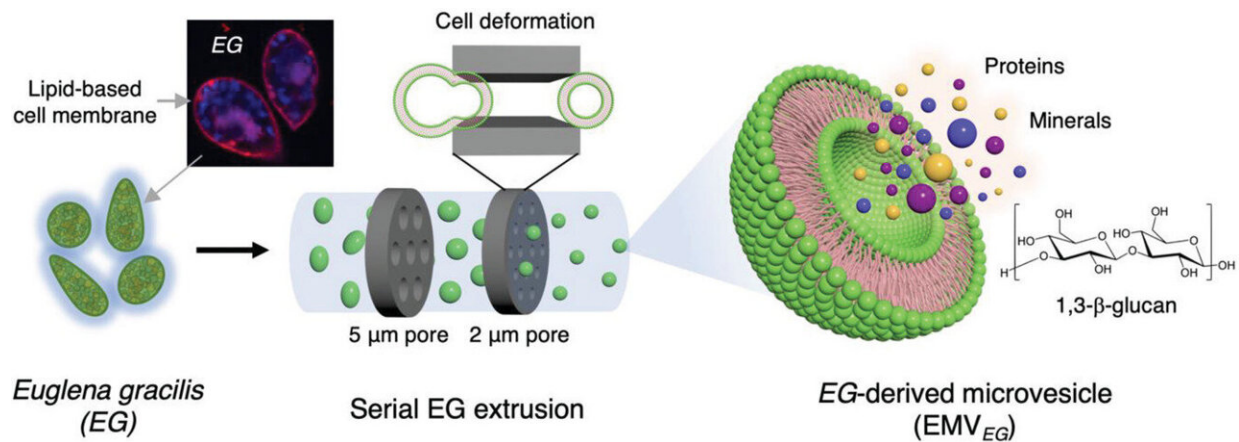


Can algae enhance skin regeneration and wound healing?

January 11 2023



Schematic illustration for fabrication of EMVEG using a EG extrusion method.
Credit: *Advanced Materials Interfaces* (2023). DOI: 10.1002/admi.202202255

A product of a freshwater single-celled green algae called *Euglena gracilis* may enhance skin regeneration to speed up wound healing, according to new research published in *Advanced Materials Interfaces*.

Investigators developed a system based on microvesicles that bud from the cell surface of *Euglena gracilis* and contain β-glucan, a carbohydrate with immunoregulatory activity, regeneration ability, and [antioxidant properties](#).

In laboratory experiments, these microvesicles promoted the

proliferation and migration of skin cells, increasing both collagen synthesis and the expression of proliferation-associated proteins. A [wound healing](#) test also generated promising results.

"This technique is expected to be applied to other cells, thereby enabling the design of new types of extracellular vesicles that are applicable for skin treatments and care in the pharmaceutical and cosmetic industries," the authors wrote.

More information: Nonanimal *Euglena gracilis*-Derived Extracellular Vesicles Enhance Skin-Regenerative Wound Healing, *Advanced Materials Interfaces* (2023). [DOI: 10.1002/admi.202202255](https://doi.org/10.1002/admi.202202255)

Provided by Wiley

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