

# Lose a tooth? Gain your life!

*“Learn how deciduous teeth can save  
your family's life”*



*Biohellenika provides a new innovative service of banking stem cells from the pulp of the deciduous teeth; its aim is to collect the valuable biological resource of stem cells.*

[www.biohellenika.gr](http://www.biohellenika.gr)

  
**Biohellenika**  
BIOTECHNOLOGY COMPANY

## What are the benefits of dental pulp stem cells?

Biohellenika offers a "second chance" for children who hadn't collected their stem cells at birth or their stem cells have already been used for a treatment.

Deciduous teeth are used for the isolation and cryopreservation of stem cells that are contained in their pulp. The procedure takes place during the beginning of their normal fall that occurs between 6-13 years old.

The service concerns also, the adults who want to use their "wisdom teeth" and also all other teeth that are extracted for orthodontic reasons.

## What are the stem cells collected from the pulp of the deciduous teeth?

Stem cells are primary cells that under proper conditions can be transformed into other cell types, useful for our body.

The pulp of deciduous teeth contains:

**Odontoblasts**, are the cells which create the pulp and the dentine of the tooth

**Mesenchymal stem cells**, which can be implanted in any other organ or tissue and reinforce its defense and regenerating function.

The stem cells derived from the teeth pulp are characterized as non haematopoietic stem cells. The use of mesenchymal stem cells combined with haematopoietic stem cells reduces patient's recovery time and increases the percentage of his/her survival.

## Where the stem cells from deciduous teeth can be used?

Nowadays it is generally acceptable that, the stem cells of the deciduous teeth due to their nature and capabilities can have, in the short run, clinical applications equal to the ones of the bone marrow and umbilical cord blood stem cells.

The diseases which are expected to be healed are:

- Regeneration of the myocardium after a heart attack
- Regeneration of bones after fractures and treatment of osteoarthritis
- Treatment of neurodegenerative diseases

- Revival of the pulp and preservation of the vitality of the tooth
- Treatment of periodontal diseases

Despite the great potential use of the stem cells from deciduous teeth in medical applications, today they can be used in autologous transplantations (only to the same child). In the future they might be used by other histocompatible members of the family too.

## The 5 stages of stem cell collection, process and cryopreservation

1. Our authorized partners supply the parents with the collection kit, without any charge after a detailed advising and filling in all the necessary documents. The deciduous tooth should be extracted by a dentist.
2. Preserve the collection kit in the refrigerator for at least 12 hours before the extraction of the tooth.
3. Bring the collection kit to the dentist and he will put the deciduous tooth into the vial containing the preservation liquid after the extraction.
4. Then place the vial with the deciduous tooth into the collection kit and immediately arrange with our authorized partner the transfer of the deciduous tooth to the lab.
5. When the tooth is received, our scientists will extract the dental pulp, isolate and cryo-preserve the mesenchymal stem cells (MSCs).

Contact Biohellenika for more information

