FUTURE HEALTH
BIOBANK

OUTLOOK

New Born Screening Test

A simple test allowing you to glimpse into your child's future health by screening for four conditions

- **Lactose intolerance**
- **Coeliac disease**
- **Bitter taste**
- **Medication induced deafness**

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OUTLOOK
New Born Screening Test
Diagnostics

Outlook new born screening

Outlook new born screening is a simple and affordable way to discover if your child is at an increased risk of developing any of the below conditions, giving you peace of mind or allowing you to prepare for possible future dietary / medical requirements.

Lactose intolerance

Coeliac disease

Bitter taste

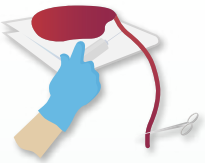
Medication induced deafness

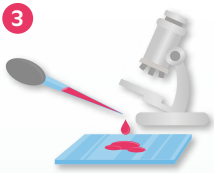
How does the Outlook test work?

Outlook newborn screening is available in two different formats; as a mouth swab kit, or as part of your cord blood stem cell storage package:

Outlook: Cord blood

1. 
Select our Premium+ stem cell storage package

2. 
Your umbilical cord blood sample is collected after birth and sent to our lab

3. 
We'll carry out the Outlook test on a small drop of cord blood and return the results by post

Or

Outlook: Mouth swab

1. 
Order your Outlook test online, or through our customer care team

2. 
Carry out the simple mouth swab at home

3. 

Return the kit to us and receive your results by post

Lactose intolerance

Milk is the first and most important nutritional ingredient for every baby, containing components such as proteins, fats, carbohydrates, minerals and vitamins that are essential for growth and development. Lactose is the main carbohydrate found in dairy products and is frequently hailed as a trigger for digestive problems.

Lactose intolerance affects around 1 in 50 people of Northern European descent and this figure increases substantially for other ethnic groups, such as African and Asian[4].

Lactose intolerance is caused by the body not producing enough of the enzyme lactase, which digests lactose. As a result, the lactose will remain in the gut longer, which will enable the bacteria to ferment and lead to a build-up of gas. This commonly causes symptoms such as wind, bloating, stomach cramps and diarrhoea. These symptoms are relatively non-specific and can appear anywhere between 15 minutes to two hours after the last intake of milk or dairy, making it difficult to accurately diagnose. The symptoms of lactose intolerance can be reduced by limiting the intake of foods that are considered to be rich in lactose. It is also possible to take lactase tablets at meal times to improve lactose digestion.

Testing for lactose intolerance

Although there are several ways to test for lactose intolerance, most tests are often harmful and painful as these tests are based on provoking symptoms. Alternatively, these tests can involve taking a biopsy of the small intestine and are therefore often considered to be overly invasive.

Our simple test, Outlook, provides an easy and non-stressful alternative for you to find out if your child is predisposed to lactose intolerance. This genetic test can be performed before any symptoms of intolerance become evident. Therefore, with an appropriate diet, it is possible to prevent symptoms from ever appearing.

Coeliac disease

Coeliac disease is characterised as a sensitivity to gluten and is the most common autoimmune disease, with around 1 in every 200 people afflicted worldwide[1].

Gluten is a protein found in the grains of wheat, barley and rye, and is one of the most common foods eaten around the world. However, some people can become hypersensitive to the presence of gluten, which may cause an abnormal reaction of the immune system against the small intestine.

This reaction can cause diarrhoea, abdominal swelling, cramps, nausea and in some cases lead to stunted growth. Longer term, coeliac disease causes damage to the small intestine, the section of the digestive system that absorbs nutrients from food.

Testing for coeliac disease

Outlook identifies if your baby carries genes that are associated with the development of coeliac disease. The aim of this test is to inform parents about their baby's natural tendency to develop this condition.

The genes that are screened for are located on the HLA (human leukocyte antigen) region of our genome (chromosome 6). Within this region there are two groups of genes, DQ2 and DQ8; it is these genes that are involved in the development of coeliac disease in over 95% of all cases of the condition[2,3].

Our non-invasive test, Outlook, offers parents an easy and pain-free way to discover if your child is predisposed to develop this condition. This genetic test can be performed before any symptoms become evident, meaning that children are able to easily manage the condition with an appropriate diet.

Bitter taste test

The bitter taste test identifies a person's individual sensitivity to bitter tasting foods. Sensitivity to bitter tastes is believed to be an evolutionary phenotype that arose through natural selection, in order to prevent us from consuming toxic plants. However, it can cause a reaction to common foods such as sprouts, cabbage, broccoli and other cruciferous vegetables that contain bitter-tasting compounds called glucosinolates.

Testing for bitter taste

First noticed in 1931 by Arthur Fox, bitterness in food is easier to detect for some people than others. He discovered this when he and a colleague accidentally inhaled phenylthiocarbamide (PTC). His colleague remarked on its bitter taste, whereas he tasted nothing. This compound, along with the less toxic 6-n-propylthiouracil (PROP), is currently used to induce the bitter taste response via a taste test strip in order to determine sensitivity.

The Outlook test allows us to identify a person's sensitivity to bitter tastes using a simple test, removing the need to undertake the unpleasant task of inducing the response via a taste test strip.

Those who are more sensitive to bitter tastes are known as a 'taster', whereas those that do not carry these variants and are less able to detect the bitterness are known as 'non-tasters'.

Medication-induced deafness

In developed countries, approximately 1 in every 300 children show severe or profound deafness at birth, or during early childhood[5, 6].

Several studies of deaf children have indicated that exposure to aminoglycoside antibiotics can lead to substantial hearing loss in 13-66% of cases[7]. Deafness has long-term implications for children in terms of communication skills, educational achievement, and overall quality of life.

Specific types of antibiotics called aminoglycosides are known to cause damage to the inner parts of the ear, leading to partial deafness in susceptible children. It is estimated that there are 1 in 500 children that carry a certain mitochondrial mutation (m.1555A >G), that predisposes them to rapid and permanent hearing loss after just one single dose of these antibiotics[8, 9].

Postnatal testing for this intolerance will enable a doctor to make a more informed decision regarding the type of antibiotic treatment prescribed for your child. Alternative antibiotics can be administered in order to avoid hearing loss in children whose tests have indicated they are susceptible to this specific condition.

Testing for medication-induced deafness

At present there are no alternative tests available; meaning that without performing a genetic test, parents will be unaware of any potential dangers or reactions until their child develops symptoms. Outlook offers parents a more detailed insight into their child's predisposition to antibiotic-induced deafness, therefore allowing a real insight into the medical requirements of their child, regarding specific antibiotic-based treatments. This is a simple and non-invasive test that can be carried out prior to any symptoms occurring.

Outlook and stem cell banking

The Outlook test can be carried out as a mouth swab test, or as part of your cord blood stem cell storage package.

Stem cells are the building blocks of life, and your baby's umbilical cord blood is a rich source of these precious cells. With the ability to regenerate and protect the body from within, stem cells are able to develop into many different types of blood and tissue cell.

Cord blood banking is the process of collecting, processing and storing these cells for use in future stem cell therapies. Currently, stem cells found in cord blood are used in treating over 85 diseases including cancerous blood disorders such as leukaemia, and genetic blood diseases like Fanconi anaemia.

They are a perfect match for your baby and have a 25% chance of matching a sibling, so you know that should they ever be required there will be no waiting and hoping for a suitable donor, and no fear of the body rejecting the cells.

"When I found out I was pregnant I was absolutely overjoyed. Just a few weeks later someone told us about stem cell banking and a company called Future Health. We'd never heard of stem cell banking before, but the more we thought about it, the more sense it made. How could we not do something that might one day protect our baby's health?"

Jeanne, Birmingham

Stem cell storage options

STANDARD PACKAGE

- Cord blood processing
- 2 years StemCellCare insurance

PREMIUM PACKAGE

- Cord blood processing
- Cord tissue processing
- 2 years StemCellCare insurance

PREMIUM + PACKAGE

- Cord blood processing
- Cord tissue processing
- Outlook screening test
- 2 years StemCellCare insurance

To give parents the widest choice possible, several different storage packages are available. Choose from the Standard package (cord blood only), the Premium package (cord blood and cord tissue), or the fully comprehensive Premium+ package (cord blood, cord tissue and Outlook screening test).

PRICE PROMISE

If you are offered a cheaper price for a comparable service elsewhere, just let us know and we promise to beat the quote by **£50**.

Terms and conditions apply, visit our website for details.

*Visit our website **www.futurehealthbiobank.com**, email us at **custcare@fhbb.com** or call us on **01159 677 707** for our latest prices.*

"I sincerely recommend Future Health for stem cell storage services. They are experienced, professional and the customer care team was great."

Bruno, April 2018

Interest free plans are available

Why choose Future Health Biobank?

One of the world's most accredited stem cell banks

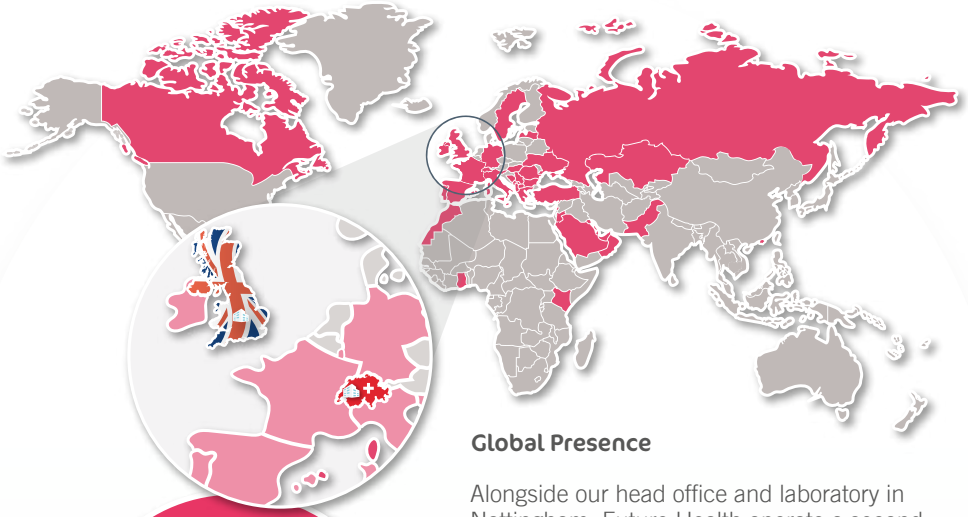
Proud to store more samples than all other UK banks combined

Two years free StemCellCare insurance

About Future Health Biobank

More experience than any other

Future Health Biobank are the UK's largest private stem cell bank, having stored more than 190,000 stem cell samples in our facilities from all over the world. Our experience has led to creating one of the most technologically advanced laboratories in Europe, and enables us to give your family's sample the best care possible.



Global Presence

Alongside our head office and laboratory in Nottingham, Future Health operate a second facility in Chatel, Switzerland, offering additional storage and a backup laboratory to the main UK site. We operate offices in around 40 countries worldwide, and have collected samples from over 75 countries to date, making us a true global leader in stem cell banking.

"Very happy with the service provided to store my son's samples, given plenty of information and felt comfortable knowing I could phone anytime for further info or questions."

Darren, April 2018

"Great service! Staff helpful, kits sent out quickly and organised at a time to suit. Informed of progress at each stage. Would happily use the service again."

Curtis, May 2018

"The whole process was hassle free, including the sample collection at the hospital, dealing with only pleasant and accommodating professionals from the start. I would definitely recommend this company to those considering stem cell storage."

Wardley family, January 2018

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