



Life Gift

An Organ and Tissue
Donation Adolescent Awareness Curriculum
2017

Grade 7

GRADE 7

Standards:

- N-7.6.1: Set a goal to achieve balanced diet
- N-7.6.2: Set a goal to increase his or her physical activity, monitor the progress of that goal, and make the necessary adjustments
- N-7.8.1: Demonstrate ways to advocate the benefits of choosing healthy foods and increasing one's physical activity.
- P-7.8.2: Identify the ways in which blood, organ, eye and tissue donation are related to health promotion.

Essential Questions:

- What is diabetes?
- How can it be prevented?
- What is the difference between regenerative and non-regenerative tissue?

Lesson 7-1

Review:

Review basic information from 6th grade including donating blood and living donations.

Discuss:

Today we are going to discuss some myths and facts about organ transplants for a deceased person.

Fact versus Myth:

- Before we begin, let's talk about some of the ideas about donation you may have heard and determine if they are true.
- Distribute the myth and fact cards and have students find the person with a card that matches their card.

Myth 1: Most religions oppose organ donation.	Fact 1: Most major religions support organ donation. Visit Donate Life SC.org for more information. You can always ask a member of your church about their opinion.
Myth 2: Tissue and organs in people over 40 can't be used because they are too old.	Fact 2: Age does not disqualify donors. Doctors determine whether organs and tissues are medically suitable for transplantation
Myth 3: Being in poor health disqualifies donors	Fact 3: Doctors determine whether organs and tissues are medically suitable for transplantation.

Myth 4: Kidneys can only be donated to family members.	Fact 4: A person can become a living donor to anyone who is a medical match as long as their own kidneys are working well.
Myth 5: Rich and famous people receive organs before others.	Fact 5: Famous celebrity status and wealth are not factors considered in organ distribution.
Myth 6: Families must pay medical expenses if a person donates their organs.	Fact 6: There is no cost to the family members of persons who donate organs or tissue.
Myth 7: The person receiving my body tissue/organ will know who donated organs or tissue.	Fact 7: The names of both the person donating and receiving are kept confidential unless everyone agrees to share their identity.
Myth 8: If the hospital workers know that I am a potential donor, they will not try to save my life.	Fact 8: Health care workers try to save lives. They don't worry about finding matching organ and tissue donors.
Myth 9: If hospital workers know I am a donor they might sign my death certificate too soon	Fact 9: People who have agreed to organ donation are given extra free tests to determine that they are no longer alive.

Homework: Interview 5 people you know and ask the following questions:

- Name:
- Age of person"
- M____F_____
- Have you ever donated blood? Y_____ N_____
- If so, why? If not, why not?

Be ready to share your answers tomorrow.

GRADE 7

Lesson 7- 2

Bell Ringer: Discuss in groups of 4 your homework assignment.

- Step 1:
 - Determine number of people who have given blood and those who have not.
 - List the reasons people do not give blood
- Step 2:
 - Place the individuals you interviewed in the group ranges. i.e., 20-30, 31-40, 41-50, etc.
 - Analyze the age group most likely to donate blood
- Step 3:
 - Determine number of males and females
 - Analyze the number of males vs. females giving blood

Review:

- What does regenerate mean? It means that organ can grow back or in the case of blood or bone marrow, it will regenerate or replace itself.
- What does non-regenerative mean? These tissues do not grow back. Living donors can donate to whomever they choose such as a friend, or a loved one.
- What organ/tissue can regenerate itself?
- The liver is one of the body's only regenerative organs. The portion of the liver transplanted in the recipient and in the donor will grow to normal size in a few months.

What tissues/organs cannot regenerate?

A kidney does not regenerate itself, but remember you have 2 of these organs. People who have diabetes sometimes need a help and need a new kidney because neither kidney is working.

What is diabetes?

Type 1 Diabetes (sometimes called "sugar diabetes") is a condition that occurs when the body can't process glucose (a type of sugar) normally.

- Diabetes means too much sugar (glucose) in the blood.
- Sugar comes from the foods we eat, like bread, cereals, pasta, rice, fruit, starchy vegetables and dairy items.
- Sugar provides the energy we need to run, skip, play, and swimming.
- Insulin is a hormone that is made in the pancreas and works like a key to a door – insulin opens the door of the cells of our body allowing the sugar to go from the bloodstream into the cells where it is then used for energy. If there is not enough insulin or if the insulin can't open the door to the cell, the sugar levels rise in the blood and diabetes occurs.
- And guess what? Even animals can get diabetes!

Type 2 Diabetes is a type of diabetes that occurs in adults but more and more kids are developing Type 2 Diabetes. It is linked to being overweight and not exercising enough.

What are some ways a person can stay healthy and reduce the risk of Type 2 Diabetes and other chronic diseases?

- Eat 5 servings of fruits and vegetables daily

- Avoid fried foods and fast foods that are high in calories.
- Maintain a healthy weight
- Reduce TV time
- Avoid sodas of all kinds

Do you know someone with diabetes?

How are they different from you?

- They have to monitor their sugar with a meter daily
- They should exercise as much as possible.
- Have a healthy eating plan
- They may have to take insulin either by tablet or insulin injections.

Homework:

Do a self-assessment and record the following for 3 days:

❖ **Nutrition:**

- ⇒ List the name and number of fruits, vegetables, and meat you ate each day
- ⇒ Fast Foods: List the number of fast food trips made for three days. List what you ordered.
- ⇒ List the number of sugary drinks you had (i.e. Soda, Gatorade, Sweet tea, Capri Sun).
- ⇒ Cereal: List the type of cereal you ate for breakfast (if applicable) and the amount of sugar and protein listed on the box.

❖ **Exercise:**

- ⇒ List the type of exercise you did, the number of days you exercised, and the number of minutes you exercised

❖ **Non Exercise-Idle time:**

- ⇒ List the number of minutes you spent: watching TV, playing video games or activity on the computer

Based on this information, where can you improve?

NOTE: Have students submit this information for a grade.

Background information and Activities:

Why are we talking about diabetes in organ donation?

- Diabetes and other genetic diseases may create the need for a kidney transplant.
- Kidney Transplant: What did we say about a kidney transplant? Most people have two and it is a living transplant.
- There are over 1,500 South Carolinians residents waiting for a transplant and out of those nearly 90% of those are in need of a kidney.
- Time on the waiting list depends on blood type and several other factors, but many patients in South Carolina wait 4 years or more for a kidney transplant. Due to the critical need, many die while waiting for a life saving transplant.
- There are approximately 120,000 people on the National Waiting List. On average, 150 people are added to the National Organ Transplant waiting list each day – one every 10 minutes another person is added to the list. How many is that in an hour?
- One donor has the potential to save up to 8 lives through organ donation and improve the lives of 50 or more through tissue donation.

Organs and Tissues for Transplantation

- Make a copy of “Organs and Tissues for Transplantation” and go to www.OrganTransplants.org and link to “Understanding Donation” and view the “Interactive Body.”
- On the back of the page identify and write brief description of each organ and tissue.
- Describe a transplant or donation fact for each organ and tissue.

The Gift of a Lifetime Puzzle:

Cut the puzzle pieces apart and have the students work in groups of 5 to select a piece and answer the questions using the “Gift of a Lifetime” website at www.OrganTransplants.org



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Grade 8

GRADE 8

Standards:

- P-8.1.3: Research ways in which blood and tissue donations are related to health promotion
- M-8.3.1: Locate valid health information, products, and services
- N-8.4.1: Explain to others the importance of variety of moderation in food selection and consumption.
- N-8.6.1: Set a goal to achieve a healthy diet, monitor the progress of that goal, and make necessary adjustments to reach it.

Essential questions:

- What is the benefit of donation to individuals and society?
- What are the causes of diabetes and heart disease?
- What is Hepatitis C? How is this related to ATOD (alcohol tobacco and other drugs)?
- Why is it important to set a goal to achieve a healthy diet

Lesson 8-1

Review:

Review information from 7th grade to determine what students know about they types of donation and the importance of practicing a healthy lifestyle.

Discuss:

Discuss how heredity, lifestyle, behaviors, environment, and medical care influence an individual's health.

1. Inherited genes:

Sometimes the risk to develop a disease can be inherited from a relative who has certain genes.

Examples:

- Diabetes or high cholesterol can be inherited
- Inherited blood disorders such as sickle-cell anemia

What are other diseases that could be inherited?

2. Lifestyle Influences:

Sometimes lifestyle or habits are inherited such as:

- We cook the way our parents' cook and that may not be good.
- Perhaps we don't see the person we live with exercise. Yet we know this is a good habit that will help reduce the risks of many diseases i.e., heart disease, cancer, diabetes
- Maybe we see someone drink and drive and think we can do that without having an accident because they haven't had an accident.
- Perhaps there is someone we admire who uses tobacco.

As a result of some of these diseases whether they are caused by inheriting a gene or by following the example of the person we live with, we need to make the best decision to keep us healthy.

3. Medical technology has come a long way.

How are lifestyle diseases or inherited diseases related to organ/tissue donation?
In other words, how do organ transplants help us with diseases that we may develop based on the genes that we inherit or diseases we develop based on following the same steps of someone who leads an unhealthy lifestyle?

NOTE: The following information is about lifestyle behaviors and provides the framework for a self - assessment. Teachers that have already discussed lifestyle and chronic diseases may want to reinforce the information about lifestyle habits and connect this to organ donation under discussion.

4. Facilitate a discussion of healthy lifestyle behaviors. What are healthy/unhealthy habits?

- Brainstorm health and unhealthy habits.
- What are some healthy habits that you and your family have?
- What are some habits that are not so healthy?
- Have students do an assessment of themselves and determine the number of healthy and unhealthy habits they have developed daily.
- Ask students to create a goal to reduce their unhealthy habits for the next 2 weeks and record this information daily.
- Write a list of people with the same unhealthy habit and their goal to change over the next 2 weeks.
- Create a team and have them be accountable to each other and encourage each other to reach their goal and change unhealthy habits to healthy habits.
- Check back with students periodically during the next 2 weeks and determine how many students were successful at the end of 2 weeks.

Discussion:

We have discussed lifestyle of families and individuals. Now we are going to discuss donating blood or an organ. As a result of some diseases, people may need an organ to replace one that is malfunctioned.

Teacher background:

- Kidney transplant: Sometimes people may need a kidney because they have diabetes. Diabetes can be inherited or it can be the result of lack of exercise and being overweight. There are other conditions that may result in the need for a kidney transplant.
- Liver transplant: A liver transplant may be needed if it is diseased with Hepatitis, cancer or other inherited disorders.
- Bone marrow transplant: A bone marrow transplant is a treatment for leukemia, which is the most common form of cancer for children under 18.

Homework:

Interview 5 adults asking them:

1. Do you know someone who has donated blood or an organ?
 2. Do you know someone who needs or has received blood or an organ or eye and tissue?
- What impact did receiving an organ or blood donation have on the person's life and family?
 - What impact does it have on an individual and their family when waiting for an available and viable organ?

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Lesson 8-2

Bell ringer:

Share the results of your homework assignment with 4 other people.

Activity:

Since we discussed the impact donation can have on a person and their family, present one of the following short videos and answer the following questions

Present one of the following short YouTube videos in class.

- What type of donation was needed in the video?
- What were the circumstances of needing a donation:
- What did you learn from the video?
- Does it make you want to be a donor?
- If not, why not?

[Selena Gomez receives kidney from her friend](#)

[Tyler - bone transplant recipient - Donate Life America](#)

[Donate Life South Carolina Personal Stories: Reagan](#)

[Donate Life South Carolina- Tillman Chesney Story](#)

If you cannot get YouTube videos at your school, divide students into groups and assign a YouTube video to review at home. Ask them to bring notes from home having answered the questions above.

The next day, give students time in their groups to discuss it, combine their information, and present information about their video.

GRADE 8

Lesson 8-3

Activity:

Divide students into 5 groups and assign each group with the following topic.

Assign each group one of the following topics to research.

Group 1: COM Blood donation,

Group 2: COM Living organ donation,

Group 3: COM Deceased organ donation

Group 4: PPT Myths and facts about each, and

Group 5: PPT Why people don't donate.

- **Group 1-3 can develop a commercial (COM) to advocate donation in each area based on the information they have researched.**
- **Group 4 -5 can develop a power point (PPT) to address myths/ facts for all types of donations based on the information they have researched.**

Be sure to address the following information in your research.

Fact 1: If you are sick or injured and admitted to a hospital, the first priority for emergency physicians and nurses is to save your life regardless of whether you are an organ donor or not. **Group 4**

Fact 2: Someone who is declared brain dead is clinically and legally dead. Brain death is different than coma or persistent vegetative state. **Group 3 and 4**

Fact 3: Everyone waiting for a transplant is treated fairly and with respect. A national system matches donated organs to people on the waiting list based on a number of factors including blood type and size, the severity of illness of the potential recipients', tissue type, distance, and length of time someone has been on the waiting list. **Group 2, 3, and 4**

Fact 4: Even though you may think that signing your driver's license is the best way to become an organ donor; the recommended way is to enroll in DonateLifesc.net. **Group 3 and 4**

Fact 5: Don't assume you aren't healthy enough to donate: medical staff will do thorough testing at the time of death to make that determination. **Group 3 and 4**

Fact 6: Any age is the right age to be an organ donor. People are never too old to save lives. **Group 4**

Fact 7: There is no cost to the donor's family for organ donation. **Group 4**

Fact 8: Donation does not disfigure the donor's body. **Group 4**

Fact 9: All major religions approve of organ donation. **Group 4**

Fact 10: It is illegal to sell or buy organs in the US. **Group 4**

Fact 11: A person can register to be an organ donor if they are between 13 and 17 years old. A person can register at <https://registerme.org> **Group 1 and 2**