About this book:

Students participating in a Medical Terminology Course from Lowcountry Leadership Charter School created this book about making healthy life style choices.

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About the Project

The South Carolina Area Health Education Consortium partnered with the U.S. National Library of Medicine and high schools in South Carolina for a health information literacy project.

Students were charged with researching public health areas and creating educational comic books about their topics so that middle school students could also learn more about important health issues.

In the process, students learned about helpful resources from the U.S. National Library of Medicine and valuable communication, research, and creative skills, as well as increase their knowledge about health careers and health literacy.

www.scahec.net
www.nlm.nih.gov

FOR MORE INFORMATION ABOUT OBESITY, NUTRITION, PHYSICAL ACTIVITY AND OTHER HEALTH TOPICS CHECK OUT:

PubMed
www.pubmed.gov

MedlinePlus
www.nlm.nih.gov/medlineplus

The Centers for Disease Control and Prevention
www.cdc.gov

USDA Choose MyPlate
www.choosemyplate.gov

Available titles in this series:

- Prescription Strength
- The 1st 72 Hours: Earthquake
- The Expert Investigator

Join Vanessa, Brian and me, Rx (pronounced Rex), for other adventures.

Series 1, Volume 3
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IP interested in obtaining copies of this book contact:
South Carolina AHEC online (www.scahec.net) or call 843-792-4431
The reason I'm starting this fit club is to help people make better choices and live a healthier lifestyle. Let me tell you a little about what got me here...

I can't wait to hear what Jennifer has to say about all of this!

Hey everyone, thanks for coming. My name's Jennifer.

I read that childhood obesity has more than doubled in the past 30 years! Can you believe that?

Really? We just learned in health class that obesity in children increases their risk for hypertension, high cholesterol, diabetes, heart disease, and even arthritis into adulthood.

Hypertension is the medical term for high blood pressure.

Hey Brian! Are you and RX headed to Jennifer's fit club? How's it going Vanessa?

We're headed there now. Fit club sounds really cool.

Hey everyone, thanks for coming. My name's Jennifer.

The reason I'm starting this fit club is to help people make better choices and live a healthier lifestyle. Let me tell you a little about what got me here...
NO ONE’S HOME YET. I WONDER WHAT’S FOR DINNER...

PIZZA AGAIN??!

....THERE’S GOTTA BE SOMETHING ELSE IN HERE.

PIZZA IT IS...

SOMETHING’S GOTTA CHANGE.
S: *tauntingly* Seriously? It wasn’t even that long of a distance! You’re so fat! Ha! you can’t even run simple laps around the gym!!

Hey coach, can I take a break? My chest hurts.

Girl! pick up the pace! This is a timed mile run!

Of course, go ahead. You can join back in when you’re feeling a bit better.

Jennifer is fed up with the teasing.

You’re so fat! Ha! You can’t even run simple laps around the gym!!
Later, Aunt Michelle hears Jennifer crying.....*SOB*

Aunt Michelle: What's wrong, Jennifer?

Jennifer: I'm tired of getting picked on. I'm always getting called "fat" and "piggy".

Aunt Michelle: Easy for you to say. You don't deal with this everyday!

Jennifer: Okay, sounds good. I'll see you in the morning.

Aunt Michelle: Goodnight. Remember I was a kid once. I think we need to spend some time together.

Jennifer: Why don't you come with me to my doctor's appointment tomorrow? We can have lunch afterwards and talk.

Aunt Michelle: Okay, sounds good. I'll see you in the morning. Goodnight.
So you mentioned you had tightening in your chest. Tell me, is it worse with exercise?

I'm not too big on exercise, but it's definitely worse when I'm up moving around.

All tests look good. It doesn't appear that you have had a myocardial infarction.

Sounds like you are suffering from angina.

Myocardial infarction is the medical term for heart attack.

When someone is suffering from chest pains due to a decrease in the amount of oxygen, it's called angina.

From previous blood tests we know your cholesterol levels are a little high.

Sounds like you are suffering from angina.

My niece, Jen, and I have been talking about getting healthier.

Angina should serve as warning to take better care of yourself through exercise and diet. You are also at risk for developing diabetes.

It's good to start healthy habits to maintain a strong cardiovascular system at a young age.
Aunt Michelle, what's this purple thing?

That's an eggplant. Put it in the cart. It's low in calories and high in fiber.

Can we get something sweet?

Sweet potatoes, white potatoes, and prune juice are all rich in potassium. Potassium can help maintain a healthy blood pressure.

Sure! Let's get strawberries and pineapple.

Black beans, lima beans, chick peas, and black eyed peas are a good source of fiber.

Those fruits are a great source of vitamin C. Michelle and Jennifer are really making some good choices.

Sure! Let's get strawberries and pineapple.

Black beans, lima beans, chick peas, and black eyed peas are a good source of fiber.

Sweet potatoes, white potatoes, and prune juice are all rich in potassium. Potassium can help maintain a healthy blood pressure.

Pumpkins, carrots, spinach, cantaloupe, and leafy green vegetables are high in vitamin A. Vitamin A helps keep ears and skin healthy and helps protect you against infections.
I've always wanted to join a swim team. That's great! There's a pool at the gym.

Now let's talk about some fun things we would like to do.

Why don't we walk to the gym after dinner and sign you up for swim team?

I'm so excited! I can't wait to get started.

Swimming is a great cardiovascular exercise. It's less stress on your joints compared to high impact exercises such as running and aerobics. Swimming is a good choice for someone with arthritis.
I'm so glad I joined the swim team. I've made many friends and now swim one mile a day. I have seen a change in my weight and my "BMI".

**BMI stands for body mass index and is a measure of body fat based on height and weight.**

Are you doing any other activities? My aunt and I walk to the gym every day. We ride bikes on the weekend. And I'm learning to play basketball.

I've really seen a change in you in the past few weeks.

Thanks! I've really seen a change in me, too!!
Aerobic means oxygen is needed to survive, grow, or work properly. Aerobic exercise is long, slow or sustained exercise that stimulates and strengthens the heart and lungs. Exercise that causes the heart to beat faster improves the body’s use of oxygen. Aerobic exercises include walking, jogging, rowing, swimming or cycling.

Angina is a type of chest discomfort due to poor blood flow through the blood vessels (coronary vessels) of the heart muscle (myocardium).

Arthritis involves the breakdown of cartilage. Normal cartilage protects a joint and allows it to move smoothly. Cartilage also absorbs shock when pressure is placed on the joint, such as when you walk. Without the normal amount of cartilage, the bones rub together. This causes, swelling (inflammation), and stiffness.

Asthma is a disease that causes the airways of the lungs to swell and narrow, leading to wheezing, shortness of breath, chest tightness, and coughing.

Blood pressure is the force of blood pushing against the walls of the arteries as the heart pumps blood. Blood pressure normally doesn't stay the same all the time. It lowers as you sleep and rises when you wake up. Blood pressure also rises when you're excited, nervous, or active. High blood pressure, or hypertension, means the pressure rises and stays high over time. Hypertension can damage the body in many ways and put you at risk for stroke or heart attack. Being active and maintaining a healthy weight can help prevent high blood pressure.

Body Mass Index, known as BMI, is a way to relate weight to height. BMI is a person's weight in kilograms (kg) divided by his or her height in meters squared. The National Institutes of Health (NIH) now defines normal weight, overweight, and obesity according to BMI rather than the traditional height/weight charts. Overweight is a BMI of 27.3 or more for women and 27.8 or more for men. Obesity is a BMI of 30 or more for either sex (about 30 pounds overweight). However, a very muscular person might have a high BMI without health risks.

Cardiovascular is the term used to refer to the heart (cardio) and the blood vessels, such as arteries and veins (vascular).

Cartilage is the tough but flexible tissue that covers the ends of your bones at a joint. It also gives shape and support to other parts of your body, such as your ears, nose and windpipe. Healthy cartilage helps you move by allowing your bones to glide over each other. It also protects bones by preventing them from rubbing against each other.

Cholesterol is a waxy substance that is found in the fats (lipids) in your blood. Your body needs cholesterol to work well. But cholesterol levels that are too high can harm you. High cholesterol (hypercholesterolemia) can be inherited, but it's often the result of unhealthy lifestyle choices. A healthy diet, regular exercise and sometimes medication can go a long way toward reducing high cholesterol.

Diabetes is a chronic disease in which the body cannot regulate the amount of glucose (sugar) in the blood. People with diabetes cannot move sugar from the blood into muscle and fat cells to be burned or stored for energy. Insulin is a hormone produced by the pancreas to control blood sugar. Diabetes occurs when the pancreas makes too little insulin or the muscle and fat cells become resistant to insulin, or both. Being overweight can cause cells to become resistant to insulin.
Fiber, also called roughage, is a substance found in plants. Dietary fiber, which is the type of fiber you can eat, is found in fruits, vegetables, and grains. It is an important part of a healthy diet. Dietary fiber adds bulk to your diet. Because it makes you feel full faster, it can help with weight control. Fiber aids digestion and helps prevent constipation. To ensure that you get enough fiber, eat a variety of foods, including: cereals, dried beans and peas, fruits, vegetables, and whole grains.

**High Impact Exercise** is any aerobic exercise that promotes physical fitness but also causes risk of stress injury to musculoskeletal tissue and joints. Typically, it is an activity or exercise in which both feet are off the ground at the same time. Some examples of high impact exercises would include running, jumping jacks, jump rope, some types of dancing, and basketball. High-impact activities can help strengthen the bones and some can help you develop more endurance, power, agility and coordination.

**Hypertension** is blood pressure that is above normal most of the time.

**Joints** are the areas where two bones are attached for the purpose of permitting body parts to move. A joint is usually formed of fibrous connective tissue and cartilage. Joints can be found in your knees, wrists, elbows, shoulders, ankles, fingers, toes, neck, spine and hips.

**Myocardial Infarction** is the medical term for heart attack. Most heart attacks are caused by a blood clot that blocks one of the coronary arteries. The coronary arteries bring blood and oxygen to the heart. If the blood flow is blocked, the heart is starved of oxygen and heart cells die.

**Obesity** means having too much body fat. It is different from being overweight, which means weighing too much. The weight may come from muscle, bone, fat, and/or body water. Both terms mean that a person's weight is greater than what's considered healthy for his or her height. Obesity occurs over time when you eat more calories than you use. The balance between calories-in and calories-out differs for each person. No single factor or behavior causes obesity. Factors that might affect your weight include your genetic makeup, overeating, eating high-fat foods, and not being physically active. Genes and some medical problems also increase a person's chances of becoming obese.

The way you eat when you are a child can affect how you will eat your whole life. If you develop bad eating behaviors over many years, they become HABITS.

Sources:
The Centers for Disease Control and Prevention (www.cdc.gov/obesity)
WHAT IS YOUR BMI?

CALCULATE BMI BY DIVIDING WEIGHT IN POUNDS BY HEIGHT IN INCHES SQUARED AND MULTIPLYING BY A CONVERSION FACTOR OF 703.

FORMULA:

\[
\text{WEIGHT} \over \text{HEIGHT} \times \text{HEIGHT} \times 703
\]

EXAMPLE: WEIGHT = 150 LBS, HEIGHT = 5'5" (65")
CALCULATION: \([150 \div (65)^2] \times 703 = 24.96\]

OR VISIT THIS WEBSITE TO FIND OUT!!

THIS IS BMI CALCULATOR IS FOR PEOPLE AGED 2 THROUGH 19 YEARS OLD.

HTTP://NCCD.CDC.GOV/DNPABMI/CALCULATOR.ASPX

BMI CATEGORIES:

UNDERWEIGHT = <18.5
NORMAL WEIGHT = 18.5-24.9
OVERWEIGHT = 25-29.9
OBESITY = BMI OF 30 OR GREATER
How many fruits and vegetables did I eat?

Ask mom to shred some carrots into the meatloaf. You won’t even know you are getting a veggie!

Identifying what you are eating and drinking now will help you see where you can make better choices in the future.

Keep a bowl of whole fruit on the table, counter, or in the refrigerator.

How many sodas did I drink?

Americans get more calories from sugary drinks than any other beverage choice?

Resource: ChooseMyPlate.gov
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