

Healthy Heart Facts

Let's look at some heart facts:

- Heart begins to pump at 4 weeks after conception; goes until death
- Only stops beating when you have a hiccup
- Beats about 72 beats per minute
- Beats about 100,000 times per day
- Beats about 3,600,000 times a year
- Pumps about 2000 gallons of blood
- Blood goes through about 60,000 miles of blood vessels each day
- A heart may pump between 5 30 liters of blood per minutes
- Pumps about 1.5 million barrels of blood in an average life time enough to fill 200 train tank cars
- Pumps oxygenated blood through the aorta (the largest artery) at about 1 mph or 1.6 km per hour
- 5% of the blood actually supplies the heart: 15-20% goes to the brain & central nervous system; 22% goes to the kidneys
- Weighs about 11 ounces
- The heart creates enough energy, each day, to drive a truck about 20 miles
- The heart can continue to pump outside of the body because it has its own electrical pump – as long as it has enough oxygen
- The heart pumps blood to about 100 trillion cells
- Prolonged lack of sleep can cause irregular jumping heartbeats
- A woman's heart beats faster than a man's (78 to 70)
- When the body is at rest, it takes the blood about:
 - o 6 seconds to go from the heart to the lungs & back
 - o 8 seconds to go to the brain and back
 - o 16 seconds to go the toes and back

 Cocaine can alter the electrical current of the heart causing a heart attack or stroke

WOW!! This makes for great trivia for the cocktail party but what is important here is that your heart/cardiovascular system needs nutrient to achieve all that:

- 1) Every cell in the body has a multitude of organs called organelles. One of the organelles is called the mitochondria. This organelle is responsible for producing all the fuel for each given cell so the cell can:
 - a. Absorb nutrients through the cell membrane
 - b. Create the enzymes necessary to metabolize nutrients
 - c. Create the transport mechanisms to move the nutrients
 - d. Metabolize and eliminate or resolve the toxins produced as by-products of normal functioning or what has been absorbed into the cell
 - e. And a 100 other functions



- 2) The number of mitochondria in a given cell correlates with the amount of fuel/ATP the cell requires in order to function
- 3) Any given heart cell will have between 1000 2500 mitochondria in order to produce enough energy/fuel/ATP to keep functioning 24/7

So, what nutrients do the heart cells need to:

- 1) Do all of its basic functioning as a normal cell
- 2) Create, support and protect the mitochondria
- 3) Allow the mitochondria to produce the ATP

If you have more questions and want to contact Dr. Holly directly, email her at holly@choicesunlimited.ca.