How does decay occur?

Decay, also known as caries, occurs due to the acid produced by bacteria, which causes mineral loss of the tooth. This process is called **demineralization**. Contrary to popular belief, decay does not start with a hole, but it **develops invisibly in the enamel below the tooth surface**. At this stage, it is still possible to reverse without drilling.



1. Healthy tooth anatomy

- **Enamel:** The outermost layer of the tooth crown and hardest tissue in the body, made of hydroxyapatite, a natural mineral.
- **Dentin:** Supports the enamel and protects the pulp.
- **Pulp:** Innemost vital part containing blood vessels and nerves.
- **Cementum:** Thin layer that helps attach the tooth to the jaw bone.

2. Initial stage decay



Early decay, being subsurface, may be **invisible but is still reversible**. If not treated at this stage, it becomes irreversible and must be managed with invasive methodes like drilling.



3. Irreversible decay progression

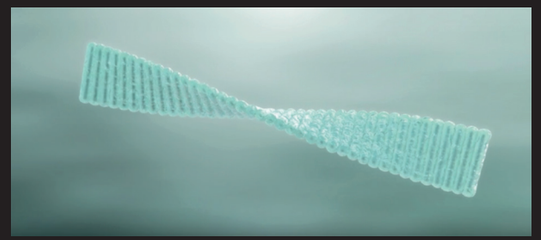
Untreated decay grows, involves the dentin and couses pain.
A covity forms, which can only be treated by drilling and filling the tooth.

Science inspired by nature

Developed in Switzerland and backed by over **25 years of research**, the vVARDIS technology is based on the science of **peptides**, building blocks of proteins known for their **regenerative properties**.

The vVARDIS scientists have patented the **process that mimics nature** to create new hydroxyapatite crystals, making possible something that was previously unimaginable: **regenerating** the only tissue in the body that has never been able to self-heal, **enamel**.

Versatile and innovative, the vVARDIS technology can address a broad range of oral health needs in the dental office and at home.





A painless, drill-free future.



Curodont™ Repair is an innovative, **painless, drill-free solution for arresting and reversing tooth decay**.

Thanks to its patented Monomer-Peptide formulation, Curodont™ Repair can stop and reverse initial decay through the regeneration of the lost minerals. It rebuilds the tooth from the inside **– without pain, injection and/or drilling**.

It is suitable for **all ages** and can be applied by a dental professional in-office **in less than 10 minutes**.

How does Curodont™ Repair work?

Unlike other technologies, the **vVARDIS formula diffuses into the early caries lesion** when applied to the enamel surface. Once inside, it is able to **generate new enamel** by attracting calcium and phosphate from your saliva - like nature does.

Initial decay lesion.
The demineralization occurs **beneath the surface** which remains intact.





The dental professional applies **Curodont™ Repair** in office (5min).

Within 5 minutes, the Curodont™ Repair technology **diffuses into the lesion**.

Once inside the tooth, this breakthrough technology attracts minerals from saliva and **remineralizes the lesion, regenerating the enamel from inside.**

