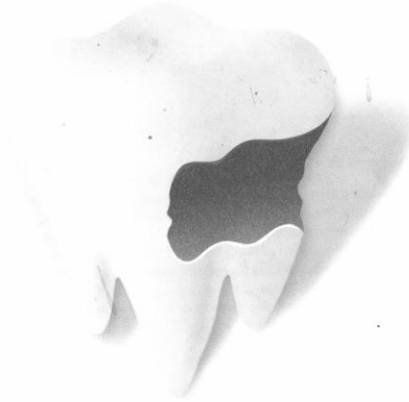


## Towards Zero Cavity



Effective ways  
for prevention of dental caries

**Colgate**

YOUR PARTNER IN ORAL HEALTH

### Which areas of the teeth are likely to decay?

There are three different places where a tooth can experience decay.



1. Decay on the biting surfaces of the teeth occurs when plaque becomes trapped in the grooves. This is most common in children because they often miss these areas when brushing.



2. Decay between the teeth occurs when plaque is left to build-up on these hard to reach surfaces. These areas cannot be reached by a toothbrush alone and may develop if flossing or cleaning between the teeth is not done regularly.



3. Decay at the root surfaces of the teeth occurs if one has suffered gum recession or bone loss (often associated with gum disease, or periodontitis).

### What are the stages of tooth decay?

#### 1 White Spots



White spot

#### 2 Enamel Decay



Enamel Decay

#### 3 Dentin Decay



Dentin Decay

#### 4 Pulp Involvement



Infected Pulp

Abscess

1. Bacteria that are exposed to sugars or carbohydrates can make acid, which attacks the enamel of the tooth. This process is known as demineralization. The first sign of this is a chalky white spot. At this stage, the decay process can be reversed.

2. Demineralization continues. Enamel starts to break down. Once the enamel surface is broken, the tooth can no longer repair itself. The cavity has to be cleaned and restored by a dentist.

3. The decay reaches into the dentin where it can spread and undermine the enamel.

4. If decay is left untreated, it will reach the tooth's pulp, which contains nerves and blood vessels. The pulp becomes infected. An abscess (swelling) or a fistula (opening to the surface of the gum) can form in the soft tissues.

### What is the treatment for dental cavities?

- The standard treatment for cavities is to fill/restore the tooth.
- If the cavity is large with extensive erosion, the remaining tooth may not be able to support the amount of filling material that would be needed to repair it. In this case, the dentist will remove the decay, fill the cavity, and cover the tooth with an artificial crown.
- Sometimes there may be more damage in the interior of the tooth. In these cases, the dentist may refer to a dental specialist called an endodontist for root canal treatment. During this procedure, the nerve and infected pulp are removed and the inside of the tooth is cleaned and sealed. In most cases, the tooth's natural crown will need to be replaced with an artificial crown.



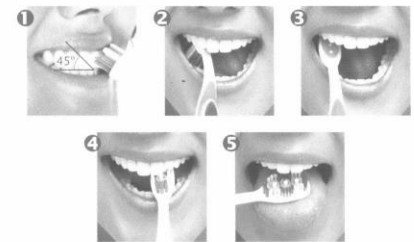
### What can be done to prevent tooth decay?

There are several things that can be done to slow down or prevent the breakdown process which leads to cavities. Here are some useful tips:

- Brush twice a day with toothpaste providing round-the-clock protection. **Colgate**® toothpaste is the brand most often recommended by dentists, among which **Colgate Total**® may provide the following benefits:
  - ✓ It provides complete 12-hour antibacterial protection
  - ✓ Fights plaque build-up, bad breath and helps prevent caries
- Clean between your teeth daily to remove plaque from areas your toothbrush cannot reach using interdental aids like floss or an interdental toothbrush.
- Rinse thoroughly, twice daily, after brushing with an anti-cavity dental rinse like **Colgate Plax**® non-alcohol mouthwash.
- Eat a healthy diet and limit carbohydrate intake.
- Visit your dentist regularly for professional cleanings and oral examination.



### What is the right way to brush?



1. Place the toothbrush at a 45-degree angle towards the gumline. Use gentle, short strokes, moving the brush back and forth against the teeth and gums.
2. Brush inside surface of each tooth in a similar way.
3. Brush chewing surface of each tooth
4. Use tip of brush to brush behind each front tooth, both top and bottom.
5. For a fresher breath, don't forget to brush your tongue!

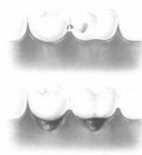
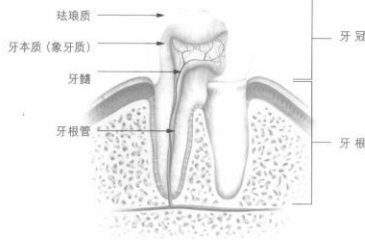
### What is the right way to floss?



1. Take about 18 inches of floss and loosely wrap most of it around each middle finger (wrapping more around one finger than the other) leaving 2 inches of floss in between.
2. With the thumbs and index fingers holding the floss, gently slide it down between your teeth, while being careful not to snap it down on the gums.
3. Curve the floss around each tooth in a "C" shape and gently move it up and down the sides of each tooth, including under the gumline. Unroll a new section of floss while moving from tooth to tooth.

## 何谓蛀牙？

蛀牙是指牙齿结构受到破坏，包括珐琅质（即牙齿的最外层）和牙本质（即珐琅质之下较柔软的一层）也会受影响。



2. 牙菌斑容易聚集在难刷的牙缝，尤其是没有定期使用牙线清洁牙缝，蛀牙便容易出现在这个部位。

3. 当牙龈萎缩或牙齿骨髓骨质流失时（通常与牙龈炎和牙周病有关），蛀牙便容易出现牙根表面。

## 什么是蛀牙的症状？

蛀牙问题可能同时影响着多颗牙齿或同一颗牙齿的多个部位。

以下是蛀牙最常见的症状：

- 牙齿出现一个蛀蚀或蛀洞
- 牙齿变得敏感（对甜食或冷、热食物）
- 牙痛
- 食物卡在牙齿与牙齿中间

## 蛀牙有哪些阶段？

### ① 白色斑点

白色斑点



### ② 珐琅质腐蚀

珐琅质腐蚀



### ③ 牙本质腐蚀

牙本质腐蚀



### ④ 牙髓发炎

发炎的牙髓



1. 当细菌接触到糖或淀粉质时，会产生破坏珐琅质的酸性物质。这个过程称为脱钙。脱钙的早期徵状是牙齿出现白色斑点。在这个阶段，蛀牙仍可以自我修复的。

2. 若脱钙过程持续，珐琅质便会开始崩解。一旦开始，牙齿便已不能再自我修复。这个阶段的蛀牙则需要由医生清洗及修补。

3. 当蛀牙继续侵蚀并穿过珐琅质，便会扩散到牙本质，并造成破坏。

4. 若没有适当地治疗蛀牙，它会蔓延至包围神经和血管的牙髓部位，导致牙髓发炎。软组织更可能会因而出现脓肿（脓肿）或龋（牙龈表面出现缺口）。

## 蛀牙是怎样形成？

人类口腔内隐藏着许多不同种类的细菌，它们会连同唾液、食物残渣和其他天然物质聚集在牙齿表面形成一层黏稠的薄膜，称为牙菌斑。部份牙菌斑中的细菌会把食物中的糖和碳水化合物（即淀粉质）转化成酸性物质，继而侵蚀牙齿表面的矿物质，形成微型龋洞（microscopic pits）或腐蚀性，而蛀洞更会随着时间逐渐变大。

## 谁是蛀牙的高危险群？

虽然儿童较普遍患有蛀牙，但成人同样有蛀牙的风险。以下是一些增加蛀牙风险的因素：

- 碳水化合物（即糖和淀粉质）含量高的饮食习惯
- 饮水中不含氟
- 口乾
- 服用某些药物
- 不正确的口腔照护

## 牙齿哪些部位较易出现蛀牙？

以下三个地方较容易出现蛀牙：



1. 当牙菌斑在牙齿沟隙内积聚，蛀牙便会在牙齿咬合面形成。这些位置最容易出现蛀牙因为儿童刷牙时经常忽略刷这些部位。

## 蛀牙有什么治疗方案？

- 蛀牙的基本治理方法是填补牙齿。
- 若蛀洞太大或蛀蚀范围太大，剩下的牙齿有可能承受不了用来补牙的材料。在这个情况下，牙医师会先彻底去除所有已被蛀蚀的部位，然后填补蛀洞，再把假牙冠套在牙齿上。
- 有些时候，牙齿内部可能已受到更多破坏。在这些情况下，牙医师可能会转介病人到牙髓专科作根管治疗。在根管治疗过程中，神经和受感染的牙髓会首先被除去，牙齿内部将会被彻底清洁，然后再被重新封填。在大部份情况下，牙齿本身的牙冠也会被套上假牙冠。



## 怎样预防蛀牙？

蛀牙的过程是可以减缓或避免的。

以下是一些有效的建议：

- 每天使用牙膏刷牙2次，以提供全天候的保护。  
**Colgate®** 牙膏是牙医最普遍推荐的牙膏品牌。  
**Colgate Total®** 可提供以下帮助：
  - ✓ 提供12小时的全面保护
  - ✓ 能有效预防牙菌斑、口腔异味和蛀牙



- 每天清洁牙缝，使用如牙线或牙间刷等作为辅助，以到达牙刷刷不到的部位，能有效去除牙缝中的牙菌斑
- 每天使用防蛀漱口水2次（例如 **Colgate Plax®** 漱口水），并于刷牙后彻底漱口
- 均衡饮食，并限制碳水化合物的摄入量
- 定期洗牙及作牙齿检查

