

Restoration of Teeth



1. What is a dental restoration?

- A dental restoration is also called a filling. It is the repair of a damaged or decayed tooth, restoring it back to its normal shape, appearance and function.
- The name of the material that is used to repair a tooth is often the name given to the repair process. "Amalgam Restoration" is an example of the material giving its name to the process.

2. Why should a damaged or decayed tooth be restored?

- A tooth is repaired to protect the part of the tooth that has become exposed by the decay or injury.
- It can prevent the loss of a tooth, since decay may spread and destroy the tooth.
- Restoration permits normal eating and chewing.
- Restored teeth should reinstate, or improve upon, the appearance of teeth and the face.

3. What are the available dental restorations?

There are different types of dental restorations which are used in particular situations.

- Amalgam restoration
 - An amalgam is an alloy or combination of two or more metals.
 - Amalgam fillings (silver fillings) are made up of mercury, powdered silver and tin. They are mixed and packed into cavities in teeth. It hardens slowly, and replaces the missing tooth substance.
 - Amalgam fillings are held in place by the shape of the prepared cavity.
 - The cavity has to have an undercut to prevent the filling from falling out. The amalgam is then slotted into the cavity.
 - It is still commonly used, despite an ongoing debate about mercury toxicity.

Amalgam fillings



Preparation



After



Amalgam fillings

- Bonding Or Composite Restoration
"The superglue of dentistry"

- Composite resin is a plastic tooth-coloured material that is used as a filling. It is also called a white or plastic filling. The process of fusing the filling material to the tooth is called bonding.

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- It is placed into the cavity in layers until the tooth is restored to its original form.
- An ultraviolet light is used to harden it, and it can be chewed on immediately after it has been completed. This is an advantage it has over **amalgam**.
- The filling bonds or sticks to the tooth.
- This characteristic is a major advance for dentistry. There is no longer the need to cut a slot into a tooth to hold a filling in place, as is necessary for an amalgam filling. As a result, less tooth needs to be cut away for a filling.
- We at Simplyteeth have named it "the superglue of dentistry".
- It is hard wearing and is used for repairing front and back teeth.
- Bonding is ideal for front teeth that need **cosmetic dentistry**.

White fillings



Decay before



After repair

White fillings



Fracture of front tooth



Cosmetic repair

• Inlay restoration

- An inlay is a solid filling that is cemented into a tooth that has been specially prepared for it.
- To make this restoration, an **impression** of the prepared cavity is taken using an elastic material. It is sent to the dental technician who will make the inlay.
- Most inlays are made of gold or tooth-coloured **porcelain**.

Porcelain inlays



Before



Preparation



After

Gold inlays

Restoration of Teeth



Before



Preparation



After

- Onlay restoration

- An onlay is a modified inlay. It is also made by a dental technician, from the impression taken of a prepared cavity.
- It differs from an **inlay** in that it not only fills the cavity as an inlay does, but also covers and protects the chewing surface of the tooth.
- It is also cemented into place and may be made of gold or tooth-coloured **porcelain**.



Before



After

- Replacement crown or "crown"

- A replacement **crown** does exactly what its name implies, it replaces the natural crown of a tooth. It is often simply called a crown.
- When all, or a large part of the original crown of a tooth has been destroyed by injury or **decay**, the lost tooth material needs to be replaced.
- The remaining portion of tooth is trimmed down in preparation for a replacement crown.
- After **taking an impression** of the prepared tooth, the dentist sends the impression to the dental technician who will make the replacement crown.
- This new crown is then cemented onto the remaining part of the tooth.
- Replacement crowns may be made of **porcelain**, gold or a combination of the two materials.
- Temporary crowns are made of **acrylic**.
- A replacement crown is also made for a healthy tooth, when it forms part of a **bridge**, or when it is used to improve the appearance of a tooth.



Before



Preparation



After

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- Porcelain veneer restoration
 - A veneer is a thin facing of porcelain or plastic material which serves to replace only the front visible part of the tooth. It is used for tooth repair and to whiten the teeth permanently and make the mouth more attractive.
 - After the dentist has prepared the tooth, an **impression** is taken and sent to the technician, where the veneer is made.
 - The **porcelain** veneer is cemented into place, using a special cement that bonds it to the tooth.
 - This is a conservative and popular method for improving the appearance of teeth.



Before



After