapy session, however can be adapted to fit the structure of different facilities.

Session 1:

It is important to meet with the client to discuss the purpose of the program. The therapist should include the benefits and functions of exercise and how participating in an exercise program will help decrease the client’s symptoms of depression. After introducing the client to the program, the therapist should have the client fill out the Exercise Interest Inventory and Personal Activities Worksheet. If the client chooses an activity that is not included within the booklet, the therapist can give them information on the particular activity and apply the principles of this program to it. Once the therapist has had the client fill out the Exercise Interest Inventory and the Personal Leisure Activities Worksheet and discussed it with them, any questions or concerns the client may have should be addressed.

Session 2:

During the second session, the therapist should begin by asking the client if they have any questions or comments about the last session. The therapist should then start by having the client fill out the Positive Affirmations and Self-Esteem Boosters Worksheet. This sheet will help give the therapist an idea of the clients’ level of self-esteem and what helps to motivate them. Then, the therapist should review the first three exercises from the booklet with the client. By doing this, the client will be introduced to the exercises and the therapist can ensure they have an understanding of the basics of the exercises. By having the therapist go through the booklet with them, it will help relieve the client of any anxiety they may be experiencing and will also give them the opportunity to ask any questions they may have.
Session 3:

The therapist should start out this session by answering any questions the client may have after reviewing the exercises from the previous session. The therapist should then start reviewing the last four exercises from the booklet with the client. After introducing the rest of the booklet to the client, the therapist should go over the *Exercise Log* with them. The client should be informed of the purpose of this log. At the end of the session the therapist should instruct the client to take the booklet home with them and thumb through it. The therapist should inform them that if they have any additional questions to write them down so they can be discussed in the following session.

Session 4:

The therapist should start this session by collaborating with the client to develop and identify specific goals for them to achieve by the end of the ten-week program. A goal worksheet is included and is intended for the therapist and the client to collaboratively fill out. Once goals have been identified, the therapist should review and discuss the reflective questions with the client. Upon completion of session four, the client will have an understanding of the exercise program, its benefits, and how to begin. The therapist will set up a time to meet with the client one time per week for weeks 5-14 to discuss how they are doing with the program and how it is progressing. During these sessions the therapist will review the clients’ exercise log, discuss reflective journal questions with them, and review their goals. Also, these sessions are open for the client to ask any questions they may have or to address any concerns they may have.
Exercise & Depression
The FIT (Fitness is Tops) Program
By: Amy Gustafson
# Table of Contents

- Introduction ................................................................. 3
- Stretching ..................................................................... 5
- Walking ......................................................................... 9
- Bicycling ....................................................................... 11
- Swimming ...................................................................... 13
- Strengthening .................................................................. 15
- Resistance Training ....................................................... 23
- Yoga .............................................................................. 29
- Pilates ............................................................................. 33
- Exercise Interest Inventory ............................................. 38
- Positive Affirmations & Self Esteem Boosters .................. 39
- Personal Leisure Activities Worksheet ............................. 40
- Goals .............................................................................. 42
- Exercise Log ................................................................. 44
- Reflective Questions ...................................................... 48
- Buddy List ....................................................................... 49
- References ...................................................................... 50
FIT Program Introduction

Depression is a mood disorder that affects millions of Americans, and is twice as common in women as in men. Depression is one of the most common and treatable mental disorders. Those with depression are more likely to develop disorders like cardiovascular disease due to decreased motivation, energy, and engagement in physical activity (Artal & Sherman, 1998).

Common symptoms of depression include: depressed mood most of the day everyday, diminished interest in pleasure and activities, significant weight loss or gain, sleeplessness or increased sleep, change in appetite, decreased sexual interest, fatigue or loss of energy, feelings of worthlessness or guilt, diminished ability to think or concentrate or recurrent thoughts of death (American Psychiatric Association, Diagnostic and Statistical Manual Text Revision [DSM-IV-TR], 2000). Exercise is one treatment option for those diagnosed with depression that most individuals can engage and achieve positive results.

Exercise has been proven to be an effective treatment for depression because it helps to regulate chemicals in the brain that improve mood. Exercise has numerous benefits or functions. Some of these include: promoting sound sleep, improving fitness, increasing self-esteem, releasing a natural muscle relaxant, controlling weight, maintaining blood pressure, relieving stress, reducing cholesterol levels, elevating mood, and increasing energy levels (Wigers, Stiles, & Vogel, 1996). It also helps prevent chronic conditions such as diabetes and heart disease, improves overall fitness, helps to increase self-esteem, and helps to develop social relationships with others.

There are many benefits for individuals who exercise. Exercising not only reduces the symptoms of depression, but it also helps control weight, helps maintain a healthy blood pressure, increases circulation, helps to decrease stress levels, and keeps the heart healthy. Exercise also increases an individual’s activity level, therefore increasing their overall level of energy. It also serves as a distraction, which gives those who exercise time out from unpleasant thoughts and feelings and replaces them with positive thoughts that enhance their mood.
The purpose of this booklet is to help you identify exercises that you will enjoy and strategies to incorporate them into your daily schedule. This booklet contains a warm-up along with seven different exercises that you can choose from. Each exercise includes a general overview, step-by-step instructions, and ideas of how to adapt the exercise. The exercises included in the booklet are: walking, bicycling, swimming, strengthening, resistance training, yoga, and Pilates.

Before starting any exercise program, it is important to have a physical examination completed by a physician to determine the level of your physical fitness. Make sure you have clearance from your doctor prior to beginning this program. Wearing comfortable clothing appropriate for the environmental conditions will make exercising more comfortable. Make sure you have a good pair of walking shoes that fit well, are well cushioned, have a good arch support, and have adequate toe room.

Before beginning this program you and your therapist will work together to develop goals that you would like to accomplish throughout this ten-week program. Throughout this exercise program you will be using the worksheets included in the back of the booklet. These include: an exercise interest inventory, a positive affirmations and self-esteem boosters worksheet, and a personal leisure activities worksheet. Exercising is more fun with a friend. Included is a buddy list for you to identify possible partners for exercising and motivation. You will also need to record the exercises you do and how long you do each one by writing them in the exercise log (see page 44). In addition, you will be asked to answer reflective questions each week. One time per week you will meet with your occupational therapist to discuss your exercise log and review your reflective questions.
Warm-Up/Cool Down: Stretching

General Overview:
Stretching is a good warm-up activity. Stretching is an excellent precursor to aerobic or anaerobic exercise that requires no special equipment and can be done indoors or outdoors. Social interaction is also possible with this safe, low cost form of exercise. The following describes the benefits of stretching and general guidelines. Ten basic stretches are described to do both before and after exercising.

Benefits of Stretching:
- Preserves range of motion
- Maintains flexibility
- Prevents injury during exercise
- Prepares the muscles for more vigorous activity
- Helps develop body awareness
- Promotes circulation

Basic Stretches to do before and after participation in an exercise program:

Use these stretches before exercising to warm-up your muscles and after participation in an exercise program to reduce soreness and to increase flexibility.

Hold stretch for 10 seconds working up to 30 seconds
Repetitions: Perform 3-5 for each stretch

- Stretch slowly and smoothly; Never bounce
- Maintain normal breathing during each movement
- Focus attention on muscle being stretched; try to limit movement in other body parts
- Feel the stretch, but don’t strain by stretching too far

1. The Spinal Twist

While seated, extend the left leg in front of you. Bend your right leg, placing your right foot on the outside of the left knee. Extend your right arm behind you to support your body. Place the left arm on the outside of the right leg. Slightly twist the torso using your left arm until you feel the stretch in your side. Hold for 10-30 seconds. Stretch the other side.
2. Hamstring Stretch

While seated, extend your left leg in front of you. Bend your right leg, placing the bottom of your foot on the inside of the left knee. Place your right hand on top of your left hand. While keeping the lower back straightened, reach toward your left foot. Hold this for 10-30 seconds. During this stretch, keep the foot of the straight leg upright with the ankle and toes relaxed. Repeat for the right leg.

3. Calf Stretch

While standing, place your left foot near the wall. Bend forearms and rest them against the wall. Keeping the right foot flat on the floor, move right leg back until you feel the stretch in the calf muscle. Hold an easy stretch for 10-30 seconds. Do not bounce. Stretch the other leg.

4. Chest Stretch

Place flat palm of right arm against a wall. Slowly rotate forward until you feel the stretch in your chest. Hold the stretch for 10-30 seconds. Stretch the other side.
5. Shoulder Stretch

Extend your left arm in front of your body. Using the left wrist, place the right wrist underneath and pull inward toward your body, while keeping the left arm extended. Hold for 10-30 seconds. Stretch the other side.

6. Quadriceps Stretch

Supporting your body with your left arm against a solid object, grab your left toes with right arm. Pull your heel up to your buttocks until you feel the stretch in your thigh. Hold for 10-30 seconds. Stretch the other side.

7. Forearm Stretch

Extend your right arm. Using your left hand, pull your fingertips back toward your body until you feel the stretch in your forearm. Hold the stretch for 10-30 seconds. Repeat using the other arm.
8. **Triceps Stretch**

Bend the right arm while placing your fingers in the middle of the back. Using the left arm, pull your right elbow backward until you feel the stretch in the back of your arm. Hold it for 10-30 seconds. Stretch the other side.

![Triceps Stretch](image1)

9. **Inner Thigh Stretch**

While seated, pull both feet inward toward the body. Grab your feet with your hands, while using the elbows to press downward slightly on the knees. You should feel this stretch in your inner thighs. Hold for 10-30 seconds.

![Inner Thigh Stretch](image2)

10. **Back Stretch**

To stretch the upper back, hands and knees should be on the floor. Just as a cat would do, slowly lift your back up toward the ceiling and hold in place for 10-30 seconds.

![Back Stretch](image3)


*Pictures used with permission of the author.*
1. Walking

General Overview:

Walking is an excellent aerobic exercise that requires no special equipment and can be done indoors or outdoors. This activity is one of the most widely used for fitness in the US. Social interaction is possible with this safe, low cost form of exercise. Aerobic fitness, exercise capacity and mental health are positively affected by walking programs. The following describes the benefits of walking and general guidelines.

Benefits/Functions of Walking:

- Improves circulation
- Helps prevent and control diabetes
- Helps control weight
- Improves efficiency of your heart and lungs
- Raises your metabolism so you burn calories faster
- Helps control your appetite
- Increases your energy
- Helps relieve stress
- Reduces levels of cholesterol in your blood
- Lowers high blood pressure
- Improves flexibility and posture
- Elevates mood
- Helps prevent and/or reduce depression
- Improves your self-esteem
- Posture: Flat back, chest out
- Strides: Walk gently and try to place your lead heal slightly in front of your hip. Roll slowly on the outside ball of your foot and push forward off your toes. Avoid bouncing and over striding -- these may cause you to be off balance and fall, or jar your body. Your strides should feel comfortable; don't strain.
- Arms: Attempt to have arms close to your sides and positioned at a 90-degree angle. While landing the lead heel, your opposite elbow should be coming backward. If performed together, the backward arm action will greatly assist the pushing-off-the-toes movement of the lead foot. This action will allow your body and center of gravity to move efficiently in a forward direction. Avoid swinging your arms outward; this action is inefficient and will cause your center of gravity and body to move side to side, not forward.
- Pace: Walk at a pace that enables you to talk while you are walking. This intensity will also promote weight loss, as your body will use fatty acids as an energy source while increasing your metabolism.
Safety Tips:

- Stretch before and after walking to prevent injuries and increase flexibility.
- Start slowly and gradually increase speed and distance.
- If you are walking in the heat, take water along to prevent dehydration.
- Wear bright colored clothes or reflectors to be more visible.
- Walk in a safe, well-lit environment.
- If outside avoid midday in extreme heat and humidity. Evenings and mornings are best.
- Walk in the opposite direction as traffic and as close to the curb as possible.

Places to walk:

- Indoor or outdoor tracks
- Treadmills
- Malls, hiking trails, your neighborhood

Addresses and phone numbers of places in my community to walk:

- __________________________________________
- __________________________________________
- __________________________________________

2. Bicycling

General Overview:

Bicycling is a low impact aerobic activity that can be done indoors on stationary bikes or outdoors, although the stresses and impact level increases with the complexity of the environment. You will see improvements in aerobic capacity, muscle strength and exercise tolerance after integrating bicycling into your therapy. The following describes the benefits of bicycling and general guidelines.

Benefits/Functions of Bicycling:

- Improves the cardiovascular system
- Builds a positive mental outlook
- Helps build and maintain healthy bones, muscles, and joints
- Helps control weight
- Builds lean muscle and reduces fat
- Reduces high blood pressure
- Relieves stress
- Fights off depression and anxiety to enhance your sense of well-being

Before engaging in a bicycling program:

- Make sure you are physically capable of riding a bike. This is why it is important to have a physical exam completed by a physician before you begin any form of exercise.
- Proper bike fit is very important. Seat height should be adjusted so that the leg can be almost fully extended when sitting and there should be at least 1-2 inches of clearance between the top (horizontal) tube and the crotch when straddling the bike.
- A recumbent works best for beginners, whereas a stationary bike is best for those who are experienced in bike riding. You can also choose to ride your own bike.
- Make sure the seat position is adjusted so your foot can reach the pedal and produce a strong downward force.
- Usually, you want to have one or two inches of clearance between your crotch and the crossbar when sizing a bike.

Here are a few tips for riding your own bicycle:

- Before you start, ensure your bike is in good shape and don’t forget your helmet!
- Make sure you understand the meanings and responses to common traffic signs.
- Ride by the same rules as motorists, use signals and abide by the posted signage.
• Avoid riding in the blind spots at the sides and rear of the vehicles where the
driver cannot see you.
• Stay well back and on the left side of vehicles
• Be bright at night! Use a headlight, taillight, reflectors and light-colored clothing
so that drivers can see you.

Places to Ride Your Bike:

• In your neighborhood
• On an outside track
• Bike trails

Places to ride a stationary bike:

• At a gym
• At home

Addresses and phone numbers of places in my community to ride bike:

• 

• 

• 

3. **Swimming**

General Overview:

Water exercises can provide a supportive environment for conditions that demand less stress on the joints. Water is a buoyant medium that allows muscles to relax but provides resistance to movement because of its density. Swimming is a very relaxing activity and an excellent form of exercise because most of the muscles normally used in movement are involved without the stresses caused by running on hard ground. The following describes the benefits of swimming and general guidelines. Three strokes are described.

**Benefits/Functions of Swimming:**

- Develops muscle strength and endurance
- Improves posture and flexibility
- Improves the cardiovascular system
- It is an effective weight-control exercise
- Tones your entire body
- Strengthens your heart muscle and improves delivery of oxygen to muscles
- It is gentle and relaxing
- Reduces joint stiffness
- Reduces high blood pressure
- Increases aerobic capacity
- Elevates metabolism and burns calories
- Improves sleep patterns

**Examples of Swimming Exercises:**

**Water Walking:**

- You may want to start with water walking, which is easy to do and can be done a few different ways.
- Move your arms in a variety of ways. You can move them in circles, up, down, back and forth.

**Strokes for Swimming Laps:**

1. **Breaststroke:**

A good choice for including variety and good for injured shoulders. Bring your hands together under your chin with the palms down, fingers straight, close together, and pointing in the direction you are about to move. Next shove the two hands straight out in front of you, keeping your thumbs touching. As your hands are pushed forward kick backward with your legs. When the knees are straight the legs will be spread wide apart.
Bring them together and, if you time this properly, your position will now be that of an arrow, the point being your extended hands.

2. Backstroke:

Keeps the face out of the water and can be quite relaxing. Lie on your back in the water and extend your arms up over your head one at a time in a circle like motion starting and ending at your sides. You also need to kick your legs up and down in a constant motion.

3. American Freestyle (The Crawl):

Put your face in the water and lie on your stomach in the water and extend your arms up over your head one at a time in a circle like motion and ending at your sides. You also need to kick your legs up and down in a constant motion. Breathe by lifting your head up to either side when taking a stroke.

Other Options:

- Water aerobics
- Water sports
- Water country-line dancing
- Water Tai chi

Places to Swim:

- Community pool
- Lake
- Pool at a gym or fitness club

Addresses and phone numbers of places in my community to swim:

- ________________________________
- ________________________________
- ________________________________

*Information adapted from:


4. **Strengthening**

**General Overview:**

Weight lifting, or weight training, is a form of exercise that stretches and strengthens the body using weights. Using weight machines or free weights, a person can strengthen one group of muscles at a time through a series of repeated exercises. Weightlifting is great exercise for anyone who wants to not only firm up their muscles, but also to burn calories and lose body fat. The following describes the benefits of strengthening and general guidelines. Eight poses are described.

**Benefits/functions of Weight Lifting/Strengthening:**

- Makes weight loss or weight maintenance easier
- Gives you a leaner, stronger body
- Improves posture
- Lowers blood pressure
- Increases metabolism rate
- Improves balance and coordination
- Gives you stronger bones, and protection against osteoporosis
- Increased strength gives you confidence and makes daily activities easier
- Decreases your risk of developing adult onset diabetes
- Increases your blood level of HDL cholesterol (the good type)
- Improves the functioning of your immune system
- Elevates your mood

**General:**

- A repetition (one full range of motion) refers to how many times an exercise is repeated during one set. For example, doing 3 sets of 10 repetitions on a bench press means doing 10 bench presses, resting, and then repeating two more times. Once you have learned the technique of the exercise, you should find a weight you can do 8-12 times for 1-2 sets. If you can't do eight, the weight is too heavy. If you are comfortably completing 12 repetitions, you may wish to increase the weight you're working with.
- Rest between sets. Resting approximately 1 minute between sets is recommended for beginning weight training. The rest period can be varied according to your goals for muscular strength or endurance development.
- **Strength vs. Endurance:** When repetitions are low (3-5 per set), strength development is primarily promoted. With higher repetitions (15-20 per set), muscle endurance and toning can be achieved. For most people, however, working with a weight that can be done 8-12 times per set is most appropriate because muscle growth, strength and endurance improve. For maximum strength
and muscle development, sets should be done with a weight great enough to cause muscle fatigue (the inability to do another repetition).

• How often should I lift? : For most people, lifting 2 to 3 times per week (each training session separated by a day off) is appropriate to make significant gains in strength. On these days, all the major muscle groups should be exercised. Different exercises that work the same muscle groups can be alternated from workout to workout. More advanced weight trainers or bodybuilders often lift weights 4 to 6 times per week, exercising different muscle groups on different days.

Examples of weight lifting/strengthening exercises:

1. Push Up:

Prime movers/Muscles worked: Pectoralis major, anterior deltoids

Beginning Phase:

• Start facedown on the floor with arms extended and shoulder width apart, back flat and feet together.

Movement Phase:

• Lower body towards the floor until chest just touches floor, while keeping back parallel to the floor.

Ending Phase:

• Push your body back to starting position slowly and with control until your elbows are fully extended.

2. Bicep Curl:

Prime Movers/Muscles worked: Biceps and elbow flexors

* These exercises can be done with a bar, free weights, or as an alternative, water bottles.
Beginning Phase:

- Grasp the weights with a closed, supinated grip that is slightly wider than shoulder width apart. Stand erect with feet shoulder width apart and knees slightly bent.

Movement Phase:

- Raise the weights in an arc by bending arms at the elbow moving upward to the front of the shoulders (Do not swing the weights).
- Lower the weights slowly with control until the arms are fully extended.

3. Hammer Curls:

Prime movers/Muscles worked: Biceps

*This exercise can be performed with free weights or as an alternative, water bottles can be used.

Beginning Phase:

- Grasp the weights with a closed, neutral grip with the palm of the hand facing the outer thighs. Stand erect with feet shoulder width apart and knees slightly bent.
- Arms should be fully extended with the weights hanging at the sides.
Upward Phase:

- Raise one weight at a time by slowly bending at the elbow, bring the weight to the front of the shoulder.
- Alternate arms.

Downward Phase:

- Lower the weights in a slow, controlled movement until the arm is fully extended.

4. Tricep Extension:

* This exercise can be done with free weights or water bottles.
* This exercise can be done standing or using a bench for support.

Beginning Phase:

- Place one hand on opposing leg or a bench for support with the other leg on the floor for stability.

Movement Phase:

- Raise the weight up to the front of the body at hip height by bending the arm at the elbow.
- Straighten elbow so that the weight is at the back of the body.
5. **Flat Dumbbell Arm Raise:**
Prime Movers/Muscles worked: Pectoralis major

*Beginning Phase:*
- Lie face up flat on a bench
- Grasp weights
- Press weights straight up over your chest keeping your palms facing each other
- Point elbows out and keep them slightly flexed

*Downward Phase:*
- Allow arms to move out in a wide arc
- Keep palms up and elbows pointed out
- Keep dumbbells in line with chest
- Lower weights under control until they are level with your body

*Upward Movement:*
- Pull weights up in a wide arc to your starting position above the chest
- Keep the elbows slightly flexed during the entire movement

6. **Lateral Dumbbell Raise:**
Prime Movers/Muscles worked: Medial Deltoids, Trapezius

*Beginning Position:* (can be standing or seated)
- Grasp weights with palms at sides and facing in
- Bend elbows slightly
Upward Movement Phase:

- Keeping your elbows bent at the same angle, slowly begin to raise the weights to the side
- Stop the weights as they reach shoulder level (palms should be facing the floor)

Downward Movement Phase:

- Slowly lower the weights to the start position

7. One Arm Dumbbell Row:

Prime Movers/Muscles worked: Rhomboids, Latissimus Dorsi, Biceps, Brachialis

Beginning Phase:

- Stand at the side of a bench
- Kneel on the bench with the leg that is next to it
- Lean over and place inside hand on the bench directly below your shoulder
- Place outside foot 1-2 feet from bench and flex knee
- Position body parallel to floor and grasp a weight with your free hand
- Hang weight down with arm straight

Upward Movement Phase:

- Pull weight up toward the chest
- Keep body parallel to floor
- Touch weight to outer chest
**Downward Movement Phase:**

- Lower weight slowly and under control to a straight arm position.
- Maintain body position

**8. Overhead Press:**

**Prime Movers/Muscles worked:** Anterior Deltoid, Triceps, Trapezius

**Beginning Phase:**

* Best if started on a shoulder press rack
* May use free weights, water bottles or a bar

- Place bar on rests at a height at which when you slightly bend your knees the bar is level with the top of your shoulders
- Bend knees step up to the bar and grasp bar a little wider than shoulder width with palms facing away
- The bar should rest on your collar bone (clavicle)
- Keep your upper back straight
- Keep a slight curve in your lower back
- Unrack bar with legs

**Upward Movement Phase:**

- Push bar up to full arm extension
- Keep elbows pointed out until arms are fully extended
- Maintain body position
**Downward Movement Phase:**

- Lower bar slowly and under control to your shoulders
- At the completion of the set, move bar to rack

**Places to do Weightlifting:**

- At home
- At a gym or fitness club
- At a friend’s home

**Addresses and phone numbers of places in my community to do weightlifting:**

- 
- 
- 
- 


*Pictures used with permission of the author.*
5. Resistance Training

General Overview:

Resistance is defined as an “opposing force”, and resistance training can be defined as any technique that uses progressive resistance to increase muscular strength. Everyone can benefit from resistance training: it’s one of the best ways to look and feel great! Resistance or weight training involves using different muscle groups to lift weights. Resistance can come from many different sources, including the use of: barbells, dumbbells, free-weights, machines, theraband, elastic bands, or other objects around the house like cans or bags of beans. The following describes the benefits of resistance training and general guidelines. Seven poses are described.

Benefits/functions of Resistance Training:

- Increases strength and muscle tone
- Increases heart and lung efficiency
- Increases flexibility, mobility and coordination
- Reduces risk of high blood pressure
- Lowers cholesterol level
- Decreases stress levels
- Increases bone density
- Reduces body fat
- Boosts metabolism
- Improves balance and stability.
- Enhances performance of everyday tasks
- Reduces risk of development of, and improvement of, medical conditions

Before starting an exercise program with resistance bands, it is important to choose the strength of theraband to be used. When choosing the strength of theraband it is important to note that each color of theraband has a different strength, so it is important to match the strength of the theraband with your physical capabilities. A general color chart with strengths follows:

<table>
<thead>
<tr>
<th>Level 1 Yellow (Easiest)</th>
<th>Level one the theraband has minimal resistance. This is ideal for those that are not physically fit and do not have a lot of strength.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2 Red (Moderate):</td>
<td>This is the most commonly purchased level of theraband used for exercise classes. This level of theraband is ideal for most exercises and for females that are of average physical fitness.</td>
</tr>
<tr>
<td>Level 3 Green (Difficult):</td>
<td>Level three theraband is the basic band used for males of average physical fitness and for females that exercise regularly.</td>
</tr>
<tr>
<td>Level 4 Blue (Hard):</td>
<td>Level four bands have the greatest resistance. They are designed for females that are active in sports and need serious resistance training and for males that are physically fit and engage in sports regularly.</td>
</tr>
</tbody>
</table>
General Guidelines for Resistance Training:

Sequence: When performing resistance exercises, it is important to go from the largest muscle groups in the legs to the smaller muscle groups in the upper body. That way you will not be as fatigued when working the large muscle groups.

Speed: It is important to perform resistance exercises at a slow pace. A good rule of thumb is one to two seconds lifting, and 3 to 4 seconds lowering. Resistance exercises performed slowly will engage more muscle fibers, and reduces injury.

Sets: Depending on what your goals are, you may choose to perform one, two or three sets of X number of repetitions. Similar gains in strength are found in each, so it's really a personal preference. One set of each exercise is quicker, but 2 or 3 sets give a higher calorie burn.

Repetitions: Repetitions are directly related to the amount of weight you are working with. The general guidelines are that to see strength gains you should use a weight that allows you to do 8-12 repetitions. If you can lift a particular weight 20 times, that weight is too light for productive strength development. If you can only lift a particular weight 3 times, then you are dramatically increasing their chance of injury.

Range of Motion: All resistance exercises should be performed in a full range of motion at the joint. Emphasis should also be put on the contracted position.

Frequency: It is important that you do not to work the same muscle group within 48 hours.

Breathing: Do not hold your breath while resistance training. Instead, exhale or breathe out while pushing or pulling the weight up or out and inhale or breathe in while letting the weight down or in, slowly returning it to its original position. To maintain correct posture, “think tall”.

Examples of Resistance Exercises:

1. Back Pull Down:

INSTRUCTIONS: Find a bar or door to hang your theraband around so that it hangs down evenly from both sides. Make sure the band is tight enough that when it is loose you have to reach up with both arms to grab the handles or sides of the band. Grab both handles and pull down with the arms, bending the elbows, so that the elbows go a bit behind the body. Concentrate on squeezing the shoulder blades together. Then release and straighten the arms back out slowly. Repeat. This exercise works the latissimus dorsi muscle and the rhomboids (both muscles of the middle/upper back).

DO: Keep spine straight, and exhale as you pull down.

DON'T: Lean back from the waist as you pull.

2. Bent Over One Arm Lateral Row:

INSTRUCTIONS: Place the band under the right foot, so that it is tight enough that you have to lean way over to grab the handles. Put the legs in a "lunge" position, where the right foot is out in front with the knee bent, and the left leg is straight out behind you. Support your body weight by placing the right hand on the right thigh. With the left hand, grab both handles and pull up so the hands go out towards the sides and the elbow bends. Return to starting position and repeat. Repeat for other side. This exercise works the latissimus dorsi, the rhomboids and the posterior deltoid.

DO: Keep spine in a straight line. Do exhale as you pull the band up and inhale as you return it.

DON'T: Turn the body as you perform this exercise. Don't place the supporting hand directly over or near the kneecap.
3. Bent Over Rear Deltoid Arm Raisers:

**INSTRUCTIONS:** Place your band under both feet so that the handles are even on each side. You may need to tie your band in a knot so that you are required to bend over to reach both handles. Grasp both handles and raise them out to the sides with your arms, keeping the elbows slightly bent. Concentrate on squeezing the shoulder blades together as you lift. Return to starting position and repeat. This exercise works the posterior deltoid and the rhomboids.

**DO:** Bend the body in half and look at the ground out in front of you. Exhale as you lift the band and inhale as you lower it.

**DON’T:** Straighten up at the waist as you lift. Stay in the bent over position to isolate the posterior deltoid and the rhomboids.

4. Shoulder Press:

**INSTRUCTIONS:** Stand on your band with both feet, keeping them shoulder width apart. Grasp both handles, one in each hand and place the band behind your shoulders. With your fingers facing forward, elbows bent, raise your arms up over your head so your arms straighten out. Then bend the elbows and lower the arms back to starting position and repeat. This exercise works the deltoid and the trapezius.

**DO:** Bring your hands closer together as you reach the top. Exhale as you lift and inhale as you lower.

**DON’T:** Bend the neck, keep it straight throughout the exercise.
5. Lateral Shoulder Raises:

INSTRUCTIONS: Place your band under both feet, keeping feet shoulder width apart so that you can grasp the handles equally on each side. Standing up straight and keeping just a slight bend in the elbows, raise the arms up to shoulder height. Return and repeat. This exercise works the lateral deltoid.

DO: Keep spine straight, exhale as you lift and inhale as you lower.

DON'T: Raise shoulders up as you raise your arms up. Keep shoulders down to isolate the deltoid.

6. Bicep Curls:

INSTRUCTIONS: Place your band under both feet, keeping them shoulder width apart. Grasp one handle with each arm and keep elbows in close to the body. Raise both arms up bending at the elbows so that the handles go up by the shoulders. Lower and repeat. The exercise works the biceps.

DO: Exhale as you go up and inhale as you go down.

DON'T: Lean back from the waist as you lift up. Keep the spine straight.

**NOTE:** You can vary this exercise by keeping the elbows tucked in and moving the hands out to the sides of your body. You can also vary this exercise by lifting one arm at a time.
7. Overhead Triceps Press:

INSTRUCTIONS: Place your band behind your back. Grasp one end of the band with your left hand placed on your lower back. Grasp the other end of the band with your right hand behind your head. Be sure the band is tight. Keep the left hand stable on the lower back and raise the right arm up so that the elbow straightens out. Return and repeat. Repeat exercise on the other side. This exercise works the triceps. To make this exercise more difficult you can lower the left hand down at the same time you raise the right hand up.

DO: Keep spine in a straight line. Exhale as you lift up and inhale as you lower.

DON'T: Lower your chin towards your chest. Keep head upright.

Places to do Resistance Training:

- In your own home
- At a gym
- At a friend’s home

Addresses and phone numbers of places in my community to do resistance training:

- 
- 
- 


* Pictures used with permission of author.
6. **YOGA**

General Overview:

Yoga comes from India and is over five thousand years old and is great for the mind, body, and spirit. For beginners, it is recommended to start slow to increase strength and flexibility and reduce the incidence of muscle strain. You can do Yoga at home by watching a video or by going to a yoga class taught by an instructor. Yoga is a great exercise program to do with other individuals so you can learn and have fun together. It is important to wear comfortable clothing and shoes with good support when doing Yoga. The following describes the benefits of Yoga a general guidelines. Nine basic poses are described.

Benefits/Functions of Yoga:

- Increases strength and flexibility
- Reduces stress
- Increases energy
- Enhances concentration
- Allows you to stay fit
- Helps you to stay healthy or recover health
- Helps balance the nervous system
- Reduces stress

**Basic Yoga Exercises for Beginners:**

1. **Mountain Pose:**

Stand erect, feet together, spread toes, lift kneecaps, thighbones back, tailbone in, lift sternum from base of spine. Shoulder blades & arms extended downwards.

Breathe and hold for 20-30 seconds.

Bend Forward

Exhale as you bend forward into wall. Align feet under each hip. Inhale. Lengthen arms. Exhale.

Breathe and hold for 30-60 seconds.
2. Triangle Pose & Tree Pose:

Legs 4 feet apart. Right foot 90° out, left foot slightly inwards. Inhale to extend the spine. Exhale, bend sideways, upper torso over legs. Breathe and hold for 20-30 seconds. Repeat on second side.

Tree Pose: Bend right leg. Press foot/thigh into each other. For balance, use wall. Breathe and hold for 20-30 seconds. Repeat on second side.

3. Bound Angle Pose:

Sit against wall. Press feet into each other, heels close to groins. Shoulder blades pressed flat into wall & downward to arch lower back. Tilting pelvis slightly, draw outer thigh muscles towards knees. Knees to floor (Can do this on wall) Breathe and hold for 30-60 seconds.

Wide-angled pose on the wall

Legs straight. Stretch out through heels & towards floor (Can do this sitting) Breathe and hold for 30-60 seconds.

4. Cat Cow:

Hands under shoulders and knees under hips. Inhale lift head and tail bone concaving the back. Exhale tuck tailbone under, round back upward, head down. Be fluid with your movements. Always starting from the pelvis. Breathe and repeat series 10 times.
5. **Puppy Pose & Child’s Pose:**

Start with hips over knees, arms extended. Draw buttocks halfway backwards towards calves as you resist with the palms pressing into the floor to lengthen the spine & back muscles.

Breathe & hold for 20-30 seconds, maintain stretch in back as you slowly move into child’s pose. Childs pose: Relax, breath & elongate the spine. Breathe and hold for 40-60 seconds.

![Puppy Pose](image1)

![Child's Pose](image2)

6. **Reclining Finger to Foot Pose:**

Place left foot into wall. Keep both legs straight & lift thigh on ground. Exhale, lift right leg with tie. Inhale, lengthen thru heel. Exhale, take leg towards torso. Breathe and hold for 40-60 seconds. Wrap tie around right hand, left hand on thigh. Exhale take leg out to the side towards floor & head. Inhale, lengthen thru heel. Exhale stretch towards floor & head.

Breathe and hold for 40-60 seconds. Repeat on second side.

![Reclining Finger to Foot Pose](image3)

7. **Reclining Twist (Crocodile Twist):**

Lie on left side place right foot on left knee, hop left hip back to align hips. Inhale and take right arm over head, exhale twist to right. Have knee & shoulder even distance from floor. Long smooth breaths to open ribs & lengthen spine.

Breathe and hold for 40-60 seconds. Repeat on second side.

![Reclining Twist](image4)
8. Deep Relaxation Pose:

Take arms approximately 2 feet out from your hips, palms facing up. Legs straight and together, then let feet roll out to the sides. Have the forehead be slightly higher then the chin. Use a blanket if necessary. Completely relax. Calm the mind letting go of any worries, thoughts or tension. When the mind wonders come back to your breath. Breathe and stay for 10 minutes.

Recommended Yoga Tapes for Beginners:

- Yoga for Beginners with Patricia Walden $15.00
- A.M. and P.M. Yoga For Beginners $18.00
- Power Yoga for Beginners :: Strength with Rodney Yee $12.00

*These items can be purchased on the Internet or through any bookstore

Places to do Yoga:

- At home
- At a gym or fitness club
- At a friend’s home

Addresses and phone numbers of places in my community to do Yoga:

- 
- 
- 


*Pictures used with permission of the author.
7. Pilates

General Overview:

Pilates is an exercise method that improves core strength, flexibility, posture, alignment and balance. Pilates can be done by watching an instructional video or it can be lead by an instructor. Pilates is a wonderful type of exercise that can be done with other individuals to increase social participation and communication skills while strengthening the mind and body. The following describes the benefits of Pilates and general guidelines. Six basic poses are described.

Benefits/Functions of Pilates:

- Improves overall strength and flexibility
- Improves awareness and mental focus
- Strengthens abdominal muscles
- Reduces chance for injury
- Relieves tension and stress
- Improves posture and alignment
- Facilitates rehabilitation from injury
- Improves sports performance
- Increases energy and stamina
- Creates firm, elongated muscles
- Improves body mechanics
- Reduces fatigue and chronic pain

Common Pilates Exercises:

1. The Hundred

1. Lie on your back and pull your knees into your chest. Inhale deeply, and as you exhale sink your chest and belly into the mat beneath you.
2. Keep that feeling of a weight pressing your torso down as you bring your head up to look at your belly. (Make sure you are folding forward from your upper back and not your neck.)
3. Stretch your arms long by your sides and reach forward until you feel the bottom of your shoulder blades sinking into the mat beneath you.
4. Straighten your legs to the ceiling, squeezing the buttocks and backs of the upper inner thighs together.
5. Begin pumping your arms straight up and down as if you were slapping water. (Keep the movement slightly above the mat and your arms straight.)
6. Inhale for five counts and exhale for five counts, reaching forward as you breathe.
7. Lower your legs to a forty-five-degree angle, or to the point just before your spine arches off the mat.
8. Maintain this position, pumping your arms and breathing for one hundred counts.
9. End by lowering your head and bringing your knees back into your chest before stretching yourself out to full length.

2. The Roll-Up

1. Stretch out to your body's full length, the way you might stretch your waking body as you get up in the morning.
2. Squeeze your buttocks tightly and press the backs of your upper inner thighs together.
3. Flex your feet and bring your straight arms forward over your head.
4. As your arms pass over your chest, lift your head and inhale as you begin to roll up and forward.
5. Imagine that your lower body is strapped down to the mat, stabilizing you just below the hip bones.
6. In order to feel the articulation of your spine it is helpful to imagine this rhythm: Lift your chin to your chest, lift your chest up over your ribs, lift your ribs up over your belly, lift your belly up over your hips, and try to lift up out of your hips and over your thighs.
7. Exhale as you stretch forward from your hips while keeping your navel pulled back into your spine.
8. Initiate rolling back down by squeezing your buttocks and slightly tucking your tailbone underneath you. Inhale as you begin pulling your navel to your spine.
9. Reversing the sequence of the exercise, exhale as you feel each vertebra pressing into the mat beneath you. Keep squeezing the backs of your upper inner thighs together for stability.
10. When the backs of your shoulders touch the mat, lower your head and bring your arms over into a full-body stretch before beginning the movement again.
11. Complete three to five repetitions and end by lying flat on the mat with your arms long by your sides.
3. Rolling Like a Ball

1. Sit toward the front of your mat with your knees bent into your chest and grab your ankles. Keep your heels glued together and your elbows extended.
2. Open your knees slightly and lift your feet off the mat until you are balancing on your tailbone. Your chin is tucked into your chest and you should feel you have taken on the roundness of a ball.
3. Initiate the rolling by sinking your navel deep into your spine and falling backward, bringing your knees with you. Do not throw your head back to begin the movement.
4. Inhale as you roll back and exhale as you come forward, placing emphasis on pulling your heels in tightly to your buttocks as you come up.
5. Imagine you are in a rocking chair that is about to tip over and quickly bring yourself back up.
6. Each time you come forward, stop and balance on your tailbone. Do not allow your feet to touch the mat.
7. Repeat the Rolling Like a Ball five or six times.

4. Single Leg Stretch

1. Sit in the center of your mat with your knees bent. Take hold of your right leg and pull it into your chest with your inside hand on the knee and your outside hand on the ankle.
2. Roll your back down to the mat, bringing your bent leg with you.
3. Extend your opposite leg out in front of you and hold it above the mat at an angle that allows your back to remain flat on the mat.
4. With your elbows extended and your chin lifted onto your chest, inhale and watch as your navel sinks deep into your spine.
5. Imagine you are anchored into the floor below.
6. Exhale and switch legs, bringing the outside hand to the ankle and the inside hand to the knee. Stretch your extended leg long out of your hip and in line with the center of your body.
7. Repeat five to ten sets of the Single Leg Stretch and then pull both knees into your chest.
5. **Double Leg Stretch**

1. Lie on your back and pull both knees into your chest, elbows extended and head lifted.
2. Inhale deeply and stretch your body long, reaching your arms back by your ears and with your legs long out in front of you and raised off the mat at about a forty-five-degree angle, as if you were stretching before getting out of bed in the morning.
3. Imagine your torso firmly anchored to the mat, do not allow your head to move off your chest.
4. As you exhale, draw your knees back into your chest by circling your arms around to meet them.
5. Sink your belly further from your knees to increase the emphasis on the exhalation, as if you were compressing air out of your lungs.
6. Repeat the sequence five to ten times, remaining still in your torso as you inhale to stretch and exhale to pull.
7. End by pulling both knees to your chest with a deep exhalation.

6. **Spine Stretch Forward**

1. Sit tall with your legs extended straight out on the mat in front of you and open to slightly wider than your hips' width.
2. Straighten your arms out in front of you and flex your feet as if you were pressing your heels into the wall across the room.
3. Inhale and sit up as tall as you can.
4. Bring your chin to your chest and begin to round down toward your belly, forcing the air out of your lungs. Imagine you are forming the letter C with your body.
5. Exhale as you stretch forward, simultaneously pulling in your abdominals. Imagine you are stretching over a beach ball held between your legs. Squeeze the imaginary ball with your upper inner thighs as you lift your chest up over the top.
6. Inhale and reverse the motion of the exercise, rolling up as if constrained by a wall behind you.
7. Exhale as you return to a tall seated position, pressing your shoulders down and stretching your arms long in front of you.
8. Repeat three times with the goal of increasing the stretch down the spine with each repetition. End by sitting tall and bending your knees in toward your chest.
Recommended Pilates Video Tapes:

- *Stott Pilates: The Contemporary Approach* $14.95
- *Stott Pilates: 22 Minute Workout for Beginners* $14.95
- *Gaiam Pilates Intermediate Mat Workout* $24.99
- *Stamina Complete Pilates Mat Workout* $19.99

Places to do Pilates:

- At home
- At a gym or fitness club
- At a friend’s home

Addresses and phone numbers of places in my community to do Pilates:

- ________________________________
- ________________________________
- ________________________________


*Pictures used with permission of author.*
Exercise Interest Inventory

Exercising is a way to increase your overall physical and mental health.
Here is a list of common exercises. Please check the exercises that you enjoy doing
or would like to engage in.

<table>
<thead>
<tr>
<th>Aerobic Exercise</th>
<th>Anaerobic Exercise</th>
<th>Flexibility Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ Aerobics</td>
<td>__ Weight Lifting</td>
<td>__ Pilates</td>
</tr>
<tr>
<td>__ Walking</td>
<td>__ Resistance Training</td>
<td>__ Stretching</td>
</tr>
<tr>
<td>__ Running</td>
<td>__ Tae Bo</td>
<td>__ Yoga</td>
</tr>
<tr>
<td>__ Volleyball</td>
<td>__ Tae Kwon Do</td>
<td>__ Tai Chi</td>
</tr>
<tr>
<td>__ Bicycling</td>
<td>__ Sprinting</td>
<td>__ Chi Kung</td>
</tr>
<tr>
<td>__ Swimming</td>
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<tr>
<td>__ Football</td>
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<tr>
<td>__ Basketball</td>
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<tr>
<td>__ Baseball/Softball</td>
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<tr>
<td>_______________</td>
<td>_______________</td>
<td>_______________</td>
</tr>
</tbody>
</table>

List 3 exercises that you have never engaged in but would like to **GET STARTED!**

1. _______________
2. _______________
3. _______________
Positive Affirmations
&
Self Esteem Boosters!

1. I like myself because __________________________.
2. I have a good sense of __________________________.
3. I feel good about __________________________.
4. My favorite place is __________________________.
5. I do __________________________ very well.
6. People say I am good at __________________________.
7. I am a good friend because __________________________.
8. I am special because __________________________.
9. I am most happy when __________________________.
10. What I really enjoy the most is __________________________.
11. One thing that motivates me is __________________________.
12. The one thing I do best is __________________________.
13. __________________________ loves me!
14. I like the way I feel about myself when __________________________.
15. One goal for my future is __________________________.

Remember to:

• Be positive about yourself and except compliments from others that point out your strengths.
• Recognize that nobody is perfect and that everyone makes mistakes.
• Be realistic about what you can do.
• Replace negative thoughts with positive affirmations.
• Accept your mistakes and learn from them.
Personal Leisure Activities Worksheet

1. List 5 activities you enjoy doing indoors.
   1. _______________________
   2. _______________________
   3. _______________________
   4. _______________________
   5. _______________________

2. List 5 activities you enjoy doing outdoors.
   1. _______________________
   2. _______________________
   3. _______________________
   4. _______________________
   5. _______________________

3. In which activities do you participate regularly?
   __________________________________________
   __________________________________________
   __________________________________________

4. In what way is leisure a problem for you?
   __________________________________________
   __________________________________________
   __________________________________________

5. What activities do you enjoy doing by yourself?
   __________________________________________
   __________________________________________
   __________________________________________

6. What activities do you enjoy doing with others?
   __________________________________________
   __________________________________________
   __________________________________________
7. What activities do you do to relax?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

8. Do you belong to any organizations or clubs? If so, which one(s)?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

9. Reflect back to a positive experience you have had with exercise. What was it like?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

10. Reflect back to a negative experience you have had with exercise. What was it like? How could it have been better?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
Goals

Make a list of goals you want to accomplish through participation in this exercise program. The goals should be attainable within ten weeks and be directly related to participation in the exercise program. Under each category of exercise, identify two goals you would like to accomplish.

Aerobic Exercise Benefits/Functions:
- Improves circulation
- Helps prevent and control diabetes
- Helps control weight
- Improves efficiency of your heart and lungs
- Raises your metabolism so you burn calories faster
- Helps control your appetite
- Increases your energy
- Helps relieve stress
- Reduces levels of cholesterol in your blood
- Lowers high blood pressure
- Improves flexibility and posture
- Elevates mood
- Helps prevent and/or reduce depression
- Improves your self-esteem

Identify Two Goals You Would Like to Accomplish for Aerobic Exercise:

1. 

2. 

Anaerobic Exercise Benefits/Functions:
- Increases strength and muscle tone
- Increases heart and lung efficiency
- Increases flexibility, mobility and coordination
- Reduces risk of high blood pressure
- Lowers cholesterol level
- Decreases stress levels
- Increases bone density
- Reduces body fat
- Boosts metabolism
- Improves balance and stability.
• Enhances performance of everyday tasks
• Reduces risk of development of, and improvement of, medical conditions

Identify Two Goals You Would Like to Accomplish for Anaerobic Exercise:

1. __________________________________________ 
2. __________________________________________ 

Flexibility Exercise Benefits/Functions:
• Improves overall strength and flexibility
• Improves awareness and mental focus
• Strengthens abdominal muscles
• Reduces chance for injury
• Relieves tension and stress
• Improves posture and alignment
• Facilitates rehabilitation from injury
• Improves sports performance
• Increases energy and stamina
• Creates firm, elongated muscles
• Improves body mechanics
• Reduces fatigue and chronic pain

Identify Two Goals You Would Like to Accomplish for Flexibility Exercise:

1. __________________________________________ 
2. __________________________________________
**ExerciseLog**

<table>
<thead>
<tr>
<th>Week/Day</th>
<th>Amount of Time Spent Exercising</th>
<th>Type of Activities or exercises completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1:</td>
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<tr>
<td>Day 1</td>
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<td>Day 3</td>
<td>__ minutes</td>
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<tr>
<td>Day 4</td>
<td>__ minutes</td>
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</tbody>
</table>

What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc…) How are you progressing toward your goals?


Week 2:

| Day 1    | __ minutes |                                      |
| Day 2    | __ minutes |                                      |
| Day 3    | __ minutes |                                      |
| Day 4    | __ minutes |                                      |

What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc…) How are you progressing toward your goals?


Week 3:

| Day 1    | __ minutes |                                      |
| Day 2    | __ minutes |                                      |
What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc...) How are you progressing toward your goals?

Week 4:
Day 1 _minutes
Day 2 _minutes
Day 3 _minutes
Day 4 _minutes

What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc...) How are you progressing toward your goals?

Week 5:
Day 1 _minutes
Day 2 _minutes
Day 3 _minutes
Day 4 _minutes

What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc...) How are you progressing toward your goals?
Week 6:

Day 1  ___minutes
Day 2  ___minutes
Day 3  ___minutes
Day 4  ___minutes

What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc...) How are you progressing toward your goals?


Week 7

Day 1  ___minutes
Day 2  ___minutes
Day 3  ___minutes
Day 4  ___minutes

What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc...) How are you progressing toward your goals?


Week 8:

Day 1  ___minutes
Day 2  ___minutes
Day 3  ___minutes
Day 4  ___minutes

What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc...) How are you progressing toward your goals?
Week 9:

Day 1  ___minutes
Day 2  ___minutes
Day 3  ___minutes
Day 4  ___minutes

What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc…) How are you progressing toward your goals?

________________________________________________________________________________________

________________________________________________________________________________________

Week 10:

Day 1  ___minutes
Day 2  ___minutes
Day 3  ___minutes
Day 4  ___minutes

What have you noticed in your exercise routine this week? (length of time, level of energy, time of day, etc…) How are you progressing toward your goals?

________________________________________________________________________________________

________________________________________________________________________________________
Reflective Journal Questions

Here are some examples of questions that you can journal on. Choose as many as you wish or come up with your own!

- What, if any, stressors did you encounter this week? How did you overcome these?
- Describe how you were feeling prior to exercising.
- Describe how you were feeling after exercising.
- Did you exercise alone or with somebody this week? Did you enjoy it?
- List a goal you want to accomplish for next week.
- Where do you see yourself socially? For example, have you initiated a conversation with another individual this week?
- Where do you see yourself mentally? For example, have you noticed an increase in your alertness or ability to pay attention?
- Where do you see yourself physically? For example, have you noticed an increase in your level of energy?
- Where do you see yourself spiritually? For example, have you found that you are more motivated or inspired to participate in other areas of your life?
# Buddy List

<table>
<thead>
<tr>
<th>Name</th>
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REFERENCES


