

The Research of Types and the Influence of the tooth brush on the health of people

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1. Introduction

Every day every person on our planet washes himself or herself and cleans teeth. Our parents have taught us to clean teeth since we were little children.

Healthy teeth play a great role for the health of the whole organism. Our ancestors knew about this fact many years ago. Archaeologists found some attachments for cleaning teeth many times. This information proves that people have always taken care of hygiene of their oral cavity.

2. Review. From the history of creating a tooth brush

In ancient times teeth were cleaned with a bundle of grass. Then people began to use a magic wooden stick pointed at the one end and frayed at the other end. They took away leftovers with the pointed end as a toothpick and the frayed end was chewed in the mouth. So, rough fibers of wood took off the deposit on teeth¹.

To make these sticks people used evergreen bush- Salvador. Its bark is able to strengthen gums and delete microbes.

The first toothpicks were found in tombs of Egypt. Some nations have teeth cleaning teeth this way up to now. For example, tribes living in modern Africa use these tooth brushes.

The first toothpick appeared in China in 1498. Its bristles were made of wool of wild boar. The handle was made of bones or bamboo. Horsehair was used in Europe and Russia.

In 1850 Wardsworf from America patented a modern tooth brush. He made its handle of bones and the bristle of wool of wild boar.

Later there was a supposition that most diseases were developed under the influence of microbes. Humid environment left on the tooth brush was favourable for development of microbes. That's why using these tooth brushes was dangerous for teeth.

Only in 1937 the universal material for bristle was managed to create. The specialists of American chemical company Du Pont invented nylon. They changed animal bristle to synthetic nylon fibres making them softer and safer. The bristle Du Pont is used to make tooth brushes at the present time and is considered one of the best.²

How many times can one be invented a tooth brush again and again? Fancy that according to statistics, more than 3000 models of tooth brushes were patented from 1963 to 1998. There are manual tooth brushes, electrical / rotary tooth brushes and ultrasonic tooth brushes

Manual tooth brushes can be with suction cups and without them, with timers (musical, blinking). There are tooth brushes with light-emitting diodes which have medical effect. There are wooden tooth brushes that are ecological products.

Electrical tooth brushes. They can be rotary where the part with the bristle not only vibrates but turns. There are brushes working on batteries and with the help of accumulators.

3. The purpose and the tasks of the project

As you know there are many different kinds of tooth brushes. How to choose the best to use? What do they differ in?

Thus, the purpose of my project is to investigate what tooth brushes are the best.

4. The description of the experiment

The devices and elements we used for our investigation:

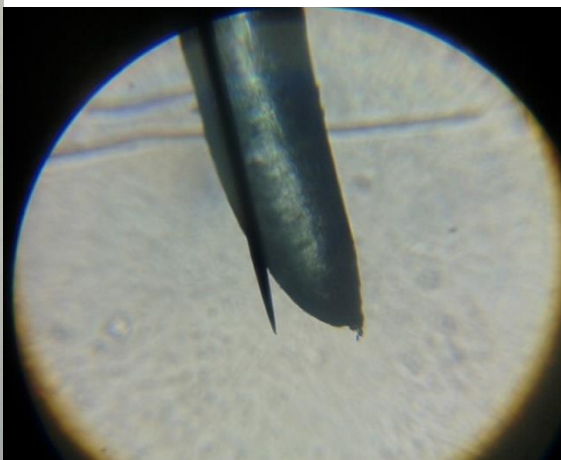
- 1) A Microscope
- 2) A Computer
- 3) Tooth brushes Colgate, Oral B, Aquafresh, Splat, Longa Vita, Noname

Tooth brushes Colgate *The hypothesis* the best tooth brush is smooth without sharp ends not to injure tooth enamel and gums. To check the hypothesis we need to investigate some tooth brushes of various kinds.

The actuality of the project is evident because people have problems how to protect their health and their teeth, in particular.

We did the *experimental research*, using 6 types of tooth brushes (25 items all in all) to prove our

There are two types of these brushes
The first type.



The bristle is smooth along the sides. If the pointing is less, the gums wouldn't be injured.

The second type.

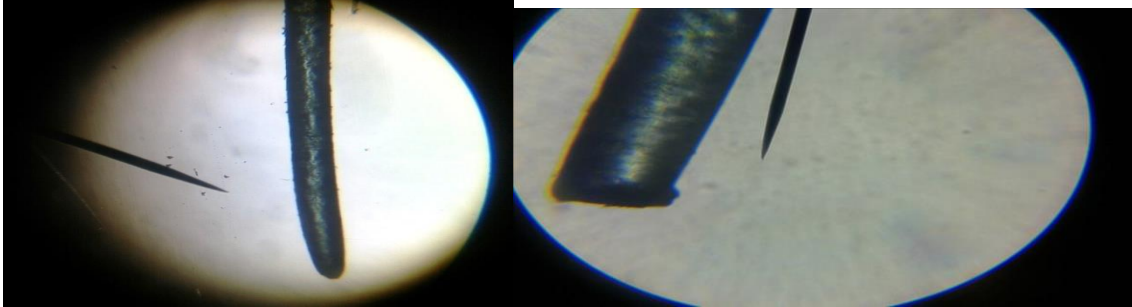


The bristles are a little fluffy but explicitly revealed pointing is not found.

The tooth brushes Oral B



There are two brushes in one set but they are different.



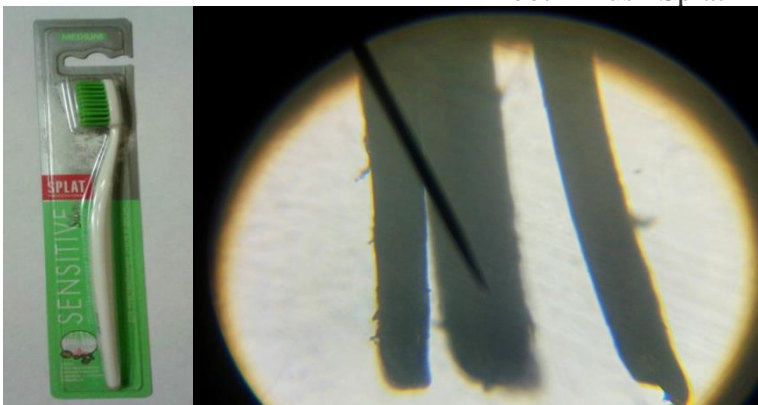
The bristle of both brushes is made well but the second brush has the mown down bristle. The thing is as if it was forgotten to work up.

Tooth Brush Aquafresh



The bristle is smooth as along the sides as at the ends. In our opinion, this brush is good.

Tooth Brush Splat

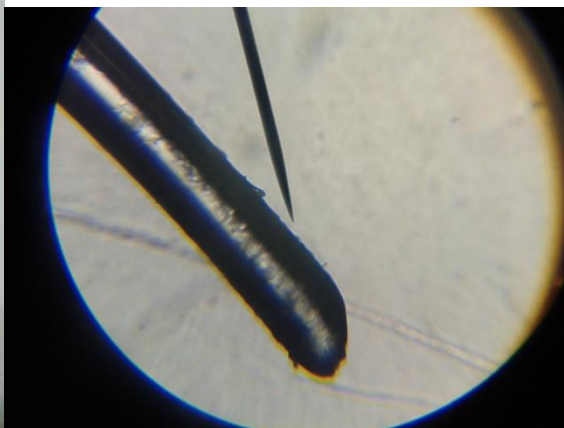


In the instruction on the box it is indicated that the bristle is uncovered. What is the matter?
The bristle uncovered or simply it is badly worked up.

Tooth brushes Longa Vita

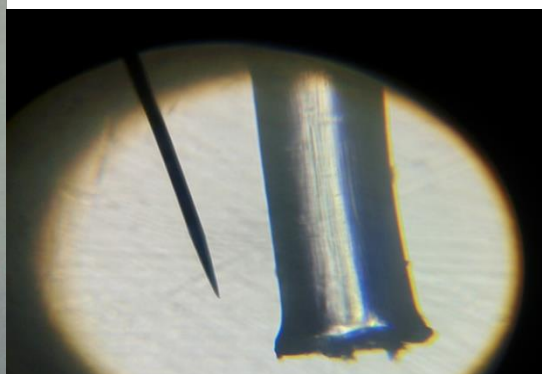


The bristle is smooth along the sides but it is a little pointed at the end.

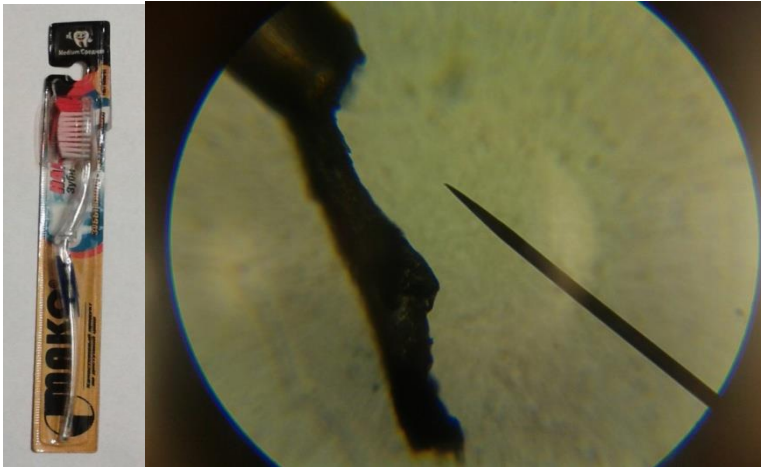


Processing of the bristle is better than the previous tooth brush has. But along the sides it is not so carefully treated.

Tooth brushes Noname



Worthy processing along the sides of the brush but it is mown down at the end, absolutely untreated. Such brushes are given in some foreign airlines at flights for distant places.



I have seen the brush with this long braid for the first time. I wouldn't use this tooth brush. This brush can do harm to your teeth.

5. The results of the research.

Analyzing the results obtained, we can say the following^

1. We investigated 6 types of tooth brushes (25 items) and found out that they differ not only in their appearances but their bristle.
2. The bristle is not always well treated. It often has sharpenings at the end, roughness along the sides or may not be treated at all.
3. The usage of tooth brushes with the bristle badly processed can lead to increasing of perceptibility of teeth and even injuring teeth and gums.
4. Our hypothesis has been confirmed that the best tooth brush is smooth, with the bristle without sharp ends. It can't harm tooth enamel and gums.

6. Practical usage of the project and recommendations

Everyone should remember that to have healthy teeth you should keep the rules:

1. Clean your teeth 2-3 minutes every morning and every evening.
2. Clean your teeth in a proper way (from red to white- from gum to the tooth).
3. Don't forget to clean the inner part of your teeth.
4. If after a few days using a new tooth brush you have unpleasant feelings, the tooth brush doesn't suit you. You should change it.
5. Consult the dentist twice a year.

Everything is in your hands!

Literature

1. <http://intranet.tdmu.edu.ua>
2. [http:// zoom.cnews.ru](http://zoom.cnews.ru)