Module 1, Lesson 1 Handout:

Heart Disease Statistics

Heart disease statistics are really powerful and illuminate the depth and impact of this disease. Before we dig in, let's lay out the basics. Cardiovascular disease (CVD) is an umbrella term that encompasses a group of disorders that affect the heart and blood vessels, including heart disease, coronary artery disease (CAD), strokes, congenital heart defects and peripheral artery disease. Heart disease falls under this umbrella as a "catch all" phrase we use and usually refers to coronary heart disease. To clarify even more, all heart diseases are cardiovascular disease, but not all cardiovascular diseases are heart disease.

Heart attacks and strokes are acute events and are mainly caused by a blockage that prevents blood from flowing to the heart or brain. It's essential to understand the magnitude and impact of these conditions and diseases because we know lifestyle factors play a major role in the prevention and treatment of cardiac illnesses. This is where you come in. People with cardiovascular disease or who are at high cardiovascular risk (meaning they have one or more risk factors such as hypertension, diabetes, hyperlipidemia or already established disease) need early detection and both medical and wellness interventions, which we'll get into in other handouts.

Here are some of the most current statistics that really show the magnitude of cardiovascular disease today:

- CVDs are the number 1 cause of death globally and more people die annually from CVDs than from any other cause
- An estimated 17.9 million people died from CVDs in 2016, representing 31% of all global deaths. Of these deaths, 85% are due to heart attack and stroke
- Over three-quarters of CVD deaths take place in low- and middle-income countries
- Out of the 17 million premature deaths (under the age of 70) due to noncommunicable diseases in 2015, 82% are in low- and middle-income countries and 37% are caused by CVDs
- The annual total cost of CVD in the United States was estimated at $351.2 billion in 2014-2015
- The average age of first myocardial infarction is 65.6 years old for men and 72.0 years old for women

- Heart failure prevalence continues to rise. As of April 27, 2018, 3,994 Americans were on a waiting list for heart transplants, and 55 were waiting for heart and lung transplants
- Approximately 5.3 million Americans have atrial fibrillation. In 2014, atrial fibrillation or flutter was the principal diagnosis in approximately 454,000 US hospitalizations
- Admissions for intravenous drug-related endocarditis (bacteria entering the blood and settling in the heart) have increased in parallel with the opioid drug crisis
- The prevalence of congenital cardiovascular defects is relatively stable, with a trend toward improved outcomes. Pulse oximetry screening for critical congenital heart disease in neonates has been implemented in almost all states since 2011. Kawasaki disease is the most common cause of acquired heart disease in US children
- Every 40 seconds an American is having a heart attack
- Every 40 seconds on average, an American will have a stroke. About 795,000 Americans have a new or recurrent stroke annually. About 90% of stroke risk is due to modifiable risk factors
- One-third of the deaths in the U.S. are related to heart disease and are early deaths which could be prevented through lifestyle and behavior changes
- Most cardiovascular diseases can be prevented by addressing behavioral risk factors such as tobacco use, unhealthy diet and obesity, physical inactivity and harmful use of alcohol

Scientific evidence tells us that typical Western diets are playing a huge part in these statistics. Diets high in packaged, processed foods, red meats and refined grains can increase production of proinflammatory cytokines while reducing production of anti-inflammatory cytokines. We also know that chronic inflammation plays a key role in the development of CAD and that inflammation is modifiable by nutrition and lifestyle. As health practitioners we have the power to turn these stats around by helping clients choose more nutrient dense foods, increase physical activity and make simple behavior changes.