

Accepted Manuscript

Full-length Article

Microbial lysate upregulates host oxytocin

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PII: S0889-1591(16)30492-5
DOI: <http://dx.doi.org/10.1016/j.bbi.2016.11.002>
Reference: YBRBI 3004

To appear in: *Brain, Behavior, and Immunity*

Received Date: 14 August 2016
Revised Date: 17 October 2016
Accepted Date: 3 November 2016

Please cite this article as: Varian, B.J., Poutahidis, T., DiBenedictis, B.T., Levkovich, T., Ibrahim, Y., Didyk, E., Shikhman, L., Cheung, H.K., Hardas, A., Ricciardi, C.E., Kolandaivelu, K., Veenema, A.H., Alm, E.J., Erdman, S.E., Microbial lysate upregulates host oxytocin, *Brain, Behavior, and Immunity* (2016), doi: <http://dx.doi.org/10.1016/j.bbi.2016.11.002>

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26 ABSTRACT

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

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