

SESSION 2.

EXERCISE

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General Conference Health Ministries Celebrations – Exercise











OBJECTIVES:

Participants will:

- Learn the benefits of regular physical activity.
- Discuss types, activity levels, and intensity of exercise.
- Learn how to avoid injury during exercise.
- Evaluate personal exercise habits.

MATERIALS NEEDED:

- Leader's notes
- PowerPoint
- Participant worksheet
- Computer (for your PowerPoint presentation)
- Projector and screen
- Tables and chairs
- Sound system (for large classes)







TIPS AND GUIDELINES

- 01. Come prepared. Review the entire content and handout materials before the session. Arrive early for your presentation.
 Set up your equipment and test everything before the participants arrive.
- 02. **Greet the participants as they arrive.** One of our goals is to build relationships within the community. Greeting people as they enter puts them at ease and can open doors for further dialogue.
- **O3. Start on time.** The presentations are designed to be less than 1.5 hours. Honor that time frame.
- 04. Welcome students and introduce yourself.

 This introduction should take only 30 to 60 seconds.
- 05. **Introduce the topic of the presentation.** A brief introduction appears in the script under slide 2. Keep it short Introductions should get the participants' attention, not bore them.
- 06. Distribute the participant worksheet for note taking.
- 07. Give the PowerPoint presentation.
- 08. **Introduce and distribute the quiz.** Detailed instructions are given in the script. Have the participants work in small groups of two to four, discussing and completing the quiz together. (If the nature of your group warrants it, lead the discussion of the quiz questions from the front, soliciting responses from the participants.) Give the participants about 20 minutes to complete the quiz. Monitor the participants' progress, adjusting the time as needed to allow them time to complete the worksheet. Then call them back together as a group and discuss the answers using the answer key.
- 09. **Closing remarks and reminder.** Introduce the next session's topic, and remind them of the date, and time of the session.
- 10. Thank the participants for coming, and visit with them as they are leaving.



WELCOME



Slide 1 (EXERCISE)

Welcome to another CELEBRATIONS presentation. During this session, we will discuss the second healthful living principle in the celebrations acronym, which starts with the letter E, which stands for exercise.



Slide 2 (GRACE - AGE 40)

At age 91 Grace was still active playing tennis, lifting weights, and walking. Fifty-one years before, however, at the age of 40, her condition had been very different. Grace's spine was badly injured during a ski accident that occurred at the time, and as the years passed her back pain intensified. Her physician told her that he couldn't do much to help her because she was "too old." Grace later was diagnosed with emphysema and had difficulty breathing. She tired easily and at one point feared that she would never be able to climb stairs again. The doctor offered her no hope of improvement.



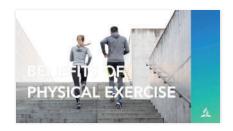
Slide 3 (GRACE - AGE 91)

Grace, however, had a strong will to recover and decided to try an exercise program offered at a local medical center. For six weeks, she worked out three times a week, two to three hours a day. She lifted weights, walked on the treadmill, rode the stationary bicycle, and did breathing exercises. Even when she was in pain and didn't feel like doing anything, she didn't quit. Eventually, her breathing improved and the back pain disappeared. She could walk reasonable distances—and had energy to spare! Her doctor told her that he had never seen such progress in anyone her age. Grace attributes her health improvement to exercise¹.









Slide 4 (BENEFITS OF PHYSICAL EXERCISE)

Regular exercise is not only a preventive measure; it also works to maintain health at its best. Studies clearly demonstrate that participating in regular physical activity provides many health benefits. The Physical Activity Guidelines for Americans (PAGA) Advisory Committee, comprising 13 leading experts in the field of exercise science and public health, summarizes the benefits of exercise² (See CELEBRATIONS, p37).



Slide 5 (BENEFITS OF PHYSICAL EXERCISE)

Studies show that people who are physically active for approximately seven hours a week have a 40-percent lower risk of dying prematurely than those who are active for fewer than 30 minutes a week. There's even substantially lower risk of premature death when people do two and a half hours of at least moderate-intensity aerobic physical activity a week.



Slide 6 (BENEFITS OF PHYSICAL EXERCISE)

Heart disease and stroke are two of the leading causes of heath worldwide. Studies show that a significant reduction in the risk of cardiovascular disease occurs at activity levels equivalent to two and a half hours a week of moderate-intensity physical activity. The evidence is strong that greater amounts of physical activity up to one hour per day result in further reductions in risk of cardiovascular disease.

^{1 &}quot;An Exercise Story"; http://nihseniorhealth.gov/stories/ca_grace.html. Accessed online April 4, 2012.

^{2 &}quot;U.S. Department of Health and Human Services (2008), 2008 *Physical Activity Guidelines* for Americans, pp. 9-12. For online version go to www.Health.gov/paguidelines.





Slide 7 (BENEFITS OF PHYSICAL EXERCISE)

The decline in bone density during aging can be slowed with regular physical activity beginning at one and a half hours a week and continuing up to five hours a week. Research studies of physical activity to prevent hip fracture show that participating in two to five hours of physical activity per week of at least moderate intensity is associated with reduced risk.



Slide 8 (BENEFITS OF PHYSICAL EXERCISE)

Metabolic Syndrome is a condition in which people have a combination of high blood pressure, a large waistline (abdominal obesity), an adverse blood lipid profile (low levels of high-density lipoprotein [HDL] cholesterol, raised triglycerides), and impaired glucose tolerance. Studies have shown that people with metabolic syndrome respond to persistent, regular physical activity; a restrictive diet; and appropriate medications³. Other studies show that those who regularly engage in at least two to two and a half hours a week of moderate-intensity aerobic activity have a lower risk of developing type 2 diabetes than do inactive people.



Slide 9 (BENEFITS OF PHYSICAL EXERCISE)

Overweight and obesity occur when calories ingested through food and beverages are more than calories used. Research shows that within the space of a year it is possible to achieve weight stability through two and a half to five hours per week of walking at a pace of about four miles per hour. Such physical activity is a critical factor in determining whether a person can maintain a healthy body weight, lose excess body weight, or maintain successful weight.

3 "Effect of Physical Activity and Diet on the Treatment of Metabolic Syndrome"; http://www.bioportfolio.com/resources/trial/75943/Effect-Of-Physical-Activity-And-Diet-On-The-Treatment-Of-Metabolic-Syndrome.html. Accessed April 4, 2012.









Slide 10 (BENEFITS OF PHYSICAL EXERCISE)

Health benefits of physical activity far outweigh the risk of adverse events for almost everyone. Adults with chronic disabilities should consult their health-care provider about the types and amounts of activity appropriate for them. As long as the activity is within one's ability, it should be safe. In other words, if you want to postpone your funeral, exercise regularly!



Slide 11 (THREE TYPES OF PHYSICAL ACTIVITIES)

Physical exercises are generally grouped into three types⁴ and have different effects on the body:

- 01. Flexibility exercises, such as stretching, improve the range of motion of muscles and joints.⁵
- 02. Aerobic exercises, such as cycling, swimming, walking, skipping rope, rowing, running, hiking, or playing tennis, focus on increasing cardiovascular endurance⁶; however, weight-bearing aerobic exercise, such as walking, climbing, and jogging, increases bone density.
- 03. Resistance exercises, such as weight training, increase muscle strength⁷ and lower or prevent bone loss associated with menopause.⁸

^{4 &}quot;Your Guide to Physical Activity"; http://www.nhlbi.nih.gov/health/public/heart/obesity/phy_active.pdf. Accessed online April 4, 2012.

⁵ D. O'Connor, M. Crowe, W. Spinks (2005), "Effects of static stretching onleg capacity during cycling," *Turin*, 46 (I), ppp. 52-56. Retrieved October 5, 2006, from ProQuest database.

⁶ J. Wilmore, H. Knuttgen (2003), "Aerobic Exercise and Endurance Improving Fitness for Health Benefits," The Physician and Sportsmedicine, 31(5).45. Retrieved October 5, 2006, from ProQuest Database.

⁷ N. de Vos, N. Singh, D. Ross, T. Stavrinos, et al. (2005), "Optimal Load for Increasing Muscle Power During Explosive Resistance Training in OlderAdults," The Journals of Gerontology, 60A(5), pp, 638-647. Retrieved October 5, 2006, from ProQuest Database. 8 WebMD (Nov. 10, 2010), "Resistance (Strength) Training Exercise";

www.webmd.com/a-to-z-guides/resistance-strength-training-exercise-topic-overview. Accessed online April 4, 2012.





Slide 12 (FOUR LEVELS OF PHYSICAL ACTIVITIES)

The 2008 PAGA Advisory Committee report provides the basis for dividing the amount of weekly aerobic physical activity for adults into four levels:

01. Inactive-no additional activity beyond baseline (basic routine activities)



Slide 13 (FOUR LEVELS OF PHYSICAL ACTIVITIES)

- 02.Low-some exercise, up to 150 minutes a week
- 03. Medium-exercise 150 to 300 minutes a week



Slide 14 (FOUR LEVELS OF PHYSICAL ACTIVITIES)

04. High-exercise more than 300 minutes a week



Slide 15 (RULE OF THUMB)

These categories provide a rule of thumb for how the total amount of physical activity is related to health benefits. Low amounts of activity provide some benefit; medium amounts provide substantial benefit; and high amounts provide even greater benefit. If a person has not been exercising regularly, it's important to obtain health clearance from a physician before embarking on such a program.









Slide 16 (RULE OF THUMB) How do we know the intensity of our exercise?



Slide 17 (RULE OF THUMB)

As a rule of thumb, a person doing moderate-intensity aerobic activity can maintain a comfortable conversation during the activity. A person doing vigorous-intensity activity cannot say more than a few words without pausing for a breath. Health benefits have not yet been proved for activities such as stretching, warming up, or cooling down, but they often are used in physical activity programs.



Slide 18 (RULE OF THUMB)

Although physical activity has many health benefits, injuries and other adverse events do sometimes occur. The most common injuries affect the musculoskeletal system (bones, joints, muscles, ligaments, and tendons). Other problems, such as overheating and dehydration, may occur during activity. The good news is that scientific evidence strongly shows that appropriate physical activity is safe for almost everyone, and that the health benefits of physical activity far outweigh the risks.





Slide 19 (RULE OF THUMB)

The current Physical Activity Guidelines for Americans encourage a person to accumulate at least two and a half hours a week in moderate-intensity physical activity, such as brisk walking. Dr. Kenneth Cooper, of Aerobics fame, promotes brisk walking rather than running or jogging. Walking appeals to many because it can be done almost any time or place. It's fun, convenient, inexpensive, and can be enjoyed alone or with friends. It requires no special equipment. Comfortable walking shoes and clothing are all that is needed. Brisk walking results in minimal injuries while exercising most muscles and systems of the body. It stimulates the release of endorphins, which elevate the mood and improve outlook on life.



Slide 20 (ELLEN G. WHITE) More than 150 years ago Ellen G. White said,

"Walking, in all cases where it is possible, is the best exercise, because in walking, all the muscles are brought into action.9



Slide 21 (PROPER TRAINING CLOTHES)

9 Ellen G. White, The Health Reformer, July 1, 1872. Ellen G. White is one of the founders of the Seventh-day Adventist Church. Her life and ministry gave strong evidence of the special guidance of the Holy Spirit.









Slide 22 (PROPER TRAINING CLOTHES) While exercising one should wear lightweight garments that offer maximum freedom of movement and are appropriate to climatic conditions.



Slide 23 (PROPER TRAINING CLOTHES) When exercising in an urban area, use brightly colored garments and reflector materials for safety.



Slide 24 (PROPER TRAINING CLOTHES) Exercise generates heat, so it's better to dress in layers that can be removed as soon as one starts perspiring.



Slide 25 (PROPER TRAINING CLOTHES)
If it is very cold, consider wearing a face mask or scarf to warm the air before it enters the lungs. A hat or headband will protect the ears, which are vulnerable to frostbite.





Slide 26 (PROPER TRAINING CLOTHES)

It's vital to wear protective gear, such as helmets, wrist guards, and knee guards, when engaging in physical activities that carry risk of injury, including bicycling, skateboarding, and roller blading.



Slide 27 (PROPER TRAINING CLOTHES)

Feet bear the weight of the whole body, therefore it's important that shoes be comfortable, well-fitting, and supportive. Look for athletic shoes with absorbent cushioning, appropriate arch support, a solid and snug heel cup, flexibility, breathability, and good lacing so you can adjust tightness without pinching your feet.



Slide 28 (EXERCISING FAITH)

As regular aerobic exercise helps us live better, so it is with the exercise of faith. We can trust God to lead our lives according to His loving prescription for health.

He gives power to the weak, and to those who have no might He increases strength. Even the youths shall faint and be weary, and the young men shall utterly fall, but those who wait on the Lord shall renew their strength; they shall mount up with wings like eagles, they shall run and not be weary, they shall walk and not faint (Isa. 40:29-31, NKJV).







Slide 29 (LIFE APPLICATION QUESTIONS)

We will now focus on some life application questions regarding exercise. We will review them carefully so that you have time to consider the questions and apply what you are learning to your life. Please write your responses in your Celebrating Exercise participant worksheets. You are welcome to ask questions and to look back over the material.



Slide 30 (LIFE APPLICATION QUESTIONS)
What are the most attractive benefits of regular exercise?



Slide 31 (LIFE APPLICATION QUESTIONS)
How can I live longer with better cognitive function and lower my risk of getting cancer, cardiovascular disease, or diabetes?



Slide 32 (LIFE APPLICATION QUESTIONS)
How does exercise offer better quality of life, less depression, ease of movement, and optimum body mass?





Slide 33 (LIFE APPLICATION QUESTIONS)

As I look at my family history, are there benefits of exercise that could prevent the adverse history being repeated in my life?



Slide 34 (LIFE APPLICATION QUESTIONS) Am I going to make the choice to exercise with these goals as motivating factors?



Slide 35 (LIFE APPLICATION QUESTIONS)
How much exercise am I currently getting per week?



Slide 36 (LIFE APPLICATION QUESTIONS) What level of exercise am I achieving?



Slide 37 (LIFE APPLICATION QUESTIONS)
Do I need to choose to exercise for longer periods each day, or can I increase the level of activity?









Slide 38 (LIFE APPLICATION QUESTIONS) What activity can I do along with exercises such as walking to maximize my use of time?



Slide 39 (LIFE APPLICATION QUESTIONS) Should I use the time for personal growth, possibly spiritual, by listening to an audio version of the Bible or devotional books?



Slide 40 (LIFE APPLICATION QUESTIONS) What benefits would come from exercising with friends?



Slide 41 (LIFE APPLICATION QUESTIONS) Would I be able to maintain some long-distance relationships by talking on the phone while doing moderate-intensity aerobic exercise?





Slide 42 (LIFE APPLICATION QUESTIONS)
How can I become better motivated to exercise regularly?



Slide 43 (LIFE APPLICATION QUESTIONS) What types of exercise achieve flexibility, cardiovascular fitness, and improved bone health?



Slide 44 (LIFE APPLICATION QUESTIONS) Which of the three types will I start today? When will I include the next type of exercise?

At this time we will divide into small groups of three or four. This will be a great opportunity for you to get to know one another and to work together as we discuss the next series of questions in our groups. You may write your responses and/or the group's responses in your Celebrating Exercise participant worksheets.







Slide 46 (LIFE APPLICATION QUESTIONS)

The children of Margaret's neighbor have a problem with their weight, and Margaret is worried that they are at risk for diabetes. She wants to give them a gift at Christmas.



Slide 47 (LIFE APPLICATION QUESTIONS)
What should she get that would
make exercise fun for them?



Slide 48 (LIFE APPLICATION QUESTIONS)

Do I have a spouse who needs to be encouraged to exercise? Can we make time to walk together, thereby adding more bonding time to our marriage as well?



Slide 49 (LIFE APPLICATION QUESTIONS)

What is the best clothing and shoes for exercise activities? What will keep me safe in a busy city, at night, or during winter?





Slide 50 (LIFE APPLICATION QUESTIONS) I sometimes find it hard to choose to exercise on a daily basis. How can I obtain spiritual strength to make this a priority in my life?



Slide 51 (REFERENCES)

Thank you for joining us. We hope the material that has been presented will be an encouragement as you apply the healthful living principle of exercise to your life. We look forward to seeing you at the next CELEBRATIONS presentation.



Slide 52 (REFERENCES)

Author Kathleen Kiem Hoa Oey Kuntaraf, M.D., MPH, is a general practitioner, focusing on public health. Born in Indonesia of Chinese parents, she serves as a associate director in the Health Ministries department at the General Conference.











SESSION 2 WORKSHEET

PLEASE NOTE: THE FOLLOWING OUTLINE IS PROVIDED AS A GUIDE FOR PERSONAL NOTE TAKING.

Some of the most attractive benefits of regular exercise are:
01
02
03
04
05
06
The three types of physical activities are:
01
02
03
Some examples of the three types of physical activities are:
01
02
03





The tour levels of physical activities are:
01
02
03
04

A rule of thumb for knowing what intensity I am exercising at is:



CELEBRATING EXERCISE QUIZ

SHORT ANSWER: WRITE A SHORT RESPONSE THAT BEST ANSWERS THE FOLLOWING QUESTIONS

Question 01

A.	What are	the	most	attractive	benefits	of regul	ar exercise?
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- B. How can I live longer with better cognitive function and lower my risk of getting cancer, cardiovascular disease, or diabetes?
- C. How does exercise offer better quality of life, less depression, ease of movement, and optimum body mass?
- D. As I look at my family history are there benefits of exercise that could prevent the adverse history being repeated in my life?
- E. Am I going to make the choice to exercise with these goals as motivating factors?







Question 02

A. How much exercise am I cu	urrently getting per week?
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B. What level of exercise am I achieving?

C. Do I need to choose to exercise for longer periods each day, or can I increase the level of activity?

D. What activity can I do along with exercises such as walking to maximize my use of time?

E. Should I use the time for personal growth, possibly spiritual, by listening to an audio version of the Bible or devotional books?



F.	What benefits	would	come from	exercising	with	friends?
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G. Would I be able to maintain some long-distance relationships by talking on the phone while doing moderate-intensity aerobic exercise?

Question 3

A. How can I become better motivated to exercise regularly?

B. What types of exercise achieve flexibility, cardiovascular fitness, and improved bone health?

C. Which of the three types will I start today?





D. When will I include the next type of exercise?

GROUP DISCUSSION

Question 4

The children of Margaret's neighbor have a problem with their weight, and Margaret is worried that they are at risk for diabetes. She wants to give them a gift for Christmas. What should she get that would make exercise fun for them?

Question 5

A. Are there others, such as our spouses who need to be encouraged to exercise?

B. Discuss ways to do that, such as making time to walk together; thereby adding more bonding time with our marriage partner or other loved one.



Question 6

A. What is the best clothing and shoes for exercise activities?

B. What improves safety when exercising in a busy city, at night, or during winter?

Question 7

I sometimes find it hard to choose to exercise on a daily basis. How can I obtain spiritual strength to make this a priority in my life?







CELEBRATING EXERCISE QUIZ/KEY

SHORT ANSWER: WRITE A SHORT RESPONSE THAT BEST ANSWERS THE FOLLOWING QUESTIONS

Question 1

A. What are the most attractive benefits of regular exercise?

Regular exercise is not only a preventive measure; it also works to maintain health at its best. See page 37 of CELEBRATIONS for a complete list of benefits.

B. How can I live longer with better cognitive function and lower my risk of getting cancer, cardiovascular disease, or diabetes? Studies show that people who are physically active for approximately seven hours a week have a 40-percent lower risk of dying prematurely than those who are active for fewer than 30 minutes a week.

Studies show that a significant reduction in the risk of cardiovascular disease occurs at activity levels equivalent to two and a half hours a week of moderate-intensity physical activity. The evidence is strong that greater amounts of physical activity up to one hour per day result in further reductions in risk of cardiovascular disease. Those who regularly engage in at least two to two and a half hours a week of moderate-intensity aerobic activity have a lower risk of developing type 2 diabetes than do inactive people.

C. How does exercise offer better quality of life, less depression, ease of movement, and optimum body mass?

Brisk walking results in minimal injuries while exercising most muscles and systems of the body. It stimulates the release of endorphins, which elevate the mood and improve outlook on life.

The decline in bone density during aging can be slowed with regular physical activity beginning at one and a half hours a week and continuing up to five hours a week. Research studies of physical activity to prevent hip fracture show that participating in two to five hours of physical activity per week of at least moderate intensity is associated with reduced risk. Overweight and obesity occur when calories ingested through food and beverages are more than calories used. Research shows that within



the space of a year it is possible to achieve weight stability through two and a half to five hours per week of walking at a pace of about four miles per hour. Such physical activity is a critical factor in determining whether a person can maintain a healthy body weight, lose excess body weight, or maintain successful weight.

D. As I look at my family history are there benefits of exercise that could prevent the adverse history being repeated in my life? Answers will vary

E. Am I going to make the choice to exercise with these goals as motivating factors? Answers will vary

Question 2

A. How much exercise am I currently getting per week? Answers will vary

B. What level of exercise am I achieving? Answers will vary

C. Do I need to choose to exercise for longer periods each day, or can I increase the level of activity?

The 2008 Physical Activity Guidelines for Americans recommend that a person accumulates two and a half hours a week in various activities. Their report provides the basis for dividing the amount of weekly aerobic physical activity for adults into four levels:

- 1. Inactive—no additional activity beyond baseline (basic routine activities)
- 2. Low—some exercise, up to 150 minutes a week
- 3. Medium—exercise 150 to 300 minutes a week
- 4. High—exercise more than 300 minutes a week

These categories provide a rule of thumb for how the total amount of physical activity is related to health benefits. Low amounts of activity provide some benefit; medium amounts provide substantial benefit; and high amounts provide even greater benefit. If a person has not been exercising regularly, it is important to obtain health clearance from a physician before embarking on such a program.







- D. What activity can I do along with exercises such as walking to maximize my use of time? Answers will vary
- **E.** Should I use the time for personal growth, possibly spiritual, by listening to an audio version of the Bible or devotional books? Answers will vary
- **F.** What benefits would come from exercising with friends? Answers will vary
- **G.** Would I be able to maintain some long-distance relationships by talking on the phone while doing moderate-intensity aerobic exercise? Answers will vary

Question 3

A. How can I become better motivated to exercise regularly?

The good news is that scientific evidence strongly shows that appropriate physical activity is safe for almost everyone, and that the health benefits of physical activity far outweigh the risks. Personal motivators will vary.

B. What types of exercise achieve flexibility, cardiovascular fitness, and improved bone health?

Flexibility exercises, such as stretching, improve the range of motion of muscles and joints. Aerobic exercises, such as cycling, swimming, walking, skipping rope, rowing, running, hiking, or playing tennis, focus on increasing cardiovascular endurance; however, weight-bearing aerobic exercise, such as walking, climbing, and jogging, increases bone density. Resistance exercises, such as weight training, increase muscle strength and lower or prevent bone loss associated with menopause.

- C. Which of the three types will I start today? Answers will vary
- **D.** When will I include the next type of exercise? Answers will vary



GROUP DISCUSSION KEY

Question 4

The children of Margaret's neighbor have a problem with their weight, and Margaret is worried that they are at risk for diabetes. She wants to give them a gift for Christmas. What should she get that would make exercise fun for them?

Answers will vary

Question 5

A. Are there others, such as our spouses who need to be encouraged to exercise? Answers will vary

B. Discuss ways to do that, such as making time to walk together; thereby adding more bonding time with our marriage partner or other loved one. Answers will vary

Question 6

A. What is the best clothing and shoes for exercise activities?

Exercise generates heat, so it's better to dress in layers that can be removed as soon as one starts perspiring. It is important that shoes be comfortable, well-fitting, and supportive. Look for athletic shoes with absorbent cushioning, appropriate arch support, a solid and snug heel cup, flexibility, breathability, and good lacing so you can adjust tightness without pinching your feet.







B. What improves safety when exercising in a busy city, at night, or during winter? When exercising in an urban area, use brightly colored garments and reflector materials for safety.

If it's very cold, consider wearing a face mask or scarf to warm the air before it enters the lungs. A hat or headband will protect the ears, which are vulnerable to frostbit.

Question 7

I sometimes find it hard to choose to exercise on a daily basis. How can I obtain spiritual strength to make this a priority in my life?

As regular aerobic exercise helps us live better, so it is with the exercise of faith. We can trust God to lead our lives according to His loving prescription for health.

He gives power to the weak, and to those who have no might He increases strength. Even the youths shall faint and be weary, and the young men shall utterly fall, but those who wait on the Lord shall renew their strength; they shall mount up with wings like eagles, they shall run and not be weary, they shall walk and not faint (Isaiah 40:29-31, NKJV).