

## CODEINE AND MORPHINE

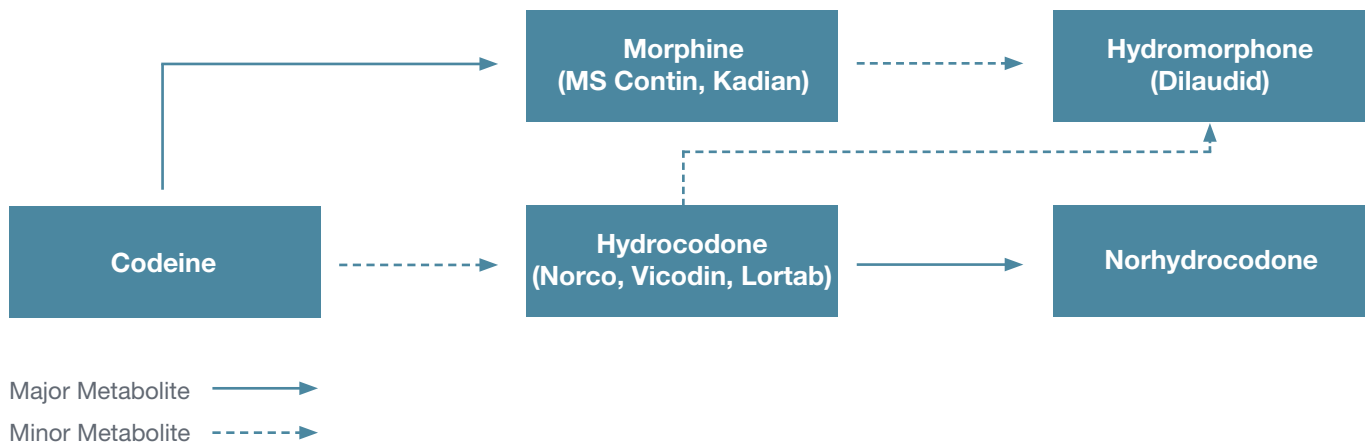
Codeine and morphine are two opiates derived from the opium poppy plant.<sup>1</sup> Both codeine and morphine act on the mu opioid receptor in the brain (to block the transmission of pain messages), but morphine has a stronger affinity for this pain receptor.<sup>1</sup>

Morphine is the most abundant naturally-occurring opiate.<sup>1</sup> Rapidly absorbed, morphine is predominantly excreted as itself, with the potential of a minor metabolite, hydromorphone, when consumed in large doses.<sup>2</sup>

Codeine is found in very small amounts in the opium poppy plant. Because these amounts are so small, codeine is commonly synthesized from morphine. Codeine is pharmaceutically available in pure form, and is also combined with other medications like acetaminophen.<sup>3</sup> The presence of codeine, morphine, and possibly the minor metabolite hydrocodone would indicate recent use of codeine.<sup>4</sup>

Due to the the manufacturing process of poppy seeds and illicit heroin, morphine and codeine may be detected after consumption of poppy seeds and use of heroin.<sup>5,6</sup>

Generally, codeine and morphine are detected between 1-4 days after last use in urine and 1-2 days after last use in oral fluid.<sup>1,6,7</sup>



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References and Additional Literature:

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