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Microbial lysate upregulates host oxytocin

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ABSTRACT

Neuropeptide hormone oxytocin has roles in social bonding, energy metabolism, and wound healing contributing to good physical, mental and social health. It was previously shown that feeding of a human commensal microbe Lactobacillus reuteri (L. reuteri) is sufficient to up-regulate endogenous oxytocin levels and improve wound healing capacity in mice. Here we show that oral L. reuteri-induced skin wound repair benefits extend to human subjects. Further, dietary supplementation with a sterile lysate of this microbe alone is sufficient to boost systemic oxytocin levels and improve wound repair capacity. Oxytocin-producing
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