

# WHAT ARE SWEET DREAMS MADE OF? ANALYSIS OF PSYCHOACTIVE SUBSTANCES INTO “GUMMIES”: A RETROSPECTIVE DESCRIPTIVE STUDY

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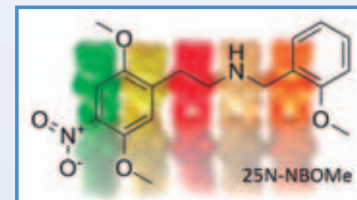
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## INTRODUCTION

Use of unauthorized synthetic drugs is a serious, forensic, regulatory and public health issue. Although psychoactive substances have a long history in recreational settings, research on its composition has focused only on tablets, crystal and powder. In the context of high levels of drug access, supply and diversity occurring within a community regulated environment, new formulation for new psychoactive substances (NPS) are readily available for users.



## OBJECTIVE

To describe the presence of NPS and its characteristics in new formulations which had not previously been found in samples delivered to Energy Control from 2014 to 2016 in Spain.

## METHODS

13,783 samples were analysed from June 2014 to December 2016. Only those samples in gummy formulation were studied (n=19). Samples were analysed by Energy Control, a Spanish harm-reduction NGO that offers users the possibility of analysing the substances they intend to consume. Analysis was done by Gas Chromatography-Mass Spectrometry.

## RESULTS

From 19 samples of NPS in gummy formulation, the analysis detected that 52.6% contained multiple psychoactive substances: 9 samples contained 25N-NBOMe (47.3%), 1 2C-E (5.26%), 1 2C-D (5.26%), 1 2C-N (5.26%), 2 Allylescaline (10.53%), 1 Cocaine (5.26%), 2 THC (10.5%), 2 Canabinol (10.5%), 1 Ketamine (5.26%), 1 Caffeine (5.26%), 1 MDMA (5.26%), 1 N-acetylMDMA (5.26%), 1 Metoxetamine (5.26%), 1 without psychoactive substance (5.26%). **The only substances found in active dosage were 25N-NBOMe, THC, LSD.** A total of 6 samples (31.6%) did not contain the substance expected by the consumer, 8 (42.1%) samples contain the substance expected, and 5 (26.3%) samples had unknown substance by the consumer.

## DISCUSSION

- Incipient presence on Energy control samples of gummies as NPS formulation was found.
- The most prevalent drug (which was in active dosage) was 25N-NBOMe. (fig. 1)
- 31.6 % did not contain the substance expected (fig. 2). This may pose a risk for potential harmful repercussions because of non-expected effects.
- All the gummies were known to be drug-carriers when bought.
- This could represent the presence of new formulations from June 2014 in the Spanish recreational market, with important increase in 2016. (fig. 3)

Fig. 1: Number of samples containing each psychoactive substance.

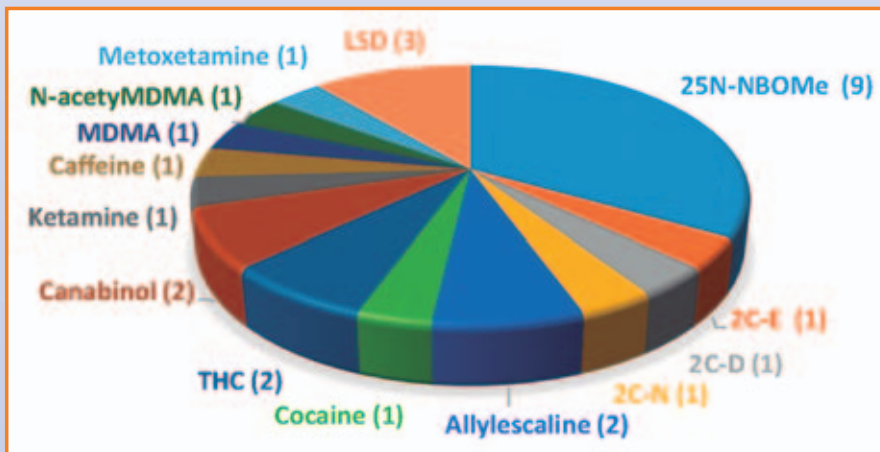


Fig. 2: Relation between expected and delivered substances. Substances found in non expected formulations.

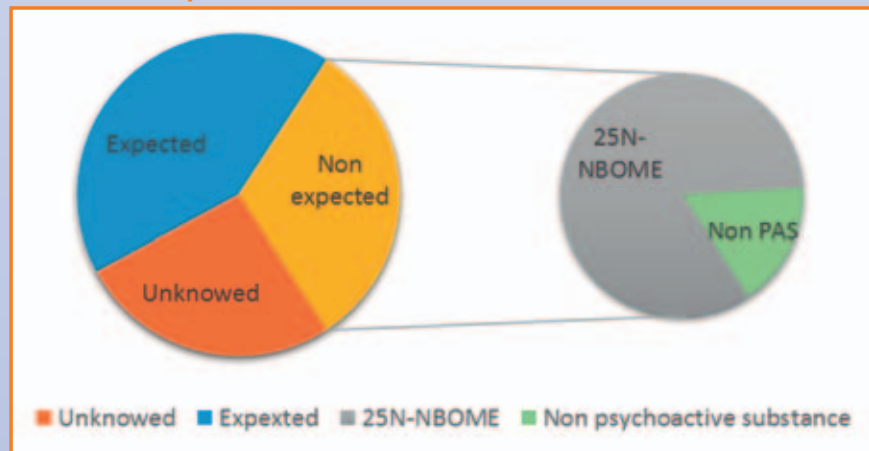
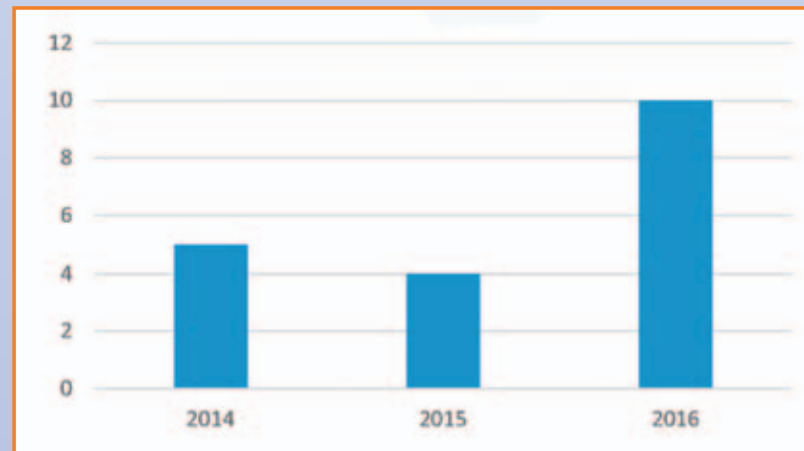


Fig. 3: Number of samples in "gummy" formulation delivered per year.



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