Opening title: let’s talk about...STEROIDS

Breanna: “What is the first word that comes to mind when you hear the word steroid?”

Speaker: “Um, the first word that comes to mind is harmful. Um, because I know that taking steroids for any length of time can have harmful effects on the body.”

Kirsten: “Can you define the word steroid?”

Speaker: “Um, I would define steroids, I only know of two. The kind that enhance athletic performance and the kind that help you breathe better. Are they the same thing? I don’t know.”

Breanna: “Do you think steroids are good or bad?”

Speaker: “Steroids are good when they occur naturally within in your body according to your metabolic needs. Steroids are bad when you supplement them in order to push your muscle development to the point that Arnold Schwarzenegger did.”

(Picture of Arnold Schwarzenegger with lion roar)

Kirsten: “Did you know that there are three different kinds of steroids?”

Speaker (confused look, throws hands up)

Picture of student with text : alright time to get serious, class is in session!

Definition of steroids on screen.

Kirsten: “So steroids can be divided into three categories bile salts, cholesterol, and steroid hormones.”

Slide saying : First a look at...Bile Salts

Kirsten: “Under the category of bile salts we have two examples Taurocholate and Glycocholate. Glycocholate and Taurocholate along with other bile salts are released from the gallbladder to the small intestine where they aid in digestion by forming emulsions with dietary lipids.”

Slide with explanation of bile salts

Slide saying: Now let’s look at cholesterol

Breanna: “Cholesterol a subdivision of steroids ,as seen over here in this ring structure, is commonly found most often in humans and other animals. Regardless of what you eat your body will contain some cholesterol because it is manufactured in the liver.
Kirsten: “Cholesterol is found in every cell of your body. It is especially abundant in the membranes of these cells. Where it helps maintain the integrity of these membranes and plays a role in cell signaling—meaning the ability of your cells to communicate with each other so you function as a human rather a pile of cells.”

*Slide describing cholesterol.*

Kirsten: “Hormones can be defined as molecules that regulate the function of organs and tissue. Some hormones such as sex hormones and adrenocorticoid hormones are steroid hormones. An example of an adrenocorticoid hormone is cortisol, shown here.”

Kirsten: “cortisol is a steroid hormone more specifically a glucocorticoid hormone produced by the adrenal gland. It is released in response to stress along with a low level of blood glucocorticoids. Its primary functions are to increase blood sugar through glucogenolysis suppress the immune system and aid in fat protein and carbohydrate metabolism.”

*Slide saying: Now let’s review.*

Kirsten: Remember a steroid is a type of organic compound that contains a CHARACTERISTIC ARRANGEMENT OF FOUR CYCLOALKANE RINGS THAT ARE JOINED TO EACH OTHER.

“There are three different classes of steroids”

“The first one is bile salts, cholesterol is second, and third is steroid hormones.”

“Each one of these classes of steroids plays an important role in the overall efficiency and functioning of our body. So you see, although steroids have a negative connotation, they are actually a vital component in the body.”