## The Facts About Fillings

### Materials

<table>
<thead>
<tr>
<th>Dental Materials</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gold</strong></td>
<td>Strength, Resistance to wear, Aesthetic</td>
<td>High cost, Difficult to repair, Requires kiln and equipment</td>
</tr>
<tr>
<td><strong>Silver</strong></td>
<td>Low cost, Easy to repair</td>
<td>Corrosive, Shrinkage, Potential for allergic reaction</td>
</tr>
<tr>
<td><strong>Amalgam</strong></td>
<td>Low cost, Non-corrosive</td>
<td>High mercury content, Higher risk of sensitivity, Difficult to reline</td>
</tr>
<tr>
<td><strong>Fusion</strong></td>
<td>Low cost, Aesthetic</td>
<td>Corrosive, Shrinkage, Potential for allergic reaction</td>
</tr>
<tr>
<td><strong>Porcelain</strong></td>
<td>High aesthetic appeal, Good wear resistance</td>
<td>High cost, Difficult to repair, Shrinkage</td>
</tr>
</tbody>
</table>

### Advantages of Gold

- Strength
- Resistance to wear
- Aesthetic appearance

### Disadvantages of Gold

- High cost
- Difficult to repair
- Requires kiln and equipment

### Advantages of Silver

- Low cost
- Easy to repair

### Disadvantages of Silver

- Corrosive
- Shrinkage
- Potential for allergic reaction

### Advantages of Amalgam

- Low cost
- Non-corrosive

### Disadvantages of Amalgam

- High mercury content
- Higher risk of sensitivity
- Difficult to reline

### Advantages of Fusion

- Low cost
- Aesthetic appeal

### Disadvantages of Fusion

- Corrosive
- Shrinkage
- Potential for allergic reaction

### Advantages of Porcelain

- High aesthetic appeal
- Good wear resistance

### Disadvantages of Porcelain

- High cost
- Difficult to repair
- Shrinkage
### The Facts About Fillings

<table>
<thead>
<tr>
<th>NICKEL OR COBALT-CHROME ALLOYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portability: Ceramic is a glass-like material formed into fillings or crowns using models of the prepared bone or teeth. The material is not colored and is used for restorations, crowns, and fixed bridges.</td>
</tr>
<tr>
<td><strong>Advantages</strong></td>
</tr>
<tr>
<td>- Good resistance to further decay</td>
</tr>
<tr>
<td>- Excellent durability; does not corrode in the mouth</td>
</tr>
<tr>
<td>- Non-toxic and biocompatible</td>
</tr>
<tr>
<td>- Can be abrasive to opposing teeth</td>
</tr>
<tr>
<td>- High cost, requires at least two office visits and laboratory services</td>
</tr>
<tr>
<td>- Slightly higher wear to opposing teeth</td>
</tr>
</tbody>
</table>

**Disadvantages**
- Not a tooth-colored alloy, is a dark silver metal color |
- Can irritate sensitive teeth |
- May not be recommended for molars |
- Higher cost because it requires at least two office visits and laboratory services

### Porcelain (Ceramic)

Porcelain is a tooth-colored material that is used for fillings, crowns, and veneers. It is a very strong material, but it can be brittle and break easily. It is also difficult to repair once it has been damaged.

**Advantages**
- Strongest material available |
- Resistant to wear and tear |
- Can be repaired |

**Disadvantages**
- Brittle and can break easily |
- Difficult to repair |
- May not be recommended for molars |
- Lower cost than metal alloys

### What About the Safety of Filling Materials?

Patient health and the safety of dental treatments are the primary goals of California's dental professionals and the state of California. The purpose of this fact sheet is to provide you with information concerning the risks and benefits of the dental materials used in the restoration (filling) of teeth.

The Dental Board of California is required by law to make this dental materials fact sheet available to every licensed dentist in the state of California. Your dentist, in turn, must provide the fact sheet to every new patient and all patients of record only once before beginning any dental filling procedure. As the patient or parent/guardian, you are strongly encouraged to discuss with your dentist the facts presented concerning the filling materials being considered for your particular treatment.

Allergic Reactions to Dental Materials

Components in dental fillings may have side effects or cause allergic reactions, just like other materials we may come in contact with in our daily lives. The risks of such reactions are very low for all types of filling materials. Such reactions can be caused by specific components of the filling materials such as mercury, nickel, chromium, and beryllium alloys. Usually, an allergy will be revealed itself as a skin rash and is easily reversed if the original material is no longer in contact with the material.

There are no documented cases of allergic reactions to composite resins, glass ionomer, or porcelain. However, there have been rare allergic responses reported with dental amalgam, porcelain fused to metal, gold alloys, and nickel or cobalt-chrome alloys.

If you suffer from allergies, discuss these potential problems with your dentist before a filling material is chosen.
It is important to discuss any dental treatment with your dentist.

Toxity of Dental Materials

- Acrylic resins, often used in dentistry, can cause harm to the body if not properly handled.
- Lead and mercury are harmful to the body and can lead to health problems.
- Bisphenol A (BPA), found in some dental materials, can interfere with hormonal balance.

Advantages of Dental Amalgam

- Cost-effective
- Resistant to wear and tear
- Easy to clean and maintain

Disadvantages of Dental Amalgam

- Toxicity to the body
- Can cause damage to the surrounding tooth structure
- May require additional treatments or procedures

Conclusion

Dental materials play a significant role in oral health. It is important to understand the advantages and disadvantages of different materials to make informed decisions about treatment options.
The Facts About Fillings

Disadvantages
- Expensive to replace
- Cannot be repaired
- Can be damaged by food and drink
- May need to be replaced more than once
- Not as durable as other materials

Advantages
- Easy to apply
- Least invasive of any dental restoration
- Can be done without anesthesia
- Resistant to decay
- Less likely to cause sensitivity

Composite Resin Fillings

Dental Amalgam Fillings

Adventures - Advantages & Disadvantages

Dental Materials - Advantages & Disadvantages