



Research into the gut and the microbes that live there, has become big news. So now companies are offering a service, analysing your poo (a.k.a. stool or faeces) to tell you what microbes are in your gut and how they might affect your health – for better or worse. This leaflet explains what we currently know about the gut microbes, their influence on health, disease and therapy, and poo testing reports.

The microbes in your gut – what do we know?

Your gut contains microbes, this is both normal and good. At any one time there are hundreds of different microbes in the gut, and they are doing a wide range of jobs, like stopping you from getting infected by other bacteria that may be in poorly prepared food. The composition of these bacteria is unique to each person and this is what the company will tell you about. However, while we know some of their roles, we still do not fully understand how they do things like affect your liver or brain. We also do not yet know what it means to have different collections of bacteria in the gut, in terms of our own health or disease risk or what a “healthy gut microbiome” should look like.

Additional information and resources

If you would like to learn more about the commercial analysis of poo testing and the gut microbiome please visit the Guts UK website for a more detailed leaflet.

<https://tinyurl.com/y63j3akr>

Visit the GMfH website where you can find a free article entitled “The ecologist will see you now”.



<https://tinyurl.com/y4a95o4x>

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All you need to know about

Gut Microbiome and Poo Testing



GMfH
GUT MICROBIOTA *for* HEALTH
EXPERT PANEL

A cross disciplinary education & interest group of the **British Society of Gastroenterology**

This leaflet explains what we know about the commercial analysis of poo (stool) samples – Gut Microbiome Tests

<https://tinyurl.com/y3wmubly>



What is gut microbiome testing?

To help diagnose diseases, doctors may ask for a poo sample to be tested by a clinical laboratory. This is **not** the same as commercial gut microbiota testing, which is not a clinical requirement, but something that you would have to pay for.

Gut microbiome testing requires either some or all of a poo sample to be collected in a container and sent to a lab for analysis. The lab analysis can include test tube experiments looking for bacteria that can cause infections, in the same way that we check a urine sample for a urinary tract infection. However, many of the new companies offer to analyse the composition of the microbiome in the gut. This analysis shows how many different bacteria are present by analysing their DNA (sequencing) and estimates how many types are in the poo sample. Some tests will also measure other markers of gut health, e.g. calprotectin, which can tell if there is inflammation in the gut.

Faecal analysis and the gut microbiota

After analysing your poo a company usually sends a list of the different types of microbes they found, and sometimes a rough estimate of the amount of the types of microbes - 10% of type A and 3% of type B. This analysis is sometimes referred to as a (faecal) profile or fingerprint. However, currently this is of little value to you, your doctor or nurse, since the bacteria in your faeces will vary in samples taken at different times of the day. We are also not yet able to make strong conclusions about the health effects of different gut microbes (apart from pathogens). These types of tests are more useful for scientists doing research on the gut and its microbes.

What else will they send me?

The report from the company may compare results from your poo to thousands of other people's poo, and they may report the levels of different types of bacteria that have been linked to certain diseases. Don't panic, at the moment these results are just of scientific interest and they do not indicate a risk of developing any disease. Since we cannot link the profile of all the microbes in poo with any disease, we cannot confidently recommend any specific interventions to change the types of microbes in your gut. Interventions would be taking a probiotic for irritable bowel syndrome or changing your diet for coeliac disease, and then only after consultation with your clinician.

Conclusion

Until there is more research, the information given by these tests can be confusing:

- These types of test are of interest to scientists at the moment
- We are not yet able to make links between fingerprints of poo microbes and diseases e.g. heart disease or cancer
- Doctors cannot yet use these tests to help make clinical decisions
- We do not yet know what a healthy gut looks like
- Getting your poo tested is only of interest to you

