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## Irregular Heart Rhythms

Palpitations is a word used to describe the sensation of a change in the pattern of the heartbeat. This condition is also described as: fluttering, quivering, racing, skipped beats, missed beats, extra beats, and hard beats. Almost all of us experience irregular heart rhythms at some point during our lives. However, most of the time, they don't indicate that anything is wrong with our hearts. And palpitations do not cause any bodily damage.

What causes these palpitations? To understand this better, let's first discuss the "electrical wiring," so to speak, of the normal human heart.

The heart is actually a hollow muscle that fills with blood (when it's relaxed) and squeezes the blood out (when it contracts). The regular rhythm of these normal contractions is caused by a tiny electrical impulse produced by very specialized cells within the heart called "pacemaker cells." Since this function is so important to survival, the body also has other potential "backup" pacemaker cells. Sometimes these backup cells become active and compete with the normal rhythm. When this occurs, there is usually an early beat, which is followed by a stronger beat. Usually we don't feel these rhythm changes at all because we're asleep or busy doing something. However, when we're at rest and not distracted, we're more likely to notice changes in heart rhythm.

What makes the heart's electrical system irritable, causing the muscle to twitch? Often we can't identify a specific cause—just as we don't know why our eyelids or calf muscles twitch sometimes. We do know that anxiety, fever, hyperventilation, caffeine, alcohol, tobacco, and some medications can all contribute to the irritability. In rare cases, the irritability may be associated with high blood pressure, hardening of the arteries, or heart valve and muscle problems.

Palpitations may come and go sporadically over minutes, hours, or days without any obvious pattern. If you don't have heart disease, you usually don't need to be concerned about occasional skips and extra beats, brief fluttering episodes, a pounding heart, or a heart rhythm that speeds up and slows down gradually.

If you are bothered by irregular heart rhythms, however, you can reduce the likelihood of having them by giving up caffeine, alcohol, and smoking. Stopping cold medications or adjusting asthma medications with the advice of your physician may also help.

You should call your physician immediately if any of the following two situations occur:

- 1.) if your heart is beating very rapidly at 120 beats per minute at rest;

2.) if your heart is beating irregularly with extra beats coming more than four times within a minute, or if you experience three or more rapid extra beats in a row.

Occasionally, a heart attack can be the cause of palpitations. Call 911 if you have chest discomfort such as pressure, squeezing, aching, or burning accompanied by shortness of breath, sweating, or dizziness with the palpitations.



For additional health information you can trust:

- Log on to our members-only Web site at [www.kaiserpermanente.org/california](http://www.kaiserpermanente.org/california), then click the "Kaiser Permanente Members Only" button
- Visit your local Kaiser Permanente Health Education Center
- Check your Kaiser Permanente Healthwise Handbook
- Listen to the Kaiser Permanente Healthphone messages at 1-800-33 ASK ME (1-800-332-7563)

To get your free Handbook and Healthphone Directory, call 1-800-464-4000.

The information presented here is not intended to diagnose health problems or to take the place of professional medical care. If you have persistent health problems or if you have additional questions, please consult with your doctor or other health care professional.

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REGIONAL HEALTH EDUCATION