Metabolic Precursors to Amphetamine and Methamphetamine^a

REFERENCE: Cody JT: Metabolic precursors to amphetamine and methamphetamine; *Forensic Sci Rev* 5:109–127; 1993.

ABSTRACT: Analysis and interpretation of amphetamine results is a challenging process made difficult by a number of factors. One of the complications comes from determination of the origin of amphetamine or methamphetamine in a sample. Given the relatively rare occasions that either of these two drugs are prescribed, legal prescription of one of these drugs is seldom a reason for positive findings. A number of other precursor compounds are metabolized by the body to amphetamine or methamphetamine, many of which could be used for legitimate reasons. Fourteen different metabolic precursors of amphetamine or methamphetamine are included in this review. They are amphetaminil, benzphetamine, clobenzorex, deprenyl, dimethylamphetamine, ethylamphetamine, famprofazone, fencamine, fenethylline, fenproporex, furfenorex, mefenorex, mesocarb, and prenylamine. Medical use, metabolism, analysis, and interpretation are described to afford sufficient information to evaluate the possible involvement of these drugs in positive amphetamine or methamphetamine results.

KEY WORDS: Amphetamine, amphetaminil, benzphetamine, clobenzorex, deprenyl, dimethylamphetamine, ethylamphetamine, famprofazone, fencamine, fenethylline, fenproporex, furfenorex, mefenorex, mesocarb, metabolic precursor, methamphetamine, prenylamine.