




[Request an Appointment](#)
[Log in to Patient Account](#)
[Find a Doctor](#)
[English](#)
[Find a Job](#)

[Give Now](#)
[PATIENT CARE & HEALTH INFO](#)
[DEPARTMENTS & CENTERS](#)
[RESEARCH](#)
[EDUCATION](#)
[FOR MEDICAL PROFESSIONALS](#)
[PRODUCTS & SERVICES](#)
[GIVING TO MAYO CLINIC](#)

Appointments at Mayo Clinic

Mayo Clinic offers appointments in Arizona, Florida and Minnesota and at Mayo Clinic Health System locations.

[Request Appointment](#)

Ejection fraction: What does it measure?

Products and services

The Mayo Clinic Diet

What is your weight-loss goal?

[5-10 lbs »](#)

[11-25 lbs »](#)

[25+ lbs »](#)

Free E-newsletter

Subscribe to Housecall

Our general interest e-newsletter keeps you up to date on a wide variety of health topics.

[Sign up now](#)

What does the term "ejection fraction" mean? What does it measure?

Answer From Rekha Mankad, M.D.

Ejection fraction is a measurement of the percentage of blood leaving your heart each time it contracts.



Chambers and valves of the heart

The heart contracts and relaxes. When your heart contracts, it ejects blood from the two pumping chambers (ventricles). When your heart relaxes, the ventricles refill with blood. No matter how forceful the contraction, the heart can never pump all blood out of a ventricle. The term "ejection fraction" refers to the percentage of blood that's pumped out of a filled ventricle with each heartbeat.

The ejection fraction is usually measured only in the left ventricle (LV). The left ventricle is the heart's main pumping chamber. It pumps oxygen-rich blood up into the upward (ascending) aorta to the rest of the body.

- An LV ejection fraction of 55 percent or higher is considered normal.
- An LV ejection fraction of 50 percent or lower is considered reduced.
- An LV ejection fraction between 50 and 55 percent is usually considered "borderline."

Ejection fraction is just one of many tests your doctor may use to determine how your heart works. But even with a normal ejection fraction, your overall heart function may not be normal. Talk with your doctor if you have concerns about your heart.

Some things that may cause a reduced ejection fraction are:

- Weakness of the heart muscle, such as cardiomyopathy
- Heart attack that damaged the heart muscle
- Heart valve problems
- Long-term, uncontrolled high blood pressure

Ejection fraction can be measured with imaging techniques, including:

- **Echocardiogram.** This is the most common test used to measure ejection fraction. During an echocardiogram, sound

Advertisement

Mayo Clinic does not endorse companies or products. Advertising revenue supports our not-for-profit mission.

Advertising & Sponsorship

[Policy](#) | [Opportunities](#) | [Ad Choices](#)

Mayo Clinic Marketplace

Check out these best-sellers and special offers on books and newsletters from Mayo Clinic.

[Free Special Report — Psychological First Aid](#)

[NEW — Mayo Clinic Guide to Arthritis](#)

[Mayo Clinic on Digestive Health](#)

[Mayo Clinic on Healthy Aging](#)

[The Mayo Clinic Diabetes Diet](#)

Visited on 08/18/2020

waves are used to produce images of your heart and the blood pumping through your heart.

- **Cardiac catheterization.** During cardiac catheterization, a thin, plastic tube (catheter) is inserted into an artery in your arm or leg and then gently guided to your heart. Images taken during catheterization can measure the ejection fraction of your heart.
- **Magnetic resonance imaging (MRI).** An MRI uses magnetic field and radio waves to create cross-sectional images of specific parts of your body. When an MRI is used to study the heart, it's known as a cardiovascular MRI.
- **Computerized tomography (CT).** During a CT scan, a special X-ray technique is used to create cross-sectional images of specific parts of your body. When a CT scan is used to study the heart, it's known as a cardiac CT.
- **Nuclear medicine scan.** During a nuclear scan, trace amounts of radioactive material are injected into your bloodstream. Special cameras then detect the radioactive material in your blood as it flows through your heart and lungs.

With

Rekha Mankad, M.D.



Share



Tweet

July 02, 2019

[Show references](#) ▾[See more Expert Answers](#)

See also

[Heart Failure](#)[Cardiac asthma: What causes it?](#)[External Drive: Charles' Artificial Heart](#)[Heart failure](#)[Heart failure and sex: Is it safe?](#)[Holiday Heart](#)[Sudden cardiac arrest](#)[Show more related content](#) ▾

Other Topics in Patient Care & Health Info

[Healthy Lifestyle](#)[Symptoms A-Z](#)[Diseases & Conditions A-Z](#)[Tests & Procedures A-Z](#)[Drugs & Supplements A-Z](#)[Appointments](#)[Patient & Visitor Guide](#)[Billing & Insurance](#)

Home > Ejection fraction: What does it measure?

FAQ-20058286

Any use of this site constitutes your agreement to the Terms and Conditions and Privacy Policy linked below.

[Terms and Conditions](#)

[Privacy Policy](#)

[Notice of Privacy Practices](#)

[Notice of Nondiscrimination](#)

Mayo Clinic is a nonprofit organization and proceeds from Web advertising help support our mission.

Mayo Clinic does not endorse any of the third party products and services advertised.

[Advertising and sponsorship policy](#)

[Advertising and sponsorship opportunities](#)

A single copy of these materials may be reprinted for noncommercial personal use only. "Mayo," "Mayo Clinic," "MayoClinic.org," "Mayo Clinic Healthy Living," and the triple-shield Mayo Clinic logo are trademarks of Mayo Foundation for Medical Education and Research.

© 1998-2020 Mayo Foundation for Medical Education and Research (MFMER). All rights reserved.