Turmeric Bandage: A Natural and Sustainable Way for Faster Wound Healing

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Turmeric has been applied to a bleeding wound because of its antibacterial property and fast healing quality. But applying dry turmeric is significantly messier and troublesome to carry in a first-aid box than simply putting on or carrying a bandage. However, research shows that even though bandages protect wounds from reinjury, they do not provide a nourishing environment for the wound, nor do they speed up the healing process. Studies have shown that even wounds resulting from a clean surgery can have an infection rate up to 8% among the general population, and a spike of 20% in elders above 60 years old. If bandages were more effective in preventing bacterial growth on a wound, they could easily avoid potentially lethal infections. This inspired the creation of a turmeric bandage that releases curcumin to enhance the healing process while protecting the wound from bacterial infections. In order for the curcumin to do its job effectively in the bandage, a binding agent was mixed with turmeric. Using this medicinal paste, multiple different materials for the actual bandage were tested. It was determined that an organic cotton cloth and compressible bandage were most effective. The resulting turmeric bandage prototype is biodegradable, compostable, portable, small, and lightweight. It will be one of the most effective solutions to a normal bandage because of its ability to alleviate the healing process.

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