

Pregnancy and blood fats

Cholesterol and triglycerides during pregnancy

The levels of cholesterol, and triglycerides, naturally increase during pregnancy. This is because, as the pregnancy develops, there is an increase in the flow of nutrients to the placenta to support the growth and development of the baby.

Extra cholesterol is needed to fuel the rapid growth of both baby and placenta, it is also needed for the production of oestrogen and progesterone, hormones that play an key role in a healthy pregnancy.

Checking cholesterol levels while you are pregnant

As measurements taken during pregnancy cannot give an accurate picture of a woman's usual cholesterol levels, HEART UK advises that cholesterol measurements are not helpful during pregnancy.

Women with high cholesterol levels before pregnancy may show more dramatic increases during pregnancy. This temporary increase poses no risk to mum or the baby.

Checking triglyceride levels while you are pregnant

HEART UK also advise against testing the levels of triglycerides during pregnancy. However, in rare cases, women with very high blood levels of triglycerides before pregnancy may develop severely elevated triglycerides placing them at high risk of acute pancreatitis, an uncommon but serious complication which can result in severe abdominal pain and fatty spots on the skin (eruptive xanthoma).

Pregnancy and familial hypercholesterolaemia

There is no reason why a healthy woman who has familial hypercholesterolaemia (FH) should be advised against getting pregnant or breastfeeding their baby.

Caring for the women with FH during pregnancy

Women who have FH and who are pregnant or planning a pregnancy should be under the shared care of specialists such as lipidologists (lipid clinic), cardiologists and obstetricians. Their risk of coronary heart disease should be assessed. Those with the rarer, more severe forms of FH, should also be screened to exclude aortic valve disease.

Pregnancy and cholesterol lowering medication:

Women are advised to stop their lipid lowering medication for at least 3 months before attempting to conceive. This allows time for these medicines to disappear completely, so that no traces are left in their blood by the beginning of their pregnancy. This 3-month period is known as the "washout" period.

This is because many lipid-lowering medicines, such as statins and ezetimibe can cross the placenta and may harm the unborn baby. Although the risk is small, these medications cannot be considered safe to use during pregnancy.

It is recommended that women should remain off their medication throughout their pregnancy and also whilst breastfeeding. Normal medication can be restarted once the baby is weaned off breastmilk.

Some women may accidentally conceive while still taking their statin or other medicines. Although the risk to the baby is believed to be small, women are strongly advised to stop their medication as soon as they are aware they are pregnant and contact their prescribing GP or specialist or other healthcare professional without delay.

Some lipid-lowering drugs such as bile acid sequestrants do not enter the bloodstream or cross the placenta and so are the only medication that can be prescribed during pregnancy and whilst breastfeeding. They should only be prescribed under specialist supervision. Bile acid sequestrants can reduce the absorption of fat soluble vitamins and folic acid so additional vitamin supplements are usually required to prevent any deficiency.

For the majority of women it is reasonable to stop lipid-lowering drug therapy altogether during pregnancy and breastfeeding. This is because the temporary rise in blood fats poses no risk to the baby and will have no long term adverse effects on the health of the mother, particularly if good long term cholesterol control has been established prior to pregnancy and is re-established again afterwards.

How soon do cholesterol and triglycerides return to pre-pregnancy levels?

- In normal pregnancies blood cholesterol remains elevated for at least one month following the birth of the baby.
- Triglyceride levels can also stay elevated for up to one month, however they may decrease more rapidly in mothers who breastfeed
- Women should wait at least 6-8 weeks following the birth of their baby before having a cholesterol test and those who are breastfeeding should wait until they have stopped before having a test.
- Women who have experienced complications or undergone surgery such as a caesarean section should wait at least 3 months before having a cholesterol test. This is because cholesterol will be needed to repair cell membranes and heal surgical wounds so the results may not be reliable

Glossary

Cholesterol – an essential waxy substance needed for cell repair and growth, vitamin D, steroid hormones and bile.

Triglyceride – the common form of dietary fat. Triglycerides are also present in the blood. Blood levels increase after a meal and then are slowly cleared from the blood.

Lipids – Cholesterol and triglycerides in the blood are often referred to as lipids

Familial Hypercholesterolaemia – a form of inherited high cholesterol caused by an alteration in a single gene. It may affect as many as 1 in 250 people in the UK.