TEST

HCG blood test - qualitative

A qualitative HCG blood test checks whether pregnancy hormone is detectable in your blood.

WHAT IT MEASURES
Whether pregnancy hormone HCG is detectable in blood

SAMPLE
Blood

FASTING NEEDED?
No

HOW LONG IT TAKES
Usually less than five minutes

RESULTS IN
Often same day; timing differs by laboratory

USED FOR
Detecting pregnancy and supporting urgent pregnancy assessment

MAIN LIMITATION
Testing too early can give a false-negative result

Overview

A qualitative human chorionic gonadotropin, or HCG, blood test checks whether HCG is present in your blood. HCG is a hormone produced mainly by tissue that develops into the placenta during pregnancy.

The result is usually reported as positive or negative . Some laboratories may report an uncertain or borderline result when the HCG level is close to the test's detection limit.

This differs from a quantitative HCG test , which measures the amount of HCG in the blood as a number. A quantitative test may be more useful when your care team needs to follow how the level changes over time.

A positive qualitative test can support a diagnosis of pregnancy. It cannot show how long you have been pregnant, whether the pregnancy is developing normally, or whether it is inside the uterus. Those questions may require quantitative HCG tests, an ultrasound scan, or both.

Why the test is ordered

The test is most often ordered to find out whether you may be pregnant. A blood test may be chosen when an answer is needed early, when a urine result is unclear, or when you are already having blood taken for another reason.

It may also be ordered:

HCG testing is sometimes used when certain uncommon tumours are suspected. However, a qualitative test is not usually suitable for monitoring these conditions because it does not provide a numerical level.

- Before a medicine, procedure, scan, or operation that could be affected by pregnancy
- During an assessment for pelvic pain or vaginal bleeding
- After an uncertain or conflicting urine pregnancy test
- As part of fertility treatment or follow-up after a recent pregnancy

Who should have the test

You may be offered this test if pregnancy is possible and knowing your pregnancy status would affect your care. This includes people with a late or missed period, pregnancy symptoms, or an uncertain home pregnancy test.

It may also be appropriate if you have pelvic pain, vaginal bleeding, dizziness, or other symptoms during a possible pregnancy. The test is only one part of that assessment.

Not everyone with a late period needs a blood test. A urine pregnancy test is often sufficient. The choice between blood and urine testing depends on timing, symptoms, previous results, and why the information is needed.

How to prepare

You do not need to fast. You can usually eat, drink water, and have coffee as normal.

Tell the person ordering the test if you:

Bring a list of your medicines and supplements if requested. Most medicines, including birth control, do not contain HCG and do not directly make the test positive.

- Recently gave birth or had a miscarriage, abortion, or ectopic pregnancy
- Are having fertility treatment or recently used medicine containing HCG

- Previously had unexpected or conflicting pregnancy test results
- Take high-dose biotin supplements, because some laboratory methods can be affected

What happens during the test

A healthcare professional places a small needle into a vein, usually in your arm. A small amount of blood is collected into a tube.

The blood draw generally takes less than five minutes. You may feel a brief scratch or sting when the needle enters.

The sample is sent to a laboratory. The laboratory uses an antibody-based test to check whether HCG is above that test's detection level.

Understanding your results

A positive result means HCG was detected at or above the laboratory test's cutoff. Pregnancy is the most common explanation in someone who could be pregnant.

A positive result does not confirm where the pregnancy is located or whether it is progressing as expected. HCG can be present in both a pregnancy inside the uterus and an ectopic pregnancy, which develops outside the uterus.

A negative result means HCG was not detected above the test's cutoff. This usually means you are not pregnant, but testing very early can produce a negative result even when pregnancy has begun.

An uncertain or borderline result may need to be repeated. A quantitative HCG test can provide more information by measuring the hormone level.

Cutoffs and reporting methods vary by laboratory. Interpretation may also be affected by age, sex, pregnancy timing, medicines, recent pregnancy, and clinical context.

What affects the results

Timing is the main factor. HCG begins to rise only after a fertilised egg implants. If you test before enough HCG has entered your blood, the result may be negative even though you are pregnant.

Other factors include:

Time of day, ordinary meals, coffee, and routine exercise generally do not meaningfully affect a qualitative blood HCG result. A recent blood transfusion is not a usual cause of a positive result.

- Recent pregnancy: HCG may remain detectable for a time after childbirth, miscarriage, abortion, or treatment of an ectopic pregnancy.
- Fertility medicines containing HCG: These can produce a positive result until the injected hormone has cleared.
- Antibody interference: Some people have naturally occurring antibodies that interact with the laboratory test and cause an unexpected positive result. This is sometimes called a "phantom HCG" result.
- Pituitary HCG: The pituitary gland in the brain can produce small amounts of HCG, particularly around or after menopause.
- Very high HCG levels: Rarely, an antibody-based test can give a falsely low or negative result when the HCG concentration is extremely high. This is called the high-dose hook effect.
- Biotin supplements: High-dose biotin may affect some, but not all, laboratory methods. The effect can differ by test manufacturer.

Accuracy and limitations

Qualitative blood HCG tests are generally reliable once enough hormone is present. However, no pregnancy test finds every pregnancy at every stage.

The test is most likely to miss a pregnancy when it is performed too early. A later repeat test or a quantitative HCG measurement may detect hormone that was previously below the cutoff.

A result may say HCG is present when pregnancy is not the explanation. Possible reasons include recent pregnancy, fertility medicine containing HCG, pituitary production, certain tumours, and antibody interference. Unexpected results may be checked with a different laboratory method or compared with a urine test.

There is no single miss rate or false-positive rate that applies to every qualitative HCG blood test. Performance differs by laboratory method, detection cutoff, pregnancy timing, and the reason for testing.

This test cannot determine:

For those questions, a quantitative blood test, repeat testing, ultrasound, or another investigation may be more appropriate.

- The exact HCG concentration
- How far along a pregnancy is
- Whether a pregnancy is viable
- Whether the pregnancy is inside the uterus
- Why HCG is present when pregnancy is not expected

Risks and complications

A blood draw may cause a small bruise, brief soreness, or minor bleeding where the needle entered. Some people feel lightheaded or faint during or shortly after the test.

What happens next

If the result is negative but your period has not started or the test was done early, routine follow-up may include repeating the test after more time has passed. Your healthcare team may choose a quantitative blood test if a numerical level would help.

After a positive result, the next steps depend on your symptoms, pregnancy plans, medical history, and reason for testing. Routine follow-up may include discussing pregnancy care, medicines, supplements, or pregnancy options.

Seek urgent medical assessment if pregnancy is possible and you have worsening pelvic or abdominal pain, vaginal bleeding, dizziness, or shoulder-tip pain.

Call emergency services for severe pain, fainting, marked weakness, difficulty staying awake, or heavy bleeding. These symptoms need prompt assessment and should not be managed by waiting for another home or laboratory test.

Common questions

Can I drink coffee before the test?

Yes. Coffee does not usually affect a qualitative HCG blood test, and fasting is not required.

Does the time of day matter?

Usually not for a blood test. HCG in blood is less affected by fluid intake and time of day than HCG in urine.

Can I exercise beforehand?

Ordinary exercise does not usually change the result. If exercise makes you dehydrated or unwell, rest and drink water before having blood taken.

How soon can a blood test detect pregnancy?

Blood testing may detect HCG earlier than many urine tests, but testing too soon can still give a false-negative result. The exact timing differs because implantation and HCG production do not begin at the same time in every pregnancy.

Can birth control or antibiotics like amoxicillin or doxycycline cause a positive result?

Birth control and most antibiotics do not contain HCG and do not usually cause a positive result. Fertility medicines that contain HCG can affect the test.

Why is my blood test positive but my urine test negative?

Blood tests may detect lower HCG levels than urine tests. The difference can also result from timing, diluted urine, different test cutoffs, or interference with the blood test. Repeat or quantitative testing may help clarify the result.

Sources

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