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Тезис

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3D printers in dentistry*ГБОУ ВПО Саратовский ГМУ им. В.И. Разумовского Минздрава России, кафедра иностранных языков**Научный руководитель: Чижова М.Е.*

3D-печать быстро прогрессирует в разных сферах нашей жизни. Эта технология сейчас применяется даже в стоматологии. 3D-принтеры могут использоваться дантистами для создания протезов, моделей, брекетов и имплантатов. Ученые активно исследуют и практически внедряют различные продукты 3D-печати. В данной работе раскрывается вопрос возможности создания зуба с помощью 3D-принтера, используя антимикробные вещества.

The dental industry is transforming into a fully-digital one quicker than most dentists imagined, and 3D technologies are completely altering the way in which dental solutions can be approached.

The latest 3D printing innovation could change the way you think about your visit to the dentist. As the researchers from all over the world are working on the creation of a 3D-printed tooth made of an antimicrobial plastic that kills the bacteria responsible for tooth decay on contact.

To test the bacteria-fighting tooth in a lab environment, the researchers coated the material with human saliva and exposed it to the bacterium that causes tooth decay. The anti-bacterial tooth killed more than 99% of all bacteria and showed no signs of being harmful to human cells.

It should be pointed out that 3D-printing has not still become a reality. The 3D-printing innovation, for example, is still not ready for clinical trials and has not yet been tested inside a human mouth. Moreover, there is a significant problem of how the tooth might react to brushing and the application of toothpaste.

However, it is hard to deny the growing role of 3D printers in medicine and dentistry. Using 3D printers, there are ongoing attempts to "bio-print" human bone, skin, tissue and even organs.

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