



## 牙齿/口腔健康问题

# 猫犬口臭



尽管口臭可因其他疾病而发生，如慢性肾病，但最常起源于口腔。<sup>1</sup> 当食物残渣滞留在牙齿中，或老年宠物唾液分泌减少时，可能会产生恶臭。<sup>1</sup> 然而，更严重的口臭通常与牙周病的发生和进展有关。牙菌斑细菌主要是厌氧菌，随着牙菌斑继续在牙齿上积聚而更加占据主导地位，它们在口腔中代谢蛋白质，导致释放出挥发性硫化物（如硫化氢），这正是产生难闻气味的原因。<sup>1</sup> 口臭通常是主人最先观察到的宠物牙周病症状。<sup>2,3</sup> 作为综合性牙科卫生计划的一部分，营养可以在宠物口臭以及相关牙周病的管理中发挥重要作用。

## 重要信息

- 研究表明，投喂专门配制的磨牙咀嚼物和饮食可减少牙周病引起的口臭。<sup>2,4-7</sup> 借助特定的成分和机械性能，磨牙咀嚼物和饮食可抑制导致口臭的挥发性硫化物的产生：
  - 可溶性锌盐（如硫酸锌）与硫结合，不会形成挥发性硫化物，而是形成没有气味的化合物。<sup>2,3</sup> 由于锌盐具有抗菌活性，也可减少牙菌斑。<sup>2,3,7,8</sup>
  - 无机磷酸盐，例如焦磷酸钠，可抑制牙菌斑矿化形成牙石。<sup>2,3,9</sup> 牙石成为了滋生更多牙菌斑的病灶，促进释放更高浓度的挥发性硫化物，并导致牙周病进一步恶化。<sup>3,10</sup>
  - 由于延长了咀嚼时间并增加了与牙齿和牙龈的接触，专门配制的磨牙饮食和咀嚼物可提供研磨（机械）作用，在宠物咀嚼时刮去牙菌斑和牙垢。<sup>2,4,7-9</sup>
  - 研究表明磨牙咀嚼物和饮食可减少猫的牙菌斑和牙石积聚，<sup>11,12</sup> 从而减轻口臭，但此益处的相关支持数据尚未发表。

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