

# Trust through food

October 23 2013

---

People's trust in others increases after eating food that contains the amino acid tryptophan, found in fish, soya, eggs and spinach. Leiden psychologist Lorenza Colzato and her colleagues at the Universities of Leiden and Münster published their findings in *Psychological Science*.

## Serotonin

Colzato and her fellow researchers were the first to investigate whether tryptophan, that stimulates the production of serotonin, has a positive effect on mutual trust. It was already known that the neurotransmitter [serotonin](#) plays a role in mutual co-operation. 'Mutual trust is an important condition for co-operation', says Colzato. 'Society functions in the first place on the basis of mutual trust. After that, such institutions as the courts and the police come into play.'

## Trust game

To determine the effect of tryptophan, the researchers gave one group of test persons orange juice with added tryptophan, while a second group was given a placebo. Subsequently, the test persons played a trust game, a task that is often used to measure how much one test person trusts the other. A trustor was given 5 euros and was free to decide how much of that money he would give to a trustee in each round of the game. The trustor would then receive extra money, but only if the trustee gave him enough money in return. The money transferred to the trustee by the trustor served as an indicator of mutual trust.

## **Inexpensive, efficient and healthy**

Test persons gave significantly more money to the other person when they had taken tryptophan, compared to persons who had been administered a neutral placebo. Colzato: 'These results support the idea that "we are what we eat": the [food](#) one eats has a bearing on one's state of mind. Food can thus act as a cognitive enhancer that modulates the way one thinks and perceives the physical and social world. In particular, the intake of [tryptophan](#) may promote interpersonal trust in inexpensive, efficient, and healthy ways.'

**More information:** Colzato, L. et al. (2013). Tryptophan promotes interpersonal trust, *Psychological Science*. [DOI: 10.1177/0956797613500795](#)  
[pss.sagepub.com/content/early/ ... 956797613500795.full](http://pss.sagepub.com/content/early/.../956797613500795.full)

Provided by Leiden University

Citation: Trust through food (2013, October 23) retrieved 20 April 2024 from <https://medicalxpress.com/news/2013-10-food.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--