

VAPE FLAVOURS

AND THEIR CRUCIAL ROLE IN TOBACCO HARM REDUCTION

Imperial Brands believes flavours are a crucial part of any satisfying next generation product (NGP) experience, helping adult smoker consumers switch away from cigarettes.

We recently reviewed¹ over **230 peer-reviewed studies** in the academic literature – as well as regulatory documents, and public health reports – to better understand what the science tells us about the role of vape flavours in tobacco harm reduction (THR).

WHAT KINDS OF STUDIES WERE ANALYSED?

Our comprehensive academic review encompassed *in-vitro* and *in-vivo* toxicological assessments, laboratory studies, clinical trials, observational studies, large-scale surveys (e.g. US Population Assessment of Tobacco and Health, or PATH, data), and more.

WHAT DID WE DISCOVER?



DO FLAVOURS POSE AN INCREASED HEALTH RISK TO CONSUMERS?

- There are **no greater toxicological concerns** around non-tobacco flavours compared to tobacco flavours.
- Many studies with contrary results were often **scientifically flawed or unrealistic**, with real-world usage conditions rarely replicated. **Comprehensive Quantitative risk assessments (QRAs)** were also often missing from the aforementioned research.
- Some papers indicated individual flavourings may pose risks, but many of these - for example, diacetyl - are **not used in blu vapes**.

SUMMARY

With high quality ingredients, responsible formulation, and rigorous testing, flavoured vape aerosols demonstrate favourable toxicological profiles compared to cigarette smoke.



ARE CONSUMERS MORE LIKELY TO BECOME DEPENDENT ON FLAVOURED VAPE?

- Overall, there is **no significant difference in dependency potential** between flavoured and tobacco flavoured vapes.
- Flavours don't appear to be the **key driver for dependence**, compared to nicotine.
- Flavours may **enhance initial appeal for adult consumers**, but not long-term dependence.

SUMMARY

A range of vape flavours don't meaningfully increase dependency potential, especially if products are marketed responsibly to intended audiences (adult smokers and nicotine users) only – and not never-smokers, or youth.

¹ "Flavoured Vaping Products in Tobacco Harm Reduction: A Regulatory Perspective" by Fearon, Stevenson, and Nahde. Cureus: <https://pubmed.ncbi.nlm.nih.gov/40757083/>



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DO FLAVOURS SUPPORT SWITCHING AMONG ADULT SMOKERS?

- **Yes.** Non-tobacco flavours (e.g. fruit and mint) are preferred by adult smokers trying to switch to vaping.
- Vape flavours may help **reduce relapse** back to smoking and support successful longer-term switching away from cigarettes.

SUMMARY

The science suggests flavour diversity is key to maximising switching success and reducing smoking prevalence.



DO FLAVOURS INCREASE UNINTENDED USE?

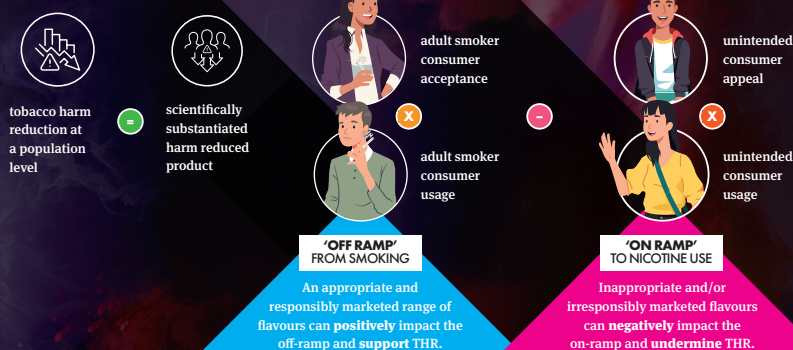
- Youth vaping is **declining across many markets**, and flavour is **not the main driver** to vape – curiosity and peer use, for instance, appear to be more influential factors.
- Gateway hypothesis (that vaping by never-smokers leads to cigarette smoking and other nicotine use) is **not strongly supported**; a better explanation is the concept of common

liability (i.e. common risk-taking traits in individuals).

SUMMARY

While continued vigilance and active youth access/prevention is needed, the evidence suggests minor levels of unintended trial and use don't outweigh the broader public health benefits for adult smokers seeking to switch to vapes.

THE TOBACCO HARM REDUCTION (THR) EQUATION



ARE VAPE FLAVOUR BANS EFFECTIVE?

- **Bans are often ineffective:** they lead to a rise in illicit vapes, DIY mixing, or relapsing to cigarette smoking.
- In some cases, bans have failed to reduce youth use while **increasing smoking rates**.

SUMMARY

While well-intentioned, vaping flavour bans may have the potential to backfire, undermining THR, and broader national and global public health goals.

CONCLUSION

Our research review of several hundred papers suggests high quality, responsibly manufactured and marketed vape flavours have an important role to play in helping to facilitate THR – offering adult smokers an acceptable, potentially harm reduced alternative to cigarettes.

However, to maximise the public health benefits, regulatory frameworks must pragmatically balance minimising youth uptake through rigorous enforcement with preserving flavour diversity to support sustained adult smoker switching.

Conversely, over-regulation – including flavour or entire category bans – has been shown to obstruct NGP innovation, fosters the illicit trade, and risks undermining encouraging progress in reducing global smoking prevalence in many markets.

Imperial Brands continues to advocate that nuanced, scientific evidence-based policy – combined with high product standards and dedicated stewardship – are essential so vapes can fulfil their promising public health potential.

