

**IMPORTANT**

1. The words "Running head:" must be written exactly as they appear in the header.
2. The header and page number must be created through the header function of the word processor.
3. The title must be in all caps with a maximum of 50 characters.
4. The middle of the page information must appear above the halfway mark on the page and double-spaced.
5. The preferred format for the Student's name: First, Middle initial, and Last.

**Benefits of Physical Activity**

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Course number and title

Instructor name

Due date of assignment

### Abstract

Physical activity is proven to improve overall health and increase the quality and expectancy of life in participants. People who take part in exercise regularly increase the activity of the frontal region of their brains which operates memory, and the risk of developing Alzheimer's disease is significantly decreased. Studies indicate that exercising raises the count of T-lymphocytes (T-cells) in the immune system, making the body more resistant to viruses. Weight training and cardiovascular exercise increase strength of muscles and the heart and eliminates excessive weight gain and heart disease. Some studies suggest people who participate in regular physical activity live two to three years longer.

#### IMPORTANT

1. The words "Running head:" must not appear in the header after the title page — just the capitalized title appears after the title page. Format the page two header with the DIFFERENT FIRST PAGE WORD PROCESSING INSTRUCTION.
2. The word "Abstract" must head the Abstract page.
3. The first line is not indented.
4. Some professors do not require an Abstract (summary of the paper).
5. Depending on the type of paper, most Abstracts are between 100-120 words in length.

### **Benefits of Physical Activity**

Whether it is for sports, good health, or simply something fun to do, physical activities improve lifestyles in more than one area. Physical activity can keep the body looking good and the mental outlook more positive about life. People can reduce their weight, perform everyday tasks, and can live a better life with the incorporation of physical activity. Research on exercise has shown that by participating in regular activity the risks of becoming ill can be reduced. When a person is sick, sometimes the body cannot fight off infection, but participating in regular physical activity improves the function of the immune system to fight off the infection. Physical activity is also proven to help maintain the function of fine motor skills that people use every day. In doing this, the memory of older people can improve and the risk of developing Alzheimer's disease can be reduced. As people age, memory is not the only aspect of the body that starts to deteriorate. With age, the joints of the body begin to deteriorate, movement slows, and the risk of high blood pressure and disease increase due to a sedentary lifestyle. By increasing physical activity in everyday life, people can maintain a healthy lifestyle and accomplish their daily routines without increased difficulty. As anything else in life, the better taken care of something is, the longer it lasts. The body is similar in that the better a person takes care of the body, the longer the life expectancy. Physical activity is proven to help prevent Alzheimer's disease, increase life expectancy, and boost the immune system.

Physical activity tests show positive results in preventing Alzheimer's disease. Scientists state that the frontal region of the brain is the area which houses the working memory. As this region of the brain deteriorates, the ability to remember events, people, or places decreases and Alzheimer's disease begins to develop (Rabins, 2009). Research

indicates that exercise increases activity in the frontal regions of the brain. Keeping this region of the brain working ensures that all of the functions of that region are functioning better including memory. Alternative studies also indicate that exercise helps retain fine motor skills and language skills that people use every day. Exercise of any kind increases the flow of blood to brain which carries oxygen to fuel the functions of the brain (Rabins, 2009). A lack of oxygen diminishes the possibilities of the frontal regions of the brain, therefore, the ability to retain information slowly deteriorates. Memory loss is not the only symptom of Alzheimer's disease. Individuals affected by Alzheimer's usually lack physical activity and experience health related symptoms including muscle deterioration, low blood pressure, and constipation. Physical activity does not need to be intense; it can include as simple an exercise as walking around the mall, dancing, or activities around the home including gardening, vacuuming, and folding clothes (Rabins, 2009).

Life expectancy is increased with the incorporation of a regular fitness regimen. Physical activity is an essential aspect of every person's life and will improve health and living conditions. Physical activity increases strength, cardiovascular functions, and overall health. There can be any number of distractions and excuses that help people find a way to avoid physical activity in their routines (Butler et al., 1998). Dr. Miriam Nelson states that 25 to 30 percent of 40 to 55 year old women find it difficult to complete everyday tasks including walking around the block, getting groceries, and climbing a flight of stairs. These struggles are not normal in patients this young, and unless some form of exercise is incorporated, patients are at an increased risk of gaining more weight and becoming obese.

As people age, their metabolic rates decreases, and that lessens the ability of their bodies to use the energy from food eaten (Butler et al., 1998). When the body cannot use

all the energy from calories, the excess is turned into body fat. Increased body fat is a risk for stroke or heart attack and can lead to death due to clogging of the arteries. Participating in physical activity can increase the rate at which the body breaks down food and uses it efficiently to function. All excess calories are burned during exercise and are the fuel used while exercising (Butler et al., 1998). Eliminating excess calories dramatically reduces the risk of cardio-respiratory disease and other heart problems. Exercise can include running or walking to increase cardiovascular endurance, but can also include weight lifting to increase muscle mass on the body. Muscle mass increases strength and further aids in the speed of the metabolic rate. As people age, muscles and bones naturally weaken and elderly individuals are at a risk of hurting themselves while trying to perform normal tasks like walking around or doing chores in their homes. Adding muscle mass allows older individuals to walk around safely, make it up and down stairs without falling, and accomplish any other normal activity where they may seriously hurt themselves.

Aerobic exercise including running or bicycling increases the maximum volume of oxygen intake to the lungs (VO<sub>2</sub>max) of an individual (Butler et al., 1998). This makes breathing much easier and more efficient and reduces excess stress on the lungs. Dr. Robert Butler and Dr. Miriam Nelson believe that exercising can eliminate all of these health risks and lead to a longer and more enjoyable life. Both doctors predict that regularly physically active people will live an extra two to three years on average than a sedentary person.

Studies on physically active individuals show that regular exercise increases the body's defense mechanisms and boosts the immune system. In order to truly see improved results in the immune system, researchers conducted experiments on people who suffer from the disease human immunodeficiency virus / acquired immune deficiency syndrome

(HIV/AIDS). Victims of HIV/AIDS have immune deficiency and their moods, attitudes, and overall health are significantly affected by this disease. Individuals with the disease participate in fitness routines three days a week including weight training and cardiovascular exercises or playing a sport (Nix, 1995). The body contains T-cells which are part of the immune system which fight off viruses that cause colds and fevers. HIV/AIDS is a virus that enters the immune system and destroys the body's T-cells and makes the infected person vulnerable to contracting other viruses. When the virus enters the body, the immune system does not have enough of the T-cells to fight the disease and the individual becomes ill and in some cases may die. Studies have indicated that exercising does not destroy T-cells any further and in fact increases the amount of T-cells in the immune system (Nix, 1995). Christine Farris is a daily participant of physical activity who contracted the HIV/AIDS disease and she states that exercising improves the symptoms. Not only is it a way to relieve personal mental stress and anxiety, Farris says, "Last count, my T-cells had increased by 200. I'm still as active as I was before; I've even increased my weight training. A boosted immune system helps control HIV related ailment including yeast infections, night sweats and fever." The American College of Sports Medicine shows that the drug azidothymidine (AZT) used to treat HIV/AIDS can cause numbness or paralysis in the legs (Nix, 1995). Members of an HIV/AIDS exercise group state that by exercising the pain and paralysis of AZT and other related drugs are relieved and they are more comfortable.

Physical activity is proven to improve overall health and increase the quality and expectancy of life in participants. Studies indicate that exercising raises the count of T-cells in the immune system, making the body more resistant to viruses. Weight training and

cardiovascular exercise increase strength of muscles and the heart and eliminates excessive weight gain and heart disease. Some studies suggest people who participate in regular physical activity live two to three years longer.

### References

- Butler, R.N., Davis, R., Lewis, C.B., Nelson, M.E., & Strauss, E. (1998). Physical fitness: How to help older patients live stronger and longer. *Geriatrics*, 53(9), 26-32. Retrieved from <http://199.245.164.25:2048/login?url=http://199.245.164.25:2250/login.aspx?direct=true&db=hxh&AN=1148021&site=ehost-live&scope=site>
- LeDoux, J. (1995). Emotion: Clues from the brain. *Annual Review of Psychology*, 46, 209–235. doi:10.1146/annurev.ps.46.020195.001233
- Nix, A. (1995). Positive energy. *American Fitness*, 13(2), 46-48. Retrieved from <http://199.245.164.25:2048/login?url=http://199.245.164.25:2250/login.aspx?direct=true&db=hxh&AN=9503212600&site=ehost-live&scope=site>
- Rabins, P.V. (2009). Exercise and Alzheimer's disease. *Memory (Medletter)*, 42-43. Retrieved from <http://199.245.164.25:2048/login?url=http://199.245.164.25:2250/login.aspx?direct=true&db=hxh&AN=10047456&site=ehost-live&scope=site>