



D31 Poppy Tea: An Update of its Abuse in the United States

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After attending this presentation, attendees will gain a greater awareness of the growing trend of poppy tea abuse in the United States and an understanding of the potential morphine content found in poppy tea.

This presentation will impact the forensic science community by increasing awareness of the growing trend of poppy tea abuse.

Poppy tea, an infusion made from the seeds or (more commonly) the un-lanced, dried pods of the opium poppy, is hardly a novel product. It has been used ceremonially and medicinally in Eastern and Western cultures for centuries. However, as opiates such as morphine and heroin increased in popularity both as medical remedies and drugs of abuse, poppy tea faded into relative obscurity. Thanks to information available on the internet, abuse of poppy tea has rebounded in recent years. Simple recipes for its preparation are easily found on various websites. Dried poppy pods and seeds are also readily available from Internet vendors worldwide, including within the United States.

There are several varieties of *Papaver somniferum*, the opium poppy, that are cultivated for both licit and illicit purposes. The physical characteristics and alkaloid profiles of these poppies vary by growing region. In Mexico and South America, the opium poppy pods are small and rounded, and generally less than three centimeters in diameter. The poppy pods of the Southwest Asian region (Afghanistan, Turkey) are more elongated, with diameters of around two centimeters. Southeast Asian poppy pods, found in countries such as Thailand and Myanmar, are typically larger than the varieties found in the Americas or the Southwest Asian countries, with diameters of about four centimeters. In addition to these size differences, each region's poppy pods also have varying alkaloid contents.

Users of poppy tea identify the varieties of poppy pods by their flowers, seed color, and pod size and shape. Popular tea varieties include Hens and Chicks, Danish Flag, Persian White, and Giganteum. The Giganteum (or Giganthemum) variety has extremely large sized pods ranging from two to nearly six centimeters in diameter. Many Internet vendors refer to these pods as "jumbo" or "mammoth" sized. Some of the U.S.-based sites also boast of their domestically grown "jumbo" pods. One website claims to carry "Arizona's Best" poppy pods.

In the last few years, several fatal and nonfatal morphine overdoses related to poppy tea have been reported in the United States, Canada, and the United Kingdom. Canada has seen a growing problem with "doda" (or "dode"), which is a term for the powder made from ground opium poppy pods and seeds. Recently, poppy pods have been smuggled into Canada from the United States. These developments prompted an investigation into the possible alkaloid content in poppy tea. Unusually high morphine contents were detected in batches of tea prepared from a popular variety of poppy pod illicitly grown in the United States. The teas also contained varying levels of other opium alkaloids including codeine. Many users in the United States incorrectly assume that the use of poppy tea is both legal and a safer alternative to heroin. However, given the variety and levels of opium alkaloids found in poppy tea, the potential for abuse, addiction, and overdose is significant.

Forensic Science, Poppy Tea, Opiate Abuse