

# Vegetarians have fewer, less-healthy sperm than meat-eaters – study

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But is he damaging his chances of fathering a child? (Reuters / Jason Lee)

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Vegetarian men may be harming their chances of conceiving children, a multi-year US study has revealed. Researchers believe the reasons may include vitamin deficiencies and the presence of female hormones in soy, which is popular among vegetarians.

Noting that Seventh-Day Adventists, members of a strict Protestant sect, live 10 years longer than average Americans, researchers at Loma Linda University, itself a Seventh-Day Adventist institution, hypothesized that diet was a possible reason. Many of the sect's followers are encouraged to go vegetarian, as most meat is considered "*unclean*."

For the experiment, researchers monitored 443 meat-eaters and 31 vegetarians and vegans between 2009 and 2013, initially assuming that the vegetarians' sperm would be healthier, and a contributing factor to the longevity of their offspring.

# Soy lowers sperm count, reduces fertility

But the results, to be [published](#) in Fertility and Sterility journal on Wednesday, came as a surprise.

*“We found that diet does significantly affect sperm quality. Vegetarian and vegan diets were associated with much lower sperm counts than omnivorous diets,”* said lead study author Eliza Orzylowska. *“Although these people are not infertile, it is likely to play a factor in conception, particularly for couples who are trying to conceive naturally, the old-fashioned way.”*

Vegetarians had 30 percent lower concentrations of sperm – 50 million per milliliter, versus 70 million per milliliter. Their motility - the vitality of the sperm – was also lower, with a third of sperm active, versus 60 percent for the meat eaters. Significantly, vegans fared worst of all.

Orzylowska believes that the reason could be [soy](#), which was [shown](#) in a study three years ago to shrink the sperm count. The reason is a high content of phyto-estrogen, which mimics a female hormone, and impedes sperm production.



[Soybean](#) plantation (AFP Photo / Norberto Duarte)

*“For children who have grown up with those kind of diets, it may have impacted on sperm quality from puberty,”* said Orzylowska.

*“It’s hard to tell people not to be vegetarians if they are trying to conceive, but I would caution against using [soy](#), at least for 74 days beforehand, which is the time it takes for sperm to be replaced.”*

A second potential explanation put forward by Orzylowska is the shortage of B12, a vitamin that helps to break down estrogen, thus maintaining a high sperm count. With its highest concentrations found in beef and fish, many vegetarians who do not take supplements may be missing out.