Menthol, nicotine, and flavoring content of capsule cigarettes in the US

Schneller, L., Bansal-Travers, M., Mahoney, M.C., McCann, SE, & O'Connor, R.J.

Abstract
Objectives: In this paper, we characterize physical design features of cigarette brands sold in the United States according to the delivery method of menthol that may affect sensory perception among users.

Methods: We used 12 cigarette brands, mentholated and non-mentholated, for analyses of the physical design characteristics, quantification of nicotine and menthol, and identification of flavor additives.

Results: Physical design characteristics did not differ significantly between the various cigarette brands. However, we found statistically significant differences in levels of menthol. Menthol levels were greatest in products that had dual delivery methods of menthol (6.7mg/cigarette; SE = 0.27) followed by products mentholated in a filter capsule only (5.7mg/cigarette; SE = 0.25), and those mentholated in the tobacco only (3.8mg/cigarette; SE = 0.12); products that were not mentholated had the least (0.38mg/cigarette; SE = 0.31). Finally, flavor additives with a mint flavor profile other than menthol were identified, such as pulegone and limonene, and differed between cigarette brands, which are likely contributing to the menthol flavor experience associated with use of these products.

Conclusions: The regulation of menthol delivery method, flavorings added to the capsule, and/or menthol concentration may be beneficial for the public health as these factors are likely creating unique sensory experiences.

Recommended Citation

Link To PDF:
https://www.ingentaconnect.com/content/trsg/trs/2020/00000006/00000003/art00004;jsessionid=3j1b6a12pw8.x-ic-live-01#expand/collapse