

What Does Ejection Fraction Mean?

Ejection fraction (EF) measures the percent of blood leaving your heart each time your heart pumps or squeezes. With each heartbeat, the heart contracts and relaxes. When your heart contracts, it pushes blood from the two pumping chambers called the ventricles. When your heart relaxes, the chambers refill with blood. No matter how strong the contraction, your heart will not ever be able to pump all of the blood out of the ventricles. The term “ejection fraction” refers to the percent of blood that is pumped out of a filled ventricle with each heartbeat.

The left ventricle is your heart’s main pumping chamber. Your EF is usually measured in your left ventricle (LV). A LV ejection fraction of 55 percent or higher is normal. An EF lower than 50 percent is reduced. EF is only one measure of heart function. Even with a normal EF, your heart function may not be normal.

The ejection fraction decreases if:

- You have weakness of your heart muscle. This may be due to a heart muscle problem, a genetic heart problem or a disease.
- A heart attack has damaged your heart.
- You have problems with your heart’s valves.
- You have had uncontrolled high blood pressure for a long time.

Ejection fraction can be measured by:

- Echocardiogram - sound waves are used to produce images of your heart and the blood pumping through your heart. This is the most common method used to check your EF.
- Cardiac catheterization - this is where a thin, plastic tube is inserted into an artery in your arm or leg and then moved to your heart. Pictures are taken to check the EF.
- Magnetic resonance imaging (MRI) - During an MRI scan, a magnetic field and radio waves are used to create pictures of your heart.
- Computerized tomography (CT) - During CT scan a special X-ray technique is used to create pictures of your heart.
- Nuclear medicine scan - During this scan trace amounts of radioactive material is injected into your bloodstream. A special camera detects the radioactive material in your blood as it flows through your heart and lungs.