

電動牙刷與手動牙刷，哪種適合你？

Electric Brush Vs. Manual Brush: Which is right for you?

By Brooke Sergent, RDH, BS - April 24, 2019



在琳瑯滿目的牙科商品中，如何挑選出適合自己的用具總是個惱人的問題。而牙刷的選擇也是個問題，隨著牙刷商品種類的增加，挑選牙刷的原因也因人而異，有些人可能會考慮其效果或需求。

到牙科診所進行例行性牙科拜訪通常會建議使用電動牙刷。但是，口腔衛生師可能會在您離開時給您一個手動牙刷作為離別禮物。儘管建議每三個月更換一次，但許多患者承認他們從不買牙刷，並且基本上每六個月依靠他們的免費牙刷。許多人想知道的是，”每三個月換牙刷”這件投資是否值得。

有效的牙菌斑去除對牙周組織的健康至關重要。一般來說，刷牙是維護口腔健康的關鍵，而且只要使用市場上的牙刷就能完成。不論是電動還是手動牙刷，刷牙的有效性是取決於患者在既定的刷牙期間其清潔程度。面對大多數人的刷牙時間為 45-70 秒，建議刷牙時間為 2 分鐘[1]。人手可以使用手動牙刷每分鐘平均可達到 200-400 次振動頻率，但與電動牙刷可以產生的振動頻率相比，明顯不足。旋轉振動電動牙刷每分鐘振動可達到 8,000 次，聲波電動牙刷每分鐘振動可達到 30,000 次[2]！

除了每分鐘顯著的振動頻率外，電動牙刷還帶來了許多優點。大多數電動牙刷都有定時器，確保一個人能刷滿 2 分鐘。有些甚至提醒使用者何時移動到口腔的不同位置，以便讓牙齒每個象限都有相同的刷牙時間。針對有敏感性牙齒的人，電動牙刷還可以調節刷牙力道。由於積極的刷牙是患者的持續抗戰，許多電動牙刷包含傳感器以檢測「沉重的手」，提醒使用者減慢刷牙動作以幫助減少對口腔以及牙齒的損害。有些電動牙刷公司甚至會每隔三個月自動將刷頭送到您家。

電動牙刷有多種形式：

- 旋轉
- 旋轉振盪
- 脈衝電
- 聲波和超聲波
- 離子的
- 雙頭

這些電動牙刷的每一個設計都有不同的概念，然而，旋轉和聲波牙刷是最廣泛使用的。旋轉刷由小圓頭組成，以圓周運動旋轉，然後以相反方向擺動（像是擺動風扇）。聲波/超聲波刷以非常高的頻率和速度振動以清除牙菌斑。

雖然電動牙刷沒有限制，但它們對於那些有技巧性問題的人，像是缺乏適當運動技巧的孩子以及清潔困難較高的矯正患者來說是很好的。由於電動牙刷上的手柄更寬，可使手部握力機能較差的更容易抓握。

電動牙刷可以消除刷牙時的「猜測」，對於那些需要額外幫助的人來說非常有幫助。一項研究證明，使用電動牙刷的人比起使用手動牙刷的人更容易集中注意力刷牙[3]。另一項研究也證明，在短短三個月內，使用電動牙刷的人減少了 20% 牙菌斑和 11% 的牙齦炎[4]。

實際上，簡單地刷牙就是維持最佳口腔健康的重要因素。不論是使用手動還是電動牙刷，基本上使用者的潔牙技巧和徹底性才是重要的。透過電動牙刷可以幫助您簡單的完成”部分的”潔牙工作。打個比喻，你可以手工混合蛋糕，但使用電動攪拌器肯定會增加體驗。但別忘了，除了牙刷，適時搭配合適的潔牙工具也是必要的，例如牙線、牙間刷等等。

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Taking a walk down the dental aisle in any retail store can be slightly overwhelming. The selection of dental products is rich. Among that selection exist a multitude of toothbrushes. Toothbrushes have evolved into technologically advanced gadgets that some may contemplate the effectiveness or the need.

A routine visit to your dental office can often lead to a recommendation for a power-driven brush. However, the dental hygienist will likely give you a manual toothbrush as a parting gift upon your dismissal. Many patients admit that they never buy a brush and essentially rely on their free brush every six months, despite the recommendation of replacement every three months. What many are left wondering is if the investment is worth all the buzz.

Optimal plaque removal is essential to the health of the periodontium and reduction in decay. Brushing, in general, is key in achieving a healthy mouth and can be done using a variety of toothbrushes available on the market. Whether it be electric or manual, the overall effectiveness relies on how thorough the patient is during a given brushing session. The recommended brushing time is 2 minutes with most people averaging around 45-70 seconds.[1] On average, the human hand can achieve 200-400 brush strokes per minute using a manual brush properly. While impressive, it pales in comparison to how many strokes an electric brush can produce. Rotating-oscillating brushes achieve up to 8,000 strokes per minute and a sonic brush averages 30,000 strokes a minute![2]

In addition to the notable brush strokes per minute, electric brushes also bring a lot more to the table. Most electric brushes have timers that ensure one is brushing the full recommended two minutes. Some even alert the user when to move to a different section of the mouth so that every quadrant is given equal time. Electric brushes are also equipped with adjustable power levels to satisfy even the most sensitive of people. Because aggressive brushing is an ongoing battle with patients, many electric brushes incorporate sensors to detect “heavy hands” and either warn the user or slow the brush down to help reduce damage to the oral dentition. Some electric brush companies will even auto-ship your brush heads every three months to your front door.

Electronic or power-driven brushes come in a variety of forms:

- Rotating
- Rotating-oscillating
- Pulsing-electric
- Sonic and Ultrasonic
- Ionic
- Dual Head

Each of these brushes is designed to bring a different concept to the table, however, rotating and sonic brushes are the most widely used. Rotating brushes consists of small round heads that whirl in a circular motion and then oscillate in the opposite direction (think oscillating fan.) Sonic/ultrasonic brushes vibrate at very high frequencies and speeds to disrupt plaque.

While electric brushes have no limitations, they serve a great purpose for those with dexterity issues, are certainly wonderful for children who lack proper motor skills, and orthodontic patients who have lots of hardware to clean. Because of the wider bulkier handle on electric brushes, it makes the brush easier to grasp, thus, assisting the population that lacks grip strength.

Electric brushes take the “guesswork” out of brushing and can be extremely helpful for those who need extra assistance. One study proved that people who use electric brushes tend to brush in a more focused and concentrated pattern than those brushing with a manual.[3] Another study went on to prove that in just three months those using an electric brush routinely had a 20% plaque reduction and an 11% gingivitis reduction.[4]

In reality, just simply brushing is what is important to achieve optimal oral health. Whether using a manual or electric brush essentially boils down to technique and thoroughness of the user. Electric brushes will easily help achieve these goals by doing most of the work for you. One way of looking at this comparison is to remember that you can mix a cake by hand, but using an electric mixer certainly enhances the experience.

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