

LIVING LIFE TO THE FULLEST

## LIQUDS

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General Conference Health Ministries Celebrations – Liquids









#### **OBJECTIVES:**

Participants will:

- Acknowledge the importance of water to their very existence and understand how much water their body needs every day to stay healthy.
- Discuss the benefits of drinking water over caffeinated or sugary drinks.
- Learn the benefits of using water as a cleansing or healing agent.
- Evaluate their personal use of water and conservation of this precious natural resource.

#### 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.
- 03. **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 (LIQUIDS)

Welcome to another CELEBRATIONS presentation. During our time together we will learn about another healthful living principle in the CELEBRATIONS acronym, which starts with the letter L. This letter stands for liquids.



#### Slide 2 (CELEBRATING LIQUIDS)

Li Ming was a retired woman who enjoyed working in her garden. Even the unusual heat wave that hit her region one summer didn't deter her from tending her flowers and other plants. The temperature rose above 100 degrees Fahrenheit, and the humidity teetered at 90 percent. On the third day of these recordbreaking temperatures, Li Ming called her daughter, Kim, but Li Ming sounded confused on the phone. Kim became alarmed and rushed to Li Ming's house, where she found her mother lying on the kitchen floor unconscious. Apparently, Li Ming's large fan wasn't enough to fight the effects of the heat and humidity, and she suffered heat stroke–which can be life threatening.<sup>1</sup>



#### Slide 3 (CELEBRATING LIQUIDS)

One can lower the risk of heat-related illness, such as heat stroke, by drinking plenty of liquids, particularly water and fruit and vegetable juices. Next to air, water is the most vital element needed for survival.







<sup>1</sup> U.S. Department of Health and Human Services, National Institute on Aging, "Hyperthermia"; http://www.nia.nih.gov/health/topics/hyperthermia. Accessed online April 4, 2012.

## LEADER'S GUIDE



#### Slide 4 (CELEBRATING LIQUIDS)

By weight, a newborn infant is approximately 75 percent water, and an adult about 70 percent. A man weighing 198 pounds has about 138 pounds of water in his body.

#### Slide 5 (CELEBRATING LIQUIDS)



The transport system within the bod A lubricant for movement

The facilitator of digestion

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The gray matter of the brain is approximately 85 percent water, blood is 83 percent water, muscles are about 75 percent water, and even hard marrow bones are 20 to 25 percent water.<sup>2</sup>

## Water, the liquid of life Water, the liquid of life, is a medium in which metabolism takes place. It is:

- The transport system within the body
- A lubricant for movement
- The facilitator of digestion

#### Slide 7 (WATER, THE LIQUID OF LIFE)

- The prime transporter of waste via the kidneys
- A temperature regulator
- A major constituent of the circulating blood.

2 M. G. Hardinge, A Philosophy of Health (Loma Linda University School of Public Health, 1980), p. 37.





#### Liquids comes

- Two third from ingested liquid
  One third from our food
- From a small amount of liquid synthesized during food metabolism



#### Slide 8 (LIQUIDS COMES)

About two thirds of the water our body requires comes from ingested liquid; about one third from our food; and a small amount of liquid is synthesized during food metabolism. Fruits and vegetables generally have higher water content than other food groups. Examples include: apricots, watermelon, papaya, citrus, strawberries, apples, grapes, cherries, spinach, bell peppers, lettuce, carrots, cucumbers, squash, broccoli, celery, and tomatoes.

Daily loss of water is average human boo prolonged			19	414	
	Low activity.	Prolonged heavy exercise	0	75	
Insensible (invisible)		(bas)	- Contraction	California Cal	
loss from skin	350	350	Constant and	and the second	
Insensible (invisible)			alles - sent	and the second	
loss from lungs	350	650	Contraction of the	15	
Sweat	100	5000	1 Contraction of the	1000	
Feces	100	100	1		
Urine	1400	500	hh.		
Total output	2300	6600			1.00

#### Slide 9 (MAINTAINING BALANCE)

Ideally, the body maintains a balance between the amount of water lost each day and the amount taken in to replace it. The amount of daily water lost depends on climatic conditions and physical activities, as you can see in this table.<sup>3</sup>





#### Slide 10 (WHAT IF WATER INTAKE IS INADEQUATE?)

When we don't provide our bodies with enough water, they attempt to avoid dehydration by decreasing sweat and urine output. If this compensatory mechanism proves inadequate, and insufficient fluid intake persists, dehydration will occur.



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**Slide 11** (WHAT IF WATER INTAKE IS INADEQUATE?) Dehydration causes an impairment of the body cooling mechanisms, along with a possible rise in body temperature and an inefficient clearance of body waste.

3 H. C. Guyton, J. E. Hall, Textbook of Medical Physiology (Philadelphia, Penn.: W.B. Saunders Co., 2000), p. 265.







#### LEADER'S GUIDE LIQUIDS



What if water intake is inadequate? An inefficient clearance of body waste The blood thickens and flow becomes impaired Increased risk of intravascular clotting

#### Slide 12 (WHAT IF WATER INTAKE IS INADEQUATE?)

The blood thickens and blood flow becomes impaired, increasing the risk of intravascular clotting. This may manifest as a stroke or heart attack.



#### Slide 13 (INSUFICIENT WATER INTAKE)

Insufficient water intake also leads to constipation.<sup>4</sup> Exercise and fiber intake play a role, as well.

Insufficient water intake	100
<ul> <li>Dehydration may cause dizziness or headache</li> <li>Increases the risk of developing kidney and gallstones</li> </ul>	
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#### Slide 14 (INSUFICIENT WATER INTAKE)

Dehydration may cause a person to experience dizziness or headache. During prolonged, arduous exercise serious dehydration may occur, so careful attention to fluid intake is particularly important under these circumstances. Drinking an inadequate amount of water also increases the risk of developing kidney and gallstones.<sup>5</sup>

#### Journal of the American medical association of

It's estimated that adequate hydration of older people could save thousands of days of hospitalization and millions of dollars each year

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#### Slide 15 (JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION - 1995)

In 1995, The Journal of the American Medical Association called attention to the hazards facing older Americans from inadequate fluid intake.<sup>6</sup> It is estimated that adequate hydration of older individuals could save thousands of days of hospitalization and millions of dollars each year. Such an observation has implications for all age groups worldwide.

<sup>4</sup> WebMD, "The Basics of Constipation"; http://www.webmd.com/digestivedisorders/digestive-diseases-constipation#causes. Accessed online April 4, 2012. 5 WebMD, "The Basics of Constipation"; http://www.webmd.com/digestivedisorders/digestive-diseases-constipation#causes. Accessed online April 4, 2012. 6 A. D. Weinberg, K. L. Minaker, "Dehydration, Evaluation and Management in Older Adults," Council on Scientific Affairs, American Medical Association, The Journal of the American Medical Association, Nov. 15, 1995: 274(19): pp. 1552-1556.





#### A practical guide to water intake

Consume sufficient amounts throughout the day to ensure that urine is a pale color (urine may be bright yellow after taking certain medications/ vitamins)

#### Slide 16 (A PRACTICAL GUIDE TO WATER INTAKE)

To help stay hydrated during prolonged physical activity or in hot weather, the 2005 Dietary Guidelines for Americans recommends that we drink fluids during the activity as well as several glasses of water or other fluid after the physical activity is completed.<sup>7</sup>

In the healthy person, a practical guide to water intake is to consume sufficient amounts throughout the day to ensure that the urine is a pale color. (Urine may be a bright yellow color after taking certain medications, including vitamin pills and anti-tuberculosis medication.)



#### Slide 17 (BEGIN DRINKING WATER IN THE MORNING)

Begin drinking water in the morning, because the body is relatively dehydrated from insensible (invisible) water loss, or perspiration, during sleep. Then continue to drink water at regular intervals throughout the day.



Water as a cleaning agent • Regular bathing removes accumulated dirt • Frequent hand washing before eating and after activities that soil their hands

#### Slide 18 (WATER AS A CLEANING AGENT)

Another important use of water is cleansing. Regular bathing removes accumulated dirt and contaminating debris, reducing the risk of infection. Frequent hand washing may reduce transmission of many infectious agents from person to person. If people thoroughly washed their hands with soap and water before eating and after activities that soil their hands, a large percentage of infectious diseases would be eliminated.







<sup>7</sup> United States Department of Agriculture, "Dietary Guidelines for Americans' (2005), "Adequate Nutrients Within Calorie Needs"; http://www.health.gov/ dietaryguidelines/dga2005/document/html/chapter2.htm. Accessed May 24, 2007.

## LEADER'S GUIDE



#### Hydrotherapy

Hydrotherapy is the use of water as a simple home therapeutic application. It is best applied as a help for simple muscular aches, pains, and bruises.

#### Slide 19 (HYDROTHERAPY)

Hydrotherapy is the use of water as a simple home therapeutic application. It is best applied as a help for simple muscular aches, pains, and bruises.







#### Slide 20 (HYDROTHERAPY)

When dealing with muscular aches, apply hot, wet towels alternated with cold, wet towels (ending with a cold application) to affected areas to improve blood flow. If a recent injury and bruising have occurred, cold compresses are more appropriate.

- Caution should be exercised where the skin is diseased or cut.
- When blood flow becomes impaired or there is neurological damage resulting in an inability to feel heat, hot applications may lead to serious injury. (diabetic patients)



#### Slide 21 (HYDROTHERAPY)

Caution should be exercised where the skin is diseased or cut. When blood flow becomes impaired or there is neurological damage resulting in an inability to feel heat, hot applications may lead to serious injury. So caution is again advised. This is especially applicable to people with diabetes or those whose nerves have been damaged by injury or surgery.

Modes of hydrotherapy

- Cold mitten friction
- Hot foot baths
- Heat compressesIce compresses

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#### Slide 22 (MODES OF HYDROTHERAPY)

There are many modes of hydrotherapy, such as cold mitten friction, hot footbaths, heat compresses, and ice compresses. It's unfortunate that so few utilize this most useful tool for relief of pain.





#### Slide 23 (ICE BAG)

A man injured his elbow during a badminton game. He would not listen to advice to compress the hematoma of his elbow with ice, which would reduce the bleeding. The next day the bruised area around his elbow had swollen so much that he went to see the doctor right away. The doctor advised the use of ice compresses at home, and charged a \$100 consultation fee!



The external application of water is one the easiest and most satisfactory ways fregulating the circulation of the lood,... But many have never learned y experience the beneficial effects of the proper use of water... All should ecome intulligent in its use in simple one treatments...8

llen G. White, The Ministry of Healing untain View, Calif,: Pacific Press dishing Association, 1942), p. 237.

#### Slide 24 (ICE BAG)

"The external application of water is one of the easiest and most satisfactory ways of regulating the circulation of the blood.... But many have never learned by experience the beneficial effects of the proper use of water.... All should become intelligent in its use in simple home treatments."<sup>8</sup>



#### Slide 25 (CONCERN FOR EARTH'S INHABITANTS)

Water is a precious and indispensable resource. It is therefore important to conserve water resources:

Avoid wasting water. When possible, install toilets and shower heads in your home that use less water. When brushing your teeth, turn on the water tap only to wet and then rinse your toothbrush; turn the tap off while brushing your teeth. Repair leaking faucets; continuous small drips over time can turn into huge amounts of wasted water. Also watch for other appropriate ways to conserve water in your day-to-day routines.



#### Slide 26 (CONCERN FOR EARTH'S INHABITANTS)

Avoid polluting water. Water can be polluted by human excrement, industrial waste, and chemicals. Animals raised in large agricultural feed-lot operations consume huge quantities of water, and their excrement has the potential to pollute groundwater and nearby rivers and streams.

8 Ellen G. White, The Ministry of Healing (Mountain View, Calif,: PacificPress Publishing Association, 1942), p. 237.





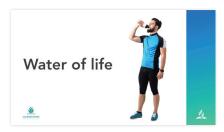


## LEADER'S GUIDE



#### Slide 27 (CONCERN FOR EARTH'S INHABITANTS)

Eating a vegetarian diet helps to conserve water, because foods consumed in a plant-based diet require much less water to produce.



#### Slide 28 (WATER OF LIFE)

Life cannot exist without water. All body functions require it. Water cleanses, refreshes, and powerfully aids the body's restoration. Similarly, in our spiritual lives, we cannot live eternally without the Water of Life.

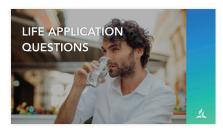


#### Slide 29 (WHAT DOES "WATER OF LIFE" MEAN?)

What does the term "Water of Life" mean? Two thousand years ago Jesus Christ met a woman in Samaria who had come to a well to draw water. He asked her for a drink, and in the ensuing conversation He said He could give her water that would take away her thirst forever. "'Whoever drinks of this water [from the well] will thirst again,'" Jesus told her, "'but whoever drinks of the water that I shall give him will never thirst. But the water that I shall give him will become in him a fountain of water springing up into everlasting life'" (John 4:13, 14, NKJV). Such a concept implies a spiritual thirst-quenching that would satisfy the yearning for peace, joy, freedom from guilt, forgiveness, and a sense of oneness with God.

Christians find such a solution in the person of Jesus Christ. His life was in marked contrast to the turmoil, strife, jealousy, anger, and dissatisfaction among the people both of His day and ours. His offer to all is that we come to Him and dedicate ourselves to His service. He promises that this will bring relief from toil, anxiety, and stress; providing rest and fulfillment in Him. His offer is still valid today. May we be transformed as we drink, bathe, and are soaked in His compassion, love, and acceptance.





#### Slide 30 (LIFE APPLICATION QUESTIONS)

We will now focus on some life application questions regarding liquids. 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 Liquids participant worksheets. Feel free to ask questions and to look back over the material.



Life application questions Based on my level of activity, how much water does my body lose daily?

**Slide 31** (LIFE APPLICATION QUESTIONS) Based on my level of activity,

how much water does my body lose daily?



Life application questions How much liquid am I taking in every day?

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**Slide 32** (LIFE APPLICATION QUESTIONS) How much liquid am I taking in every day?



Life application questions Based on the suggested criteria of the color of my urine, am I getting sufficient liquids on a daily basis?

**Slide 33 (LIFE APPLICATION QUESTIONS)** Based on the suggested criteria of the color of my urine, am I getting sufficient liquids on a daily basis?





**Slide 34** (LIFE APPLICATION QUESTIONS) What can I do to increase my intake of liquids?



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Life application questions Do I need to fill a water bottle each morning and make sure I drink it all?

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#### Slide 35 (LIFE APPLICATION QUESTIONS)

Do I need to fill a water bottle each morning and make sure I drink it all?





#### **Slide 36** (LIFE APPLICATION QUESTIONS) Would a schedule to drink at specific times each day be useful (not forgetting the important first glass in the morning)?



Life application questions What are the most attractive benefits of regular exercise?

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#### Slide 37 (LIFE APPLICATION QUESTIONS)

What percentage of my liquid intake is pure water?



Life application questions What are the most attractive benefits of regular exercise?

#### **Slide 38** (LIFE APPLICATION QUESTIONS) What drinks increase the chance of dehydration because they are diuretic in nature?





#### Slide 39 (LIFE APPLICATION QUESTIONS)

Do I consume too many sugary drinks (including fruit juices) that contribute to a weight problem?



Life application questions

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#### Slide 40 (LIFE APPLICATION QUESTIONS)

Do I make too many of these drinks readily available for my family, rather than keeping them for special times only?



Life application questions Because a third of the water my body gets comes from my food, do I need to reevaluate the amount of high-water foods I'm eating?

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#### **Slide 41 (LIFE APPLICATION QUESTIONS)** Because a third of the water my body gets comes from my food, do I need to re-evaluate the amount of high-water foods I'm eating?



Life application questions Which of the fruits and vegetables mentioned that are high in water content am I going to choose to use more regularly?

#### Slide 42 (LIFE APPLICATION QUESTIONS)

Which of the fruits and vegetables mentioned that are high in water content am I going to choose to use more regularly?

Life application questions	
How often do I use water as a cleansing or healing agent?	
CELEBRATIONS	4

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#### **Slide 43** (LIFE APPLICATION QUESTIONS) How often do I use water as a cleansing or healing agent?

Life application questions
How should I tactfully remind others to wash their hands more frequently in order to stop the spread of infections?



#### Slide 44 (LIFE APPLICATION QUESTIONS)

How should I tactfully remind others to wash their hands more frequently in order to stop the spread of infections?



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#### LEADER'S GUIDE LIQUIDS



Life application auestions When is it appropriate to use hydrotherapy? Do I have ice or ice packs in my refrigerator for use on bumps or bruises?

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#### Slide 45 (LIFE APPLICATION QUESTIONS)

When is it appropriate to use hydrotherapy? Do I have ice or ice packs in my refrigerator for use on bumps or bruises?

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.

# Life application

questions Ron and his family enjoy exercisin outdoors. When it is hot and hum they drink a lot of sodas to keep hydrated. Sometimes they compl. of headaches and dizziness. Ň.

#### Slide 46 (LIFE APPLICATION QUESTIONS)

Ron and his family enjoy exercising outdoors. When it is hot and humid, they drink a lot of sodas to keep hydrated. Sometimes they complain of headaches and dizziness. What is wrong?



#### Slide 47 (LIFE APPLICATION QUESTIONS)

How could I encourage them to exercise, but also keep them safe?

	Life application questions		
	What are the symptoms of dehydration and heat stroke that I should look for?		
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#### Slide 48 (LIFE APPLICATION QUESTIONS)

What are the symptoms of dehydration and heat stroke that I should look for?



Life application questions

· How often do I think about and thank God for the wonderful gif of sufficient water?





#### Slide 49 (LIFE APPLICATION QUESTIONS)

How often do I think about and thank God for the wonderful gift of sufficient water? Which of the suggested ways to conserve water will I begin implementing?

#### Life application questions

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Can I chose to use more plantbased foods that consume less water in production and reduce the amount of contamination of water supplies?



#### Slide 50 (LIFE APPLICATION QUESTIONS)

Can I choose to use more plant-based foods that consume less water in production and reduce the amount of contamination of water supplies?

#### Life application questions Being thirsty reminds us of the greater thirst for the "water of life' that Jesus offers. How can I accept that gift so that I also can be a source of life to those with whom I interact on a daily basi <u>ů</u>

#### Slide 51 (LIFE APPLICATION QUESTIONS)

Being thirsty reminds us of the greater thirst for the "water of life" that Jesus offers. How can I accept that gift so that I also can be a source of life to those with whom I interact on a daily basis?



#### Slide 52 (REFERENCES)

We are glad that you took the time to attend this discussion. We hope that you make liquids a daily part of your healthy lifestyle. We look forward to seeing you at the next CELEBRATIONS presentation!



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

#### 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 3 WORKSHEET

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

The L in CELEBRATIONS stands for \_\_\_\_\_\_.

The two most important elements to survival are:

1.

2.

An adult body is comprised of roughly \_\_\_\_\_\_ percent water.

An infant's body is about \_\_\_\_\_\_ percent water.

A human brain is about \_\_\_\_\_\_ percent water.

Human bone marrow is about \_\_\_\_\_\_ percent water.









Water is called the liquid of	It acts to do six major jobs in the human body.		
1.			
2.			
3.			
4.			
5.			
6.			

Two thirds of the water our body needs comes from \_\_\_\_\_;

One third of the water we need comes from \_\_\_\_\_\_.

When we don't provide our body with enough water, the body tries to avoid dehydration by reducing:

1.

2.



Dehydration can cause several symptoms:

1.			
2.			
3.			
4.			
5.			
6.			

In order to remain hydrated during physical activity, we must:

- 1.
- 2.

The clearest indication that a person is properly hydrated is:

It is important to begin hydrating in the morning, when we must replace fluids lost by:









While any drink is better than none (so long as it's not alcoholic), it is wisest to avoid:

1.

2.

Our bodies benefit from external use of water for:

Hydrotherapy is the use of water to:

To relieve muscle aches, use water as follows:

To relieve an injury such as a hematoma or bruising:

Pure water is one of the earth's most precious resources. We can preserve it by:

1.

2.

3.





## CELEBRATING EXERCISE QUIZ

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

#### **Question 1**

#### Based on my level of activity,

A. How much water does my body lose daily?

B. How much liquid am I taking in every day?

#### Based on the suggested criteria of the color of my urine,

C. Am I getting sufficient liquids on a daily basis?

D. What can I do to increase my intake of liquids?









E. Do I need to fill a water bottle each morning and make sure I drink it all?

**F.** Would a schedule to drink at specific times each day be useful (not forgetting the important first glass in the morning)? A. What are the most attractive benefits of regular exercise?

#### **Question 2**

A. What percentage of my liquid intake is pure water?

B. What drinks increase the chance of dehydration because they are diuretic in nature?

C. Do I consume too many sugary drinks (including fruit juices) that contribute to a weight problem?



**D.** Do I make too many of these drinks readily available for my family, rather than keeping them for special times only?

#### **Question 3**

#### Because a third of the water my body gets comes from my food,

A. Do I need to re-evaluate the amount of high-water foods I'm eating?

**B.** Which of the fruits and vegetables mentioned that are high in water content am I going to choose to use more regularly?

#### **Question 4**

A. How often do I use water as a cleansing or healing agent?









**B.** How should I tactfully remind others to wash their hands more frequently in order to stop the spread of infections?

C. When is it appropriate to use hydrotherapy?

D. Do I have ice or ice packs in my refrigerator for use on bumps or bruises?

### GROUP **DISCUSSION**

#### **Question 5**

Ron and his family enjoy exercising outdoors. When it is hot and humid, they drink a lot of sodas to keep hydrated. Sometimes they complain of headaches and dizziness.



**A.** What is wrong?

**B.** How could I encourage them to exercise, but also keep them safe?

C. What are the symptoms of dehydration and heat stroke that I should look for?

#### **Question 6**

A. How often do I think about and thank God for the wonderful gift of sufficient water?

B. Which of the suggested ways to conserve water will I begin implementing?









**C.** Can I chose to use more plant-based foods that consume less water in production and reduce the amount of contamination of water supplies?

#### **Question 7**

Being thirsty reminds us of the greater thirst for the "water of life" that Jesus offers. How can I accept that gift so that I also can be a source of life to those with whom interact on a daily basis?



## CELEBRATING EXERCISE QUIZ/KEY

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

#### **Question 1**

#### Based on my level of activity,

#### A. How much water does my body lose daily?

The amount of daily water a body loses depends on climatic conditions and physical activities. Sweat is excreted 50 times quicker under conditions of prolonged heavy exercise as compared to low activity in normal temperatures. The average person excretes a total of some 2,300 milliliters (2.3 liters, or about 2.4 quarts) of water daily during low activity at normal temperature, and 6,600 milliliters (6.6 liters, or about 7 quarts) in prolonged heavy exercise.

#### B. How much liquid am I taking in every day?

Answers will vary

#### Based on the suggested criteria of the color of my urine,

**C.** Am I getting sufficient liquids on a daily basis? Answers will vary

**D.** What can I do to increase my intake of liquids? Begin drinking water in the morning, because the body is relatively dehydrated from water loss or perspiration during sleep. Then continue to drink water at regular intervals throughout the day.

**E.** Do I need to fill a water bottle each morning and make sure I drink it all? Answers will vary

**F.** Would a schedule to drink at specific times each day be useful (not forgetting the important first glass in the morning)? A. What are the most attractive benefits of regular exercise? Answers will vary









#### **Question 2**

**A.** What percentage of my liquid intake is pure water? Answers will vary

**B.** What drinks increase the chance of dehydration because they are diuretic in nature? Caffeinated beverages, alcohol

**C.** Do I consume too many sugary drinks (including fruit juices) that contribute to a weight problem? Answers will vary

**D.** Do I make too many of these drinks readily available for my family, rather than keeping them for special times only? Answers will vary

#### **Question 3**

#### Because a third of the water my body gets comes from my food,

**A.** Do I need to re-evaluate the amount of high-water foods I'm eating? Answers will vary

**B.** Which of the fruits and vegetables mentioned that are high in water content am I going to choose to use more regularly? Any of the following: Apricots, watermelon, papaya, citrus, strawberries, apples, grapes, cherries, spinach, bell peppers, lettuce, carrots, cucumbers, squash, broccoli, celery, and tomatoes.

#### **Question 4**

**A.** How often do I use water as a cleansing or healing agent? Answers will vary

**B.** How should I tactfully remind others to wash their hands more frequently in order to stop the spread of infections? Answers will vary





#### **C.** When is it appropriate to use hydrotherapy? It is best applied as a help for simple muscular aches, pains, and bruises.

**D.** Do I have ice or ice packs in my refrigerator for use on bumps or bruises? Answers will vary

## GROUP **DISCUSSION**

#### **Question 5**

Ron and his family enjoy exercising outdoors. When it is hot and humid, they drink a lot of sodas to keep hydrated. Sometimes they complain of headaches and dizziness.

#### **A.** What is wrong?

Water is the most healthfully beneficial liquid we can consume. When inadequate and insufficient fluid intake persists, dehydration will occur. As a result, a person may experience dizziness or headache.

#### B. How could I encourage them to exercise, but also keep them safe?

To help stay hydrated during prolonged physical activity or in hot weather, the 2005 Dietary Guidelines for Americans recommends that we drink fluids during the activity as well as several glasses of water or other fluid after the physical activity is completed.

**C.** What are the symptoms of dehydration and heat stroke that I should look for? Dehydration causes an impairment of the body cooling mechanisms, along with a possible rise in body temperature and an inefficient clearance of body waste. The blood thickens and blood flow becomes impaired, increasing the risk of intravascular clotting.

Insufficient water intake also leads to constipation.

Dehydration may cause a person to experience dizziness or headache. Drinking an inadequate amount of water also increases the risk of developing kidney and gallstones.







#### **Question 6**

**A.** How often do I think about and thank God for the wonderful gift of sufficient water? Answers will vary

#### B. Which of the suggested ways to conserve water will I begin implementing?

Answers will vary and may include any of the following:

Install toilets and shower heads in your home that use less water. When brushing your teeth, turn on the water tap only to wet and then rinse your toothbrush; turn the tap off while brushing your teeth. Repair leaking faucets; continuous small drips over time can turn into huge amounts of wasted water. Also watch for other appropriate ways to conserve water in your day-to-day routines.

#### C. Can I chose to use more plant-based foods that consume less water

in production and reduce the amount of contamination of water supplies?

Animals raised in large feed-lot operations consume huge quantities of water, and their excrement can pollute groundwater and nearby rivers and streams. Eating a vegetarian diet helps to conserve water because a plant-based diet requires much less water to produce.

#### **Question 7**

Being thirsty reminds us of the greater thirst for the "water of life" that Jesus offers. How can I accept that gift so that I also can be a source of life to those with whom interact on a daily basis? Answers will vary