HEALTH BASICS

Amniotic fluid

Amniotic fluid is the liquid that surrounds and supports a baby during pregnancy.

WHAT IT IS
Liquid surrounding a baby inside the amniotic sac

WHERE IT COMES UP
Pregnancy scans, waters breaking, and amniocentesis

WHY IT MATTERS
Supports development and provides information about pregnancy health

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Your midwife, obstetrician, or maternity assessment service

HOW IT IS CHECKED
Ultrasound measurement or laboratory testing of a sample

Overview

Amniotic fluid is the liquid around a baby in the uterus during pregnancy. It is held inside the amniotic sac, a thin membrane often called the "bag of waters."

The fluid gives the baby room to move and helps protect it from pressure and injury. It also supports lung, muscle, bone, and digestive system development. The amount changes naturally throughout pregnancy.

You may hear about amniotic fluid during an ultrasound scan, when your waters break, or before a test called amniocentesis. Amniocentesis uses a needle to remove a small sample for laboratory testing.

Amniotic fluid is not a disease or a diagnosis. However, too little fluid, too much fluid, or fluid leaking before labour can be linked with pregnancy complications. A single measurement does not always show the full picture. The stage of pregnancy, scan method, changes over time, and other findings all matter.

How it works

Early in pregnancy, much of the fluid comes from water and other substances passing from the pregnant person's circulation through nearby tissues. Later, the baby's urine becomes a major source. This is normal: the placenta removes waste from the baby's blood.

The baby swallows amniotic fluid. The fluid is absorbed through the digestive system, returned to the circulation, and eventually passes back through the placenta. Fluid also moves through the baby's lungs and across the amniotic sac. This continuous movement helps regulate the amount.

Amniotic fluid has several roles:

An ultrasound does not directly measure every drop of fluid. Instead, the sonographer looks for pockets of fluid around the baby. They may record the deepest vertical pocket or calculate an amniotic fluid index by measuring pockets in different parts of the uterus.

The meaning of a measurement depends on the pregnancy stage and the method used. The baby's position and normal measurement differences can also affect the result.

- Cushioning the baby from pressure and minor impacts
- Allowing movement needed for muscle and bone development
- Helping the lungs grow and mature
- Keeping the temperature around the baby stable
- Reducing compression of the umbilical cord

Why it matters for your health

The amount and appearance of amniotic fluid can provide information about the baby, placenta, and amniotic sac. For example, fluid levels may be considered alongside the baby's growth, kidney and bladder appearance, movements, and blood flow through the placenta.

A low or high measurement may lead to another scan rather than an immediate conclusion. Follow-up may check whether the finding continues, whether the baby is growing as expected, and whether there is a possible cause.

When the amniotic sac opens, fluid can pass through the vagina. This is called rupture of membranes, or "waters breaking." It often happens shortly before or during labour, but it can happen earlier. The timing matters because membrane rupture can affect decisions about monitoring, infection risk, and birth.

Amniotic fluid can also be tested. During amniocentesis, a clinician uses ultrasound to guide a thin needle through the abdomen and remove a small sample. Depending on why the test is

offered, the laboratory may examine chromosomes, genes, infection markers, or other substances. Amniocentesis is optional, and its purpose and risks should be explained before you decide.

What can go wrong

Oligohydramnios means there is less amniotic fluid than expected. Possible reasons include fluid leaking through the membranes, placental problems, certain fetal kidney or urinary tract conditions, and some medicines. Sometimes no clear cause is found. The importance depends on when it occurs, how low the measurement is, and other pregnancy findings.

Polyhydramnios means there is more amniotic fluid than expected. It can be associated with diabetes during pregnancy, conditions that affect the baby's swallowing or fluid production, and some infections or genetic conditions. In many cases, no cause is identified. Larger amounts can increase the chance of early contractions, an unusual fetal position, or umbilical cord problems when the waters break.

Premature rupture of membranes means the waters break before labour begins. If this occurs before 37 weeks, it is called preterm prelabour rupture of membranes, or PPROM. It needs prompt maternity assessment because it can be associated with infection and early birth.

Green or brown fluid may contain meconium , the baby's first stool. Meconium can occur around labour, especially later in pregnancy. It does not always mean the baby is unwell, but the maternity team may recommend additional monitoring.

Routine follow-up is usually appropriate when a scan finds an unexpected fluid measurement but you otherwise feel well and your maternity team has arranged repeat assessment.

Contact your maternity unit promptly if you think fluid is leaking, even if you are unsure whether it is amniotic fluid or urine. Also seek prompt assessment for fever, vaginal bleeding, worsening abdominal pain, regular contractions before 37 weeks, or a noticeable reduction in the baby's usual movements.

Call emergency services for heavy bleeding, severe constant pain, collapse, serious breathing difficulty, or if you can see or feel the umbilical cord or other tissue at the vaginal opening.

What you can do

There is no reliable home method for setting or controlling the exact amount of amniotic fluid. Do not rely on home pH strips, fluid colour, smell, or internet photographs to decide whether your waters have broken.

If a scan reports low or high fluid, useful questions include:

Attend planned scans and maternity appointments. Keep a record of the result, the measurement method, and whether the level is changing over time.

If you notice vaginal wetness, note when it began, whether it continues, and the approximate colour. Use a sanitary pad rather than a tampon, and contact your maternity service for advice. Fluid may be a steady trickle rather than a large gush. A clinician can assess the history, examine for fluid, and use laboratory tests when needed.

Follow the movement advice given by your maternity team. If your baby is moving less than usual, contact the maternity unit rather than waiting for the next appointment.

Drinking more water is not a substitute for assessment. Hydration can affect some ultrasound measurements in certain situations, but it does not address every cause of low fluid. Follow the specific advice given after your scan.

- Which ultrasound measurement was used?
- How does the result fit with the pregnancy stage?
- Were the baby's growth, kidneys, bladder, and placenta also assessed?
- Is a repeat scan or another test planned?
- What changes should lead to an earlier assessment?

Common questions

Is amniotic fluid the same as urine?

No. Later in pregnancy, fetal urine is a major source, but amniotic fluid is a changing mixture that also contains water, salts, proteins, cells, and other substances. The fluid is continuously produced, swallowed, absorbed, and replaced.

What colour is it?

It is often clear, pale yellow, or lightly pink-tinged. Green or brown fluid may contain meconium, while red fluid may contain blood. Colour alone cannot identify the cause, so contact your maternity service if you think your waters have broken.

Can an ultrasound tell whether my waters have broken?

An ultrasound can show how much fluid appears to be present, but it cannot always confirm or exclude a small leak. Assessment may also include questions about the leakage, a speculum examination, or testing a vaginal fluid sample.

Does one low or high reading mean something is wrong?

Not necessarily. Ultrasound gives an estimate, and readings can change. Your maternity team will interpret the number alongside the pregnancy stage, previous measurements, the baby's growth, and other scan findings.

Does the baby breathe the fluid?

The baby moves fluid in and out of the developing lungs, but oxygen comes from the placenta through the umbilical cord before birth. Fluid movement is part of normal lung development.

Does amniocentesis remove enough fluid to harm the baby?

Only a small sample is taken, and the fluid is normally replaced. Amniocentesis has recognised risks, so the clinician offering it should explain the expected benefits, limitations, and risks for your situation.

Sources

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