Interview: “Parents tell us that their children are now brushing correctly and independently”

By Kasper Mussche, DTI

Most children do not particularly love toothbrushing, and many parents agree that getting their children to brush can be quite a hassle. As a solution, South-Korean Samsung spin-off Kitten Planet has launched Brush Monster, a fun and interactive mobile app game that teaches children healthy brushing habits and enables parents to analyse the brushing data afterwards. Via augmented reality and an innovative smart brush, the app walks kids through the brushing process from start to finish in real time, while turning good oral hygiene into an engaging game. Prevention spoke to Dr Jongho Choi, Brush Monster co-founder and CEO of Kitten Planet.

Dr Choi, where did the idea for Brush Monster come from?

The other co-founders and I are all fathers of young children, and we all at one point or another experienced for ourselves that it can be quite difficult to get kids to brush their teeth, let alone to do so properly! Also, sometimes kids say they have brushed their teeth well, but it is difficult for parents to know if this is true.

All of the Kitten Planet co-founders are engineers in the healthcare industry, and we all big on prevention, so we tried to find a fun, new solution for these problems, something that children can put into practice and that is very present in their everyday lives. Brush Monster not only introduces a great toothbrush and a fun game that teaches kids healthy brushing habits and allows parents to analyse the process, but also helps children learn to be confident doing something extremely important in their stage of development. Lastly, Brush Monster is a solution for the typical struggle many parents have in getting their children to brush their teeth and makes bedtime more relaxed.

What is the in-game story around Brush Monster? How does the game work?

Well, first of all, Brush Monster is supported by almost all phones and tablets and is currently available in 137 countries. People can easily download the app from Google Play and the App Store, and then kids can get started with brushing right away.

The app has a classic villain versus superhero storyline. The game starts with the evil character—Green Mold—capturing the friendly Brush Monster. By following detailed instructions on where, when and how to brush their teeth, kids can save the Brush Monsters and collect items and stickers. Sparkles and crazy goggles appear on the children’s faces while brushing, and the monsters change regularly to keep things interesting. At the end of a successful brushing session, children are rewarded with a star and given the opportunity to take a selfie.

What age group can benefit from the app?

There are many children who hate brushing their teeth or who are not very good at it. According to a study we did, the spatial recognition and motor skills required for good brushing are not fully developed in children younger than 8. Still, brushing is a necessary routine for healthy teeth and a healthy life in general, and the best-case scenario is when a good oral hygiene routine and technique are instilled in children when they are still young. So, Brush Monster is aimed at children aged 3–10 and their parents.

What difference does the app offer compared with other teaching methods out there?

Brush Monster teaches children directly. There is so much educational content aimed at kids already, such as posters at the basis of kindergartens and elementary schools that show children how to brush their teeth in different steps. Children can watch an unlimited number of instructional videos with their favourite characters on YouTube, and teachers and parents often spend many hours explaining to children how to brush well. But these methods are all indirect—learning and doing are separated. Because children easily forget what they have learnt and still end up brushing the wrong way, these methods often fail.

With Brush Monster, we put the focus on learning by doing. Through augmented reality, the screen of the smartphone or tablet acts like a magical, interactive bathroom mirror. Children can see their own faces, and the animations show them where and how to brush. This corresponds to the views held in paediatric dentistry, namely that children should watch themselves in the mirror while brushing and get feedback at the same time. However, bathroom mirrors are often too high for small children, and the instructions are not always correct. This is where Brush Monster comes in.

How can parents be sure that their children have brushed well?

Among the main problems when learning toothbrushing up to young children are that they rarely brush for longer than one minute straight and often brush less than twice per day. Many children also only brush the buccal surfaces of the teeth. The built-in sensor in our smart toothbrush divides the mouth into 16 regions, and through 3-D motion analysis, the smart brush tracks and analyses how well each of these 16 regions was brushed, and parents get a full dental report after brushing.

Brush Monster uses a sonic brush with soft bristles. Yes. The gingivae of small children are relatively soft and weaker than those of adults, so we opted for sonic brushes, as they are effective and gentle. Our smart brush head is designed to guarantee the most effective plaque removal, while five levels of sonic vibration ensure the most effective plaque removal and massage the gingivae.

How has the response been so far?

We launched the app in January 2018, and it is now the most popular of about 200 brushing apps. Brush Monster currently has a rating of 4.8 and has received so many great responses and user requests for new functions. We are very happy to see that many parents are now recommending our app to other parents. One Korean online marketing platform even voted Brush Monster toothbrush the number one electric toothbrush for kids. Most importantly though, parents tell us that their children are now brushing correctly and independently, and actually brush correctly for three minutes.