

Endotoxemia influenced by diet type

May 3 2012



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Noting that endotoxemia is associated with systemic inflammation and metabolic syndrome, Swaroop Pendyala, M.D., from The Rockefeller University in New York City, and colleagues investigated the impact of diet on endotoxemia. In a crossover study, eight healthy individuals were fed a Western-style and a prudent-style diet with similar caloric density

for one month. Using a neutrophil priming method that detects lipopolysaccharide from gram-negative organisms, blood endotoxin levels were measured.

The researchers observed a 71 percent increase in endotoxemia induced by the Western-style diet, compared with a 31 percent decrease with the prudent diet.

"The Western-style diet might, therefore, contribute to endotoxemia by causing changes in gastrointestinal barrier function or the composition of the [microbiota](#)," the authors write. "Therapeutic reagents that reduce endotoxemia might reduce [systemic inflammation](#) in patients with [gastrointestinal diseases](#) or metabolic syndrome."

More information: [doi:10.1053/j.gastro.2012.01.034](https://doi.org/10.1053/j.gastro.2012.01.034)

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Citation: Endotoxemia influenced by diet type (2012, May 3) retrieved 19 April 2024 from <https://medicalxpress.com/news/2012-05-endotoxemia-diet.html>

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