PRENATAL TESTING

Have you visited your doctor yet for your prenatal blood testing? It’s an important step to take once you’ve decided you want to get pregnant.

In a standard prenatal screening, your doctor will check your immunity to certain conditions, as well as your exposure to any diseases that could impact your fertility or pregnancy. This could include the following:

Rubella (German Measles)
HIV (Human Immunodeficiency Virus)
Syphilis
Chlamydia
Gonorrhoea
Hepatitis B and C
Blood group and rhesus factor
Iron levels
Thyroid (TSH)

Your doctor may not do all of the above, and they might have some other things they test for depending on your general health history as well.

Let's look at the above tests, as well as some of my favourite prenatal tests and why they're useful.

Rubella

It’s important to check your Rubella status in advance of pregnancy, because if you need a booster immunisation that should be done at least 1 month before pregnancy.

TSH (Thyroid)

The range for TSH (thyroid stimulating hormone) is often written as 0.4 - 4 mU/L, sometimes even as high as 5 mU/L. This range is actually unacceptable for pregnancy, but this is often missed by doctors who don’t specialise in pregnancy and prenatal care.

The ideal range for TSH for optimal health is between 1 - 2 mU/L, and in pregnancy it needs to be below 2.5 mU/L to prevent miscarriage. If your levels are over 2.5 mU/L please speak to your health care professional.

STI's

STI tests are performed because if left untreated they can harm the pregnancy. Even if you have been in a monogamous relationship for years, your doctor is just doing their job and being thorough with your testing, so don’t be alarmed. If you are overdue for a Pap test it is worth scheduling one in as well.

Blood Group and Rhesus Factor

This one is pretty standard, just checking your blood group and whether you have the rhesus factor or not. It's represented as the + or - after the blood group letter. e.g. O+

If you are rhesus negative, you will be given an injection of Rh antibodies just after the birth of your first child (if they are rhesus positive) to help prevent issues with any future pregnancies.

It's not something you need to worry about, your doctor has it all under control. Fun fact: the injection given is actually created from donations from a very special group of blood donors. They are unsung heroes.

Iron Levels

If your doctor finds that your iron levels are low, they may recommend supplementation, or in severe deficiency, an iron infusion.

Semen Analysis (Sperm Test)

Most doctors won't recommend doing a semen analysis unless you have been trying to conceive for 12 months (or 6 months if the female partner is over 36 years of age). However, I personally think semen testing is extremely relevant because it lets you know from the very start what you're working with.

A poor result can be a great motivator for a man to improve his health before trying for a baby, and it also let's you know that something needs to be improved before wasting all that time trying with sperm that can't go the distance.

I won't go into a huge amount of detail in this course about sperm (keep an eye out for a future course devoted entirely to sperm!), but the basics are that you want to exceed the minimum parameters.

Let's use morphology, the shape of the sperm, as an example. The test will say 4% and above is adequate morphology for conception. But do you really want adequate sperm creating your baby? Hell no! You want the best swimmers ever!

In my clinic the minimum I accept is 10% morphology. That's more than double the medical minimum, and gives you a much better chance of a healthy pregnancy, especially if there are some female factor fertility inhibitors to deal with as well.
If the results are below the parameters in any way, implement the suggestions in this guide and retest in 3 months.

Extra Testing

This is the juicy section that I absolutely love when it comes to prenatal testing. It's the stuff that is often left out but can make a mammoth difference in understanding why conception isn't working. Or it can show you problems you didn't know existed, so you can fix them before wasting time!

MTHFR (Methylenetetrahydrofolate Reductase)

MTHFR (methylenetetrahydrofolate reductase), commonly referred to as "the motherf*cker gene" by my patients, is a gene that is involved in methylation. You don't need to worry too much about what that is, the important points to note are that a mutation in one or both of the MTHFR genes has been linked to infertility, recurrent miscarriage, blood clotting disorders, and mood disorders.

I think you can see where it got it's nickname now!

Whenever I see a new patient who has a history of miscarriage, or has been struggling to conceive, I recommend the MTHFR gene test.

If you are positive to having a MTHFR SNP (mutation), then it's very important to only take vitamins with the bioactive versions of folate, often called folinic acid or 5-MTHF. Avoid taking the synthetic version commonly used, called folic acid.

The next topic, homocysteine, is relevant to MTHFR as well.

Homocysteine

Not everyone has easy access to genetic testing for things like MTHFR, so you can use homocysteine testing instead through your local doctor.

Homocysteine levels should be below 11 to show that methylation is working correctly, which means there will be less risk of MTHFR related infertility or miscarriage.

If your levels are above 11, then it's important to follow the same rules as if you have a positive MTHFR diagnosis. High homocysteine levels, leading to hyperhomocysteinemia, have been shown to lead to recurrent miscarriage, and have also been found to be a cause of female sterility (inability to conceive).

Source: Hyperhomocysteinemia in women with unexplained sterility or recurrent early pregnancy loss from Southern Italy: a preliminary report.

Vitamin D

As we will discuss further in the Supplement section, vitamin D is relevant to multiple reproductive conditions. It's a real all-rounder when it comes to fertility care, so it's important to ensure your levels are up where they need to be.

Your doctor or natural medicine practitioner can test your vitamin D levels. Even though the range is 50 - 150 nmol/L, for reproductive health you should aim for levels over 120 nmol/L.

Omega 3

Omega 3 testing is relatively new, but can be useful if you think you might not be consuming enough Omega 3 rich foods in your diet (refer to the Fertility Foods section for more information on this).