

Blueberry extract may aid wound healing

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Tolu Esther Adekeye, MS, University of Maine. Credit: Tolu Esther Adekeye

Treating wounds with an extract taken from wild blueberries may improve healing, according to a new study. The research will be presented this week in Philadelphia at the American Physiological Society's (APS) annual meeting at Experimental Biology 2022.

More than \$50 billion is spent on [wound care](#) each year. Chronic wounds, such as diabetes-related sores and pressure ulcers, may be categorized as "nonhealing" due to the reduced vascularization (development of nutrient-rich blood vessels) that often accompanies these conditions. Vascularization is necessary for wound healing.

Researchers from the University of Maine previously found that a phenolic extract from wild blueberries improved vascularization and [cell migration](#)—critical steps in the healing process—in human umbilical cord cells. In a new study, the research team, led by Dorothy Klimis-Zacas, MS, Ph.D., FACN, examined the effects of phenolic extract on live wounds. Phenols are compounds naturally found in some foods that act as antioxidants to prevent or reverse some forms of cell damage.

The researchers treated a group of rats with a topical gel containing a wild blueberry phenolic extract. Compared to animals that were treated with a base gel that did not contain the phenolic extract and a [control group](#) that received no treatment, the treated group showed improved migration of endothelial cells to the wound site and a 12% increase in wound closure.

"Wild blueberries have the potential to enhance cell migration, new blood vessel formation (angiogenesis) and vascularization and to speed up wound closure. This is especially important in conditions that require enhanced wound closure in patients with [chronic wounds](#) such as diabetic [wounds](#), burns and pressure ulcers," said Tolu Esther Adekeye,

MS, first author of the study.

More information: Abstract: "Phenolic extract(s) from wild blueberries promote(s) wound healing via vascularization," experimentalbiology.org/

Provided by Experimental Biology

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