

New antibacterial gel bandage made using durian husk

Singapore - NTU's food scientists have made an antibacterial gel bandage using the discarded husks of the popular tropical fruit, durian.



By using a low-cost green process to extract high-quality cellulose from the durian husks, they created a soft gel, like silicon sheets, which can be cut into bandages of various shapes and sizes, then added the organic molecules produced from baker's yeast, known as natural yeast phenolics, making the bandage deadly to bacteria.

This non-toxic hydrogel bandage may be useful in helping skin wounds heal faster, while the antibacterial molecules help to

prevent infections, as shown in lab experiments on animal skin.

Developed by Professor William Chen, the Director of NTU's Food Science and Technology Programme, the innovation was published recently in ACS Sustainable Chemistry & Engineering.