Cathinone, a potent psychostimulant isolated from young shoots of Catha edulis was given to four human volunteers. Examination of urine collected from the volunteers at predetermined intervals showed the presence of unchanged cathinone, d-norpseudoephedrine, and two unidentified basic substances. The observed biotransformation of cathinone to the less potent psychostimulant, d-norpseudoephedrine involves reduction of a ketone group to alcohol, a common metabolic pathway in humans.