

For infertility treatment, should he drink less coffee, more booze?

October 20 2014, by Randy Dotinga, Healthday Reporter



Study suggests male beverage consumption affects in vitro fertilization results.

(HealthDay)—A man's love of coffee could hamper the success of a couple's infertility treatment, a small new study suggests.

But mild alcohol use by would-be fathers might help boost the odds of pregnancy through in vitro fertilization, the findings indicate.

The Boston researchers aren't ready to encourage men enrolled in IVF to cut coffee consumption and have an extra beer with dinner. Still, these preliminary results were "definitely surprising," said study co-author Dr. Jorge Chavarro, an assistant professor of nutrition and epidemiology at Harvard School of Public Health in Boston.

"We'd like to follow up and see if it replicates in other populations, such

as other couples who are trying to conceive naturally," he said.

The research is to be presented Monday at the American Society for Reproductive Medicine annual meeting in Honolulu.

Previous research into [male fertility](#) hasn't found connections between alcohol or caffeine and scientific measurements of [semen quality](#). But Chavarro said those measurements might not reflect other aspects of male fertility that are crucial to a man's ability to impregnate a woman, he said.

Enter the new study, which looks beyond measurements of sperm quality to evaluate the effect of male beverage consumption on IVF birth rates.

The researchers focused on 105 men, average age 37, involved in 214 IVF treatments between 2007 and 2013. All answered questions about their diet before undergoing treatment.

Overall, more than half of the couples achieved a pregnancy in each IVF cycle, the researchers found. Couples in which the man consumed the most caffeine (equivalent to three or more 8-ounce cups of coffee a day) were half as likely to have a pregnancy as couples where the male consumed the least caffeine (less than a cup of coffee daily), the researchers said.

Ultimately, after adjusting their statistics for factors such as age or obesity, the researchers said live births were least likely—just 19 percent of the time—in the couples whose male partners consumed the most caffeine.

But the live pregnancy rate was 52 percent to 60 percent for couples where the men consumed the least caffeine, said study author Dr. Anatte Karmon, a research fellow of reproductive endocrinology and infertility

at Massachusetts General Hospital.

The numbers for alcohol consumption only bordered on statistical significance, Karmon said. While 28 percent of couples in which the men drank the least alcohol had live births, she said, [live births](#) occurred for 57 percent of couples where the man drank the most—22 grams or more per day, which is less than the 28 grams found in two "standard" drinks or two 12-ounce beers.

Chavarro said researchers don't know why caffeine or alcohol might have these effects. One possibility is that they're making men more or less likely to have sex with their partners. But Chavarro said that a change in sexual routine probably wouldn't have had much effect on pregnancy since the couples had infertility problems.

Dr. Rebecca Sokol, a professor of medicine, obstetrics and gynecology at Keck School of Medicine at University of Southern California, questioned the study's conclusions. The researchers only looked at a small number of men and the study doesn't prove whether alcohol or [caffeine](#) actually affect fertility, she said.

Other research suggests that alcohol could be toxic to sperm, said Sokol, who is also president of the American Society for Reproductive Medicine.

What should couples do with the information from the study? Nothing right now, Chavarro said. "As far as we are aware, this is the first time this has been reported," he said. "There needs to be a lot more replication before anyone can make a strong recommendation to patients."

However, "we know from other studies that alcohol at very high intakes is not a good idea" for men in infertile couples, he said. "The [alcohol](#)

levels in this study are very modest."

Sokol also advised moderation. "It is in the best interest of [couples](#) who are trying to initiate a pregnancy that they moderate their use of drugs and chemicals because all could potentially impact fertility," she said.

Chavarro is co-author of another new study being presented at the fertility meeting that suggests—but doesn't prove—that eating fruits and vegetables containing residue from pesticides could harm [sperm quality](#). The study doesn't say if organic food would be a better alternative, however.

Another new study, written by researchers at Sao Paulo Federal University in Brazil and scheduled to be presented Tuesday at the conference, finds that smoking can impair fertility. Smoking contributes to problems with semen quality in men with a condition known as varicocele—enlarged veins in the scrotum—the researchers said.

All three studies should be considered preliminary since they have not undergone the peer review process required of research published in major medical journals.

More information: For more about infertility, see the [U.S. Centers for Disease Control and Prevention](#).

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Citation: For infertility treatment, should he drink less coffee, more booze? (2014, October 20) retrieved 25 April 2024 from <https://medicalxpress.com/news/2014-10-infertility-treatment-coffee-booze.html>

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