FUTURE HEALTH
BIOBANK

Parents' Guide to Dental Stem Cell Banking

Trustpilot

What are stem cells?

Stem cells are the building blocks of life, and your child's milk teeth are a rich source of these precious cells.

Dental pulp stem cells are found in the soft, connective tissues in the centre of each tooth. Amongst these cells are one of the most understood, extensively researched and promising types of stem cell called mesenchymal stem cells (MSCs); a type of stem cell that can turn into and replicate a variety of other cells within the human body. These valuable stem cells are able to regenerate and protect the body from within, and can be extracted from milk teeth and healthy adult wisdom teeth.

The type of cells found in teeth are currently being used in hundreds of clinical trials[1] for use in treatments for conditions including autism, diabetes and Crohn's disease.

We were extremely happy to discover this service was available, I thought we had missed the chance of banking stem cells having not done it from the umbilical cord. We were so pleased with the service also.

Louise Rowlands, Cheshire

10 reasons parents store their children's stem cells

Personalised regenerative medicine is set to be the future of healthcare. Therefore, it is no surprise there are already millions of privately banked stem cell samples across the world.

There are treatments available right now from stem cells, saving and changing lives today.

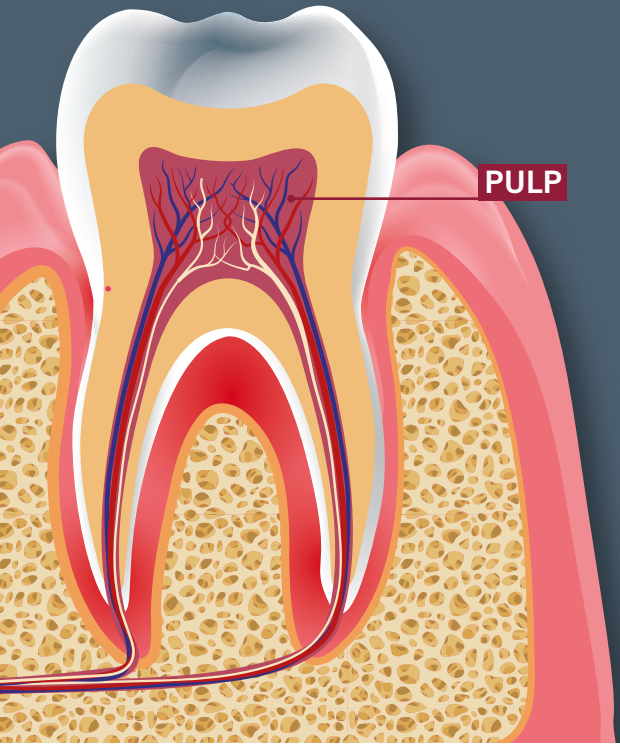
1. These cells could one day improve or even save your child's life.
2. Storing cells today means they are available tomorrow and anytime throughout your child's life. Whenever your child has need of them they will be here waiting.
3. Your child's or identical twins own cells are their only perfect cell match. Using their own cells means no rejection and no chance of contracting another's disease or genetic disorder. After all, they are a natural part of them.
4. Obtaining cells from teeth is the only way to obtain certain cells without the need for expensive or painful medical intervention.
5. The best cells are young cells, before they can deteriorate through age or pollution. Banking your child's cells today preserves them in their prime.
6. Personal cell medicine will become mainstream medicine in the very near future. The Harris Review of 2007 predicts the chance of using your own cells is as high as 1 in 3*. Wouldn't it give you peace of mind to know that your child's own cells are readily available?
7. Cells from teeth have the widest potential for therapeutic application. They can proliferate safely in a lab and naturally change into different cell types thereby allowing them to treat more conditions.
8. Storing tooth cells is less expensive, faster and easier than any other alternative.
9. Payment plans are available to suit your needs and budget.
10. Storing cells from a naturally shed baby tooth opens your private door to personalised treatment specifically for your loved one.

Potential use of dental pulp stem cells

Scientists have been studying dental pulp stem cells for nearly two decades. Following extensive studies and clinical trials[4], dental pulp stem cells show potential for regenerative therapies which could treat a range of diseases and conditions from dental related problems to nerve repair. Research shows that dental pulp stem cells share similar behavioural characteristics to mesenchymal stem cells (MSCs) from other tissues[5].

MSCs are found in many tissues throughout the body and can transform into and replicate muscle, nerve, bone, fat and cartilage cells. They also have the ability to change how the immune system behaves and therefore show potential to treat a range of immune disorders[6].

Current clinical trials



- Covid-19
- Diabetes
- Congenital heart disease
- Various cancers
- Diabetic kidney disease
- Knee osteoarthritis

What are clinical trials?

Clinical trials are medical research studies tested on people.
This is the stage that follows extensive research carried out in a laboratory.

Storing stem cells from teeth offers unique benefits to the banking process.

If you have missed the chance at birth to store your child's cord tissue, dental pulp is the perfect opportunity to store these vital cells.

Whereas using bone marrow calls for an invasive procedure, storing a naturally shed tooth from your child eliminates the need to undergo any procedure.

We've released 26 dental stem cell samples for therapies such as autism, knee injury repair and diabetes type 1 and 2.

Eyes
Regain vision after injury or age-related macular degeneration

Blood vessels
To treat stroke recovery, tissue repair and regrowth

Bone and cartilage
Bone regrowth, joint and back repair or sports injuries

Immunotherapy
To treat Autism, Parkinson's, Alzheimer's & Motor neurone disease

Fat cells
For reconstructive surgery

Nerve repair
To treat multiple sclerosis, spinal injury

Mouth repair
To repair damaged or diseased teeth and gum tissue

Skin cells
Skin grafts after burns or injury, constructive treatments

Various organs
Heart, kidney and liver diseases

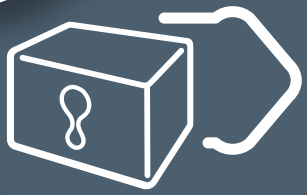
Insulin secreting cells
To treat Diabetes

How does it work?

The science behind dental pulp stem cell banking is complicated, but storing your child's stem cells couldn't be simpler:

Step 1
Contact us to arrange your service ensuring you are ready for your child's tooth to fall out

Step 2
We send your collection kit to your home once your child has a wobbly tooth



Step 3
Once the tooth falls out, place it in the specialist tooth collection kit, following the instructions

Step 4
Our medical courier will then collect the sample from your home and deliver it to our laboratory in Nottingham

Once your sample has arrived, our scientists:

Step 4
Run numerous tests on the tooth and isolate the cells from the dental pulp

Step 5
Proliferate the cells until a sufficient number of high quality cells are present, before dividing the cells into numerous vials

Step 6
Carry out further quality testing to ensure the sample is optimal for therapy

Step 7
Cryogenically freeze and store the cells in the vapour phase of liquid nitrogen for decades to come

Step 8
Should you ever need to use your sample, we'll take care of everything and can ship it anywhere in the world, free of charge

The service includes:

We offer a range of ways to pay, including interest free payment plans.

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

Collection kit and next day delivery

Medical courier for shipment to the laboratory

Quality testing

Sample processing

Contamination testing

Extensive protections for your samples

More experience than any other

The largest tooth stem cell bank in the world

We are the UK's largest private stem cell bank, having stored more than 200,000 stem cell samples from all over the world in our facilities. Our experience has led to creating one of the most technologically advanced stem cell biobanks in Europe, enabling us to give your family's sample the best care possible.

Free worldwide shipment of samples for treatment

Global presence

We operate offices in around 40 countries worldwide, and have collected samples from over 94 countries to date, making us a true global leader in stem cell banking.

Alongside our head office and laboratory in Nottingham, we operate a second facility in Chatel, Switzerland, offering additional storage and backup facilities to the main UK site.

One of the world's most accredited stem cell banks

We're regarded by our peers as the most innovative, highly considered centre of excellence. Our processes in both the UK and Swiss laboratories are licensed and accredited to the highest level.

Frequently asked questions

Q: How many teeth do you need?

A: The process is usually successful using only one tooth. If it does not work with a single tooth, we attempt the process again at no additional cost. There is a limit of three attempts, something we have never needed to abide by yet.

Q: Which tooth is best?

A: Whilst all teeth contain dental pulp from which cells can be isolated, the most desirable teeth are anterior deciduous teeth. These are the top and bottom front six teeth. It is important to remember that like all cells in our body, stem cells deteriorate with age. The younger the better. Because of this, it's advised to begin the process as soon as you have decided to store the cells.

Q: Will I, or my child, need to take a blood test?

A: It is a regulatory requirement that all donors of teeth sent for processing have a blood test within 7 days of the tooth falling out. This mandatory screening ensures the sample is safe for storage and the potential recipient of the sample in the future understands the sample's background – this screening could also aid a sample being used by someone else in the future, by a family member for example.

Q: Can you bank cells from adult teeth?

A: Yes. If a tooth is free of decay and fillings then it can be processed in our laboratory. Often people who have had wisdom teeth extracted will go on to store the dental pulp.

Q: With the chance of using stem cells so small, is there any point in storing them?

A: Stem cell therapy is a very real possibility for both transplant and regenerative medicine. In 2008, it was estimated that 1 in 200 people will undergo a stem cell transplant before the age of 70[7]. The transplant data used in this study is now ten years old and stem cell research has continued to develop at an astonishing rate. In fact, it is now estimated that as many as 1 in 3 people will benefit from stem cell based regenerative therapies[8]. To date, we have released 26 samples for treatment of a range of illnesses such as autism and diabetes.

Q: Do I need to speak to my dentist about an extraction?

A: The process allows for teeth to fall out naturally, you can send us a tooth that falls out from your home. We can also accept teeth that are extracted by a dentist.

Q: I have already stored Cord Blood for my child, is it worth storing Dental Pulp Stem Cells?

A: Yes, cord blood stem cells are very different to dental pulp stem cells, they each perform a very important job in body repair for different types of illnesses. Cord blood stem cells predominantly treat immune disorders and blood diseases whereas dental pulp stem cells have the potential to be used for a wide range of regenerative purposes, including treatment of diabetes and heart disease. that could treat illnesses such as diabetes and heart disease.

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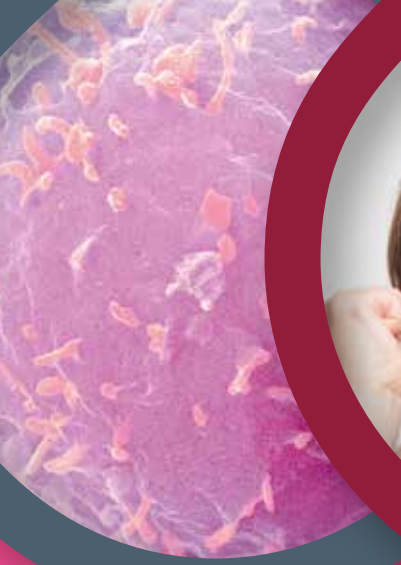

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BIOBANK

10 Faraday Building, Nottingham Science & Technology Park,
University Boulevard, Nottingham NG7 2QP
United Kingdom

www.futurehealthbiobank.com
custcare@fhbb.com
0115 967 7707

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HFEA licence ✓ GDP certification ✓ OFSP licence ✓ ISO 9001 certification ✓ BSI accreditation ✓

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