

PrEP's Effect on Body Fat and Cholesterol Is Minimal

Truvada appeared to temporarily prevent some weight gain and reduce cholesterol slightly in a recent study.

March 1, 2018 By [Benjamin Ryan](#)

Truvada (tenofovir disoproxil fumarate/emtricitabine) as pre-exposure prophylaxis (PrEP) is associated with a slightly lowered cholesterol level and suppression of body fat gain, shifts that are possibly transient, [aidsmap](#) reports.

Publishing their findings in *Clinical Infectious Diseases*, researchers in the randomized, placebo-controlled iPrEx trial, which first proved PrEP's efficacy among men who have sex with men and transgender women in 2010, conducted a substudy to look at the metabolic effects of Truvada among the HIV-negative participants.

This substudy included 251 participants randomized to receive Truvada and 247 individuals randomized to receive a placebo. The members of this overall study group received fasting blood lipid tests and dual X-ray absorptiometry scans of their entire body, hip and spine upon their entry into the study and every 24 weeks afterward, including after they stopped receiving PrEP. At each study visit while they were receiving PrEP, the participants provided blood samples that the investigators tested to determine how much Truvada was in their system.

Participants in the Truvada group received a median 64 weeks of exposure to the drug.

Truvada did not affect the participants' lean body mass. Both those in the Truvada and placebo groups experienced weight gain, although those who received the study drug saw less weight gain through week 72 of follow-up. This difference was a result of less fat gain among those in the Truvada group. The median percentage increase in body fat was 3.8 percentage points lower among those who received the study drug, compared with those who received the placebo.

This difference in body fat gain was not apparently a result of nausea, which is a common side effect of Truvada, particularly during the first few weeks of daily use (for most people on PrEP, this side effect dissipates). At week 24 of follow-up, those who experienced nausea did not experience a different weight-gain rate compared with those who did not experience the side effect.

There was no difference in triglyceride levels between the two study groups, but by week 48 of

follow-up, those in the Truvada group had a median HDL cholesterol level 3.9 milligrams per deciliter lower than those in the placebo group.

Truvada was not associated with lipodystrophy, which is the abnormal distribution of body fat that is definitively linked with a few antiretroviral drugs that are much older than Truvada and are no longer commonly used to treat HIV.

“These data provide additional reassurance,” the study authors concluded, “on the modest, apparently benign and possibly transient metabolic effects of [Truvada] as PrEP. However, they added that because the study population was young (a median age of 25) and followed only for a year or two, longer-term follow-up of older individuals is warranted.

To read the aidsmap article, [click here](#).

To read the study abstract, [click here](#).