

NTU Singapore Researchers Develop Cheaper, Biodegradable Gel Bandages Made From Durian Husks

Amazing!

By: [RD MINION \(/AUTHOR-SEARCH/97/RD-MINION\)](#)
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Heaps and heaps of durian husks are a common site at famous durian stalls.

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It's prickly, stinky and there's pretty much nothing else it can be used for, right?

Wrong!

A team of researchers from Nanyang Technological University (NTU) in Singapore have come up with a way to use the husks to make protective gel bandages.

Nanyang Technological University, Singapore
on Thursday

Shell we keep wounds clean: #NTUsg food scientists have made an antibacter durian husks. High-quality cellulose extracted from the husk is combined with g making to create soft gel sheets which can be cut into bandages of various sha #NTUsgInnovation bandages are cheaper compared to conventional hydrogel | properties in the market that are made of synthetic materials. <http://bit.ly/Durian> NTU SCBE School of Chemical and Biomedical Engineering NTU College of E #biomedical #sustainability

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According to a report by [The Straits Times](https://www.thestar.com.my/tech/tech-news/2021/03/29/singapores-ntu-uses-durian-husks-to-make-bandages-for-post-surgery) (<https://www.thestar.com.my/tech/tech-news/2021/03/29/singapores-ntu-uses-durian-husks-to-make-bandages-for-post-surgery>), the bandages, which are currently made from synthetic materials, are ususally used for patients who have undergone surgery.

The bandages help keep the wound moist and protects the body from wound infection while also promoting healing.

The new durian husk gel bandages do the exact same thing except that its made from materials that are fully organic.

For those of you who are not fans of the durian odour, good news, the new bangages are odourless!

A biodegradable solution

The researchers, led by by Professor William Chen, director of NTU's Food Science and Technology programme, discovered a way to extract cellulose from the husk of a durian and combine it with glycerol to make the soft gel for the bandages.

According to the report, compounds from baker's yeast are then added to the mixture to make the gel antibacterial.



Made from durian husks.

PIC: THE STAR

Even better news is that the durian husk gel bandages are less expensive than the conventional versions.

"By using waste products which are currently discarded in large quantities – durian husks and glycerol – we could turn waste into a valuable biomedical resource that can enhance the speedy recovery of wounds to reduce the chances of infections," said Prof Chen.

He added that talks are ongoing with industry players and the product could be in the market in about two years.

Perfecto!