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What can a level/Intensity of exercise do to lower the rates of cardiovascular diseases in the heart?

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Summer Science Research Program, The Opportunity Network

Author Note

Tenzin Namdol is a rising senior at The Renaissance Charter School and is enrolled in 10

Advanced Placement Classes; Tenzin is also aspired to work in the Medical Field. This Research was conducted for two reasons: to investigate specific exercises that can be beneficial to any type of person whether out of shape or in shape and to spread awareness of the dangers of certain cardiovascular diseases. Correspondence concerning this article should be addressed to Tenzin Namdol, Contact: t.namdol0220@gmail.com

Abstract

The Research study will undermine the history of Cardiovascular diseases and investigate certain exercises that will benefit any person in terms of their body mass. Using the literature technique

the research will target research similar to our research in finding effective and sim,p;le exercises that can prevent and decrease the chances of Cardiovascular diseases.

Introduction

The importance of daily exercise and physical activities is essential to decrease the rates of certain cardiovascular diseases. However, in some cases cardiovascular diseases aren't well known to the general public therefore it would lead to further doubts about taking care and managing one's health. It is known to affect people who aren't physically active or people who are overweight, and these diseases should be well known for their negative effects or in some instances death.

In addition, physical and daily exercise is detrimental to maintaining a healthy body, however, not many people are aware of the benefits of life-changing and simple activities. Specifically, they help combat and negate harmful cardiovascular diseases like coronary artery disease. Which is the buildup of plaque in your arteries that pushes blood into your organs to function properly. The area is incredibly well known and numerous doctors and physicians have confirmed that regular exercise and training can heavily reduce numerous cardiovascular diseases: type 2 diabetes mellitus, hyperlipidemia, obesity, hypertension, and coronary artery disease. However, depending on the person these cases can vary; some people may have instances where extensive may be an effective exercise while the other may find high intensity to be more impactful. Scientists currently are hosting trials and programs to show the beneficial effects of constant exercise and physical activity. Many physicians and doctors are seeking further data and research about long-term exercise training (Physical Activities).

Finally, the main focus would be specific Coronary Artery Diseases and how the general public should show more concern and stress towards its outcomes like death. Many people have shown confusion but this article shall discuss specific exercises that are simple and efficient for any person whether overweight or athletic. The research will show detrimental reasons for exercising and how these simple strategies can help combat and lower the risk of cardiovascular diseases. And the research will have trials and tests on which exercise is known to help any person regardless of their BMI (Body Mass Index).

Methods

The Literature review will be conducted by researching related articles based on Cardiovascular diseases and what exercising can do to prevent and decrease the rate of these diseases. In addition, research will be done on certain exercises in hopes of finding a simple and effective exercise that can cease to be beneficial towards anyone. Existing knowledge will also be utilized to develop a foundation or a baseline of what is known about Cardiovascular diseases and how to negate these cases. Hence forward, there are countless new initiatives being made to counter and negate cardiovascular diseases. However, Cardiology physiology will always remain a complex and hard jewel to decipher. The study was carried out with SSRP and utilized the literature review process. The studies were identified by an electronic search and hand search. We will search the databases of PubMed, Web of Science, and CINAHL. We also will utilize Google Scholar to find additional articles from recent studies. The search strategy combined terms related to aerobic exercises, strength training, and cardiovascular diseases. Specifically the keywords used will be, "strength training, weight training, resistance training, progressive

training, progressive resistance, weightlifting; or aerobic exercise, endurance exercise, aerobic training, endurance training, cardio training, exercise, physical endurance, physical exertion; and Coronary Artery Disease, Hypertension, Insulin Resistance, Cardiac Arrest, Atherosclerosis, and the myocardial infarction. The review included studies that will search for the most effective and simple exercises that are efficient towards any individual regardless of your body mass. We will identify in other studies regarding a variety of people with different BMI's, and expose them to different types of exercises whether that would be extensive, aerobic, or intensive; In hopes of drafting new ideas and exercises that will be effective towards all sorts of people.

Discussion

Two significant references that we used as our foundation would be a research study that identifies if aerobic exercise has any significant effects on cardiovascular diseases. Hence forward, with their given research it is clear that regular ET/PA induces a wide range of direct and indirect physiological adaptations and pleiotropic benefits for human health. Thus, aerobic exercise not only prevents certain heart diseases but it can also generally improve the mental wellbeing of a person. In addition, the other research study regarded a research paper emphasizes on the complexities of cardiac arrest and the underrated effects it can actually have on an individual. This article aims to review the cardiac rhythms associated with sudden death, the pathophysiology involved in cardiac resuscitation, and the current state of resuscitation science and techniques. These studies support the research proposal in both aspects of exercise and how these specific diseases should be more well known and concerning to the general public.

The studies do relate to each other in the sense of cardiovascular diseases and their missions of making it more well known. However, they do present different perspectives because one focuses more on exercise and how it can prevent cardiovascular diseases whereas the other study emphasizes on the initiatives being taken and how it should be more concerning to the public. On top of that, they both express clinical implications and information to analyze and back up their inferences.

The studies bolster and ameliorate our claim about how certain aerobic exercising can be crucial towards one's health, especially with rising heart diseases. With creating a simple and effective exercise the research hopes to find more alternatives to combat cardiovascular diseases and spread awareness of the dangers.

Conclusion

I envision my research affecting the world by letting the general public know and learn more about cardiovascular diseases. And how to combat them which may sound difficult but with committing an hour of exercising can really make a difference between a life or death scenario. This exercise known as aerobic exercising consists of both intensive and extended physical activities or in other words "Cardio". Thus, this can help people and most importantly motivate them to show more concern towards their health. I also aim to put this topic in the spotlight so more funding and research can go into innovating new ways to combat Cardiovascular diseases. People may be aware of the diseases but they aren't aware of its history and how these diseases function; there are simple things people can be doing to prevent themselves from severe pain or worse that my research will provide.

References

Cardiac Arrest: Resuscitation and Reperfusion

Exercise effects on cardiovascular disease: from basic aspects to clinical evidence

Exercise and insulin resistance in type 2 diabetes mellitus: A systematic review and meta-analysis

<u>Heart Disease and Stroke Statistics—2016 Update: A Report From the American Heart Association</u>

Insulin resistance and cardiovascular disease

Modulation of Heart Rate by Acute or Chronic Aerobic Exercise. Potential Effects on Blood Pressure Control

Using Exercise to Measure and Modify Cardiac Function