

Tobacco in Australia

Facts & Issues

Relevant news and research

12.8 Construction of cigarettes and cigarette filters

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Research:

12.8 Construction of cigarettes and cigarette filters

Payan DD, Burke NJ, Persinger J, Martinez J, Jones Barker L, et al. Public support for policies to regulate flavoured tobacco and e-cigarette products in rural california. *Tobacco Control*, 2022. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35064014>

Hoffmann D and Hoffmann I. The changing cigarette: Chemical studies and bioassays, in Risks associated with smoking cigarettes with low machine-measured yields of tar and nicotine. *Smoking and Tobacco control monograph 13*. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2001. p 159-92.

12.8.1 Construction of cigarettes

Wei, J, Xiao, H, Wang, X, Zhao, H, Wang, X, Yao, S et al. (2023). Analysis of parametric instability of cigarettes based on computational fluid dynamics methods. *Heliyon*, 9(9), e19449. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/37662803>

Haynes, A, Winnall, WR, Brennan, E, Dunstone, K, Benowitz, NL, Ashley, DL et al. (2023). Tobacco constituents, flavorants, and paper permeability of factory-made and roll-your-own cigarettes on the Australian market. *Nicotine Tob Res*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/37462724>

Li, C, Tian, S, You, J, Liu, J, Li, E, Wang, C et al. (2023). Qualitative determination of volatile substances in different flavored cigarette paper by using headspace-gas chromatography-ion mobility spectrometry (HS-GC-IMS) combined with chemometrics. *Heliyon*, 9(1), e12146. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36685456>

Poorolajalab J, Javad Assaric M, Mohammadid Y, and Gohari-Ensafa F. Impact of cigarettes' filter length and diameter on cigarette smoke emissions. *Clinical Epidemiology and Global Health*, 2020; 8(2):377-82. Available from: <https://www.sciencedirect.com/science/article/abs/pii/S221339841930377X>

Hackshaw A, Morris JK, Boniface S, Tang JL, and Milenkovic D. Low cigarette consumption and risk of coronary heart disease and stroke: Meta-analysis of 141 cohort studies in 55 study reports. *BMJ*, 2018; 360:j5855. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29367388>

Gallopel-Morvan K, Moodie C, Guignard R, Eker F, and Béguinot E. Consumer perceptions of cigarette design in france: A comparison of regular, slim, pink and plain cigarettes. *Nicotine & Tobacco Research*, 2018:nty105-nty. Available from: <http://dx.doi.org/10.1093/ntr/nty105>

Song MA, Benowitz NL, Berman M, Brasky TM, Cummings KM, et al. Cigarette filter ventilation and its relationship to increasing rates of lung adenocarcinoma. *Journal of the National Cancer Institute*, 2017; 109(12). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28525914>

Poppendieck D, Khurshid S, and Emmerich S. Measuring airborne emissions from cigarette butts: Literature review and experimental plan. 2016. Available from: <https://nvlpubs.nist.gov/nistpubs/ir/2016/NIST.IR.8147.pdf>

McAdam K, Eldridge A, Fearon IM, Liu C, Manson A, et al. Influence of cigarette circumference on smoke chemistry, biological activity, and smoking behaviour. *Regulatory Toxicology and Pharmacology*, 2016; 82:111-26. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/27634061>

Administration FaD. How a cigarette is engineered, 2016, Center for Tobacco Products, Food and Drug Administration: Silver Spring, Maryland. Available from: <http://www.fda.gov/TobaccoProducts/NewsEvents/ucm527462.htm>.

Agaku IT, Omaduvie UT, Filippidis FT, and Vardavas CI. Cigarette design and marketing features are associated with increased smoking susceptibility and perception of reduced harm among smokers in 27 EU countries. *Tobacco Control*, 2015; 24(e4):e233. Available from: <http://tobaccocontrol.bmj.com/content/24/e4/e233.abstract>

US Department of Health and Human Services, The health consequences of smoking - 50 years of progress: A report of the Surgeon General. Atlanta GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health 2014. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/24455788>.

Matsunaga Y, Agaku IT, and Vardavas CI. The association between cigarette rod length, slim design, and blood cadmium levels among U.S. Smokers: Nhanes 1999–2010. *Prev Med*, 2014; 65:87-91. Available from: <http://www.sciencedirect.com/science/article/pii/S0091743514001522>

Werley MS, Jerome AM, DeSoi DJ, Coggins CR, Oldham MJ, et al. A comprehensive evaluation of the toxicology of experimental cigarettes manufactured with banded papers. *Inhalation Toxicology*, 2013; 25 Suppl 2:19-33. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24341844>

Oldham MJ, Coggins CR, and McKinney WJ, Jr. A comprehensive evaluation of selected components and processes used in the manufacture of cigarettes: Approach and overview. *Inhalation Toxicology*, 2013; 25 Suppl 2:1-5. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24341842>

Borland R and Savvas S. Effects of stick design features on perceptions of characteristics of cigarettes. *Tobacco Control*, 2013; 22(5):331. Available from: <http://tobaccocontrol.bmj.com/content/22/5/331.abstract>

O'Connor R, Wilkins K, Caruso R, Cummings K, and Kozlowski L. Cigarette characteristic and emission variations across high-, middle- and low-income countries. *Public Health*, 2010; 124(12):667–74. Available from: <http://www.publichealthjrnal.com/article/PIIS0033350610002908/fulltext>

Ozden O. Plug wrap papers. *Cellulose Chemistry and Technology*, 2009; 43(1-3):51-5. Available from: <https://www.cellulosechemtechnol.ro/pdf/CCT1-3-2009/p.51-55.pdf>

O'Connor R, Hammond D, McNeill A, King B, Kozlowski L, et al. How do different cigarette design features influence the standard tar yields of popular cigarette brands sold in different countries?

Tobacco Control, 2008; 17(1):i1–i5. Available from:

http://tobaccocontrol.bmj.com/cgi/content/full/17/Suppl_1/i1

Carpenter CM, Wayne GF, and Connolly GN. Designing cigarettes for women: New findings from the tobacco industry documents. *Addiction*, 2005; 100(6):837-51. Available from:

<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1360-0443.2005.01072.x>

Hoffmann D and Hoffmann I. The changing cigarette, 1950-1995. *Journal of Toxicology and Environmental Health*, 1997; 50(4):307–64. Available from:

<http://www.ingentaconnect.com/content/tandf/utehold/1997/00000050/00000004/art00001>

12.8.2 Cigarette filters

Crooks, I, Thorne, D, West, M, Prasad, K, Gray, A, West, C et al. (2024). A framework for the systematic evaluation of a novel cigarette filter technology. *Food Chem Toxicol*, 187, 114583.

Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/38518883>

Topart, F, Beguinot, E, Wirth, N, & Martinet, Y. (2024). [Society. Why ban cigarette filters?]. *Rev Prat*, 74(2), 139-141. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/38415412>

Ashley, DL, Zhu, W, Watson, CH, Bravo, R, Ngac, PK, Valentin-Blasini, L et al. (2023). Mouth Level Intake of Nicotine from Three Brands of Little Filtered Cigars with Widely Differing Product Characteristics Among Adult Consumers. *Chem Res Toxicol*, 36(1), 43-52. Retrieved from

<https://www.ncbi.nlm.nih.gov/pubmed/36598842>

Yang, G, Hou, N, Li, Z, Huang, K, Zhang, B, Xu, J, & Sun, J. (2023). Pressure Drop Performance of Porous Composites Based on Cotton Cellulose Nanofiber and Aramid Nanofiber for Cigarette Filter Rod. *Materials (Basel)*, 16(1). Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36614750>

Yang, Y, Wang, C, Zhang, H, Qian, J, Yang, S, Liao, H et al. (2023). Preparation of Functionalized Zr-Based MOFs and MOFs/GO for Efficient Removal of 1,3-Butadiene from Cigarette Smoke. *Materials (Basel)*, 16(2). Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36676418>

Dobaradaran S, Mutke XAM, Schmidt TC, Swiderski P, De-la-Torre GE, et al. Aromatic amines contents of cigarette butts: Fresh and aged cigarette butts vs unsmoked cigarette. *Chemosphere*, 2022; 301:134735. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35489462>

Soleimani F, Dobaradaran S, De-la-Torre GE, Schmidt TC, and Saeedi R. Content of toxic components of cigarette, cigarette smoke vs cigarette butts: A comprehensive systematic review. *Sci Total Environ*, 2021; 813:152667. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34963586>

<https://www.sciencedirect.com/science/article/abs/pii/S0048969721077457?via%3Dihub>

Silva A, Piras SS, Bialous SA, and Moreira JC. Health without filters: The health and environmental impacts of cigarette filters. *Cien Saude Colet*, 2021; 26(6):2395-401. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/34231748>

Roselli C, Fagiolino I, Desideri D, Sisti D, and Meli MA. Assessment of the release of metals from cigarette butts into the environment. *PLoS One*, 2021; 16(11):e0260111. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34793538>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8601425/pdf/pone.0260111.pdf>

Pulvers K, Tracy L, Novotny TE, Satybaldiyeva N, Hunn A, et al. Switching people who smoke to unfiltered cigarettes: Perceptions, addiction and behavioural effects in a cross-over randomised controlled trial. *Tobacco Control*, 2021. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34799433>

Pack EC, Kim HS, Lee SH, Koo YJ, Jang DY, et al. Survey of characteristics of exposure to mainstream cigarette smoke using discarded cigarette butts from Korean smokers. *Environmental research*, 2020; 185:109434. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32276166>

Hoek J, Gendall P, Eckert C, Louviere J, Blank M-L, et al. Young adult susceptible non-smokers' and smokers' responses to capsule cigarettes. *Tobacco Control*, 2018. Available from: <https://tobaccocontrol.bmj.com/content/tobaccocontrol/early/2018/10/03/tobaccocontrol-2018-054470.full.pdf>

Thrasher JF, Islam F, Barnoya J, Mejia R, Valenzuela MT, et al. Market share for flavour capsule cigarettes is quickly growing, especially in latin America. *Tobacco Control*, 2017; 26(4):468-70. Available from: <http://tobaccocontrol.bmj.com/content/tobaccocontrol/26/4/468.full.pdf>

Poppendieck D, Khurshid S, and Emmerich S. Measuring airborne emissions from cigarette butts: Literature review and experimental plan. 2016. Available from: <https://nvlpubs.nist.gov/nistpubs/ir/2016/NIST.IR.8147.pdf>

Czoli CaH, D. Cigarette packaging: Youth perceptions of 'natural' cigarettes, filter references, and contraband tobacco. *Journal of Adolescent Health*, 2014; 54(1):33-9.

Pauly J, O'Connor R, Paszkiewicz G, Cummings K, Djordjevic M, et al. Cigarette filter-based assays as proxies for toxicant exposure and smoking behavior--a literature review. *Cancer Epidemiology, Biomarkers and Prevention*, 2009; 18(12):3321-33. Available from: <http://cebp.aacrjournals.org/content/18/12/3321.long>

Shin H, Sohn H, Han J, Park C, Lee H, et al. Effect of cigarette filters on the chemical composition and in vitro biological activity of cigarette mainstream smoke. *Food and Chemical Toxicology*, 2008; 47(1):192-7. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/19027817>

Paszkiewicz GM and Pauly JL. Spectrofluorometric method for measuring tobacco smoke particulate matter on cigarette filters and cambridge pads. *Tobacco Control*, 2008; 17(suppl. 1):i53-8. Available from: http://tobaccocontrol.bmj.com/cgi/content/abstract/17/Suppl_1/i53

Harward CN, Parrish ME, Plunkett SE, Banyasz JL, and Shafer KH. Evaluation of hydrazine reduction by cellulose acetate filters using infrared tunable diode laser spectroscopy. *Analytical Chemistry*, 2002; 74(22):5871-81. Available from: <https://pubmed.ncbi.nlm.nih.gov/12463375/>

Hoffmann D and Hoffmann I. The changing cigarette, 1950-1995. *Journal of Toxicology and Environmental Health*, 1997; 50(4):307–64. Available from: <http://www.ingentaconnect.com/content/tandf/utehold/1997/00000050/00000004/art00001>

Scully M, Wakefield M, Scollo M, Durkin S, and White V. Prevalence and correlates of flavour capsule cigarette use among Australian adolescents. *Health Promotion Journal of Australia*; n/a(n/a). Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/hpja.570>

12.8.2.1 Development of the modern cigarette filter

Prabhakaran, D, Park, H, Choi, O, Abraham, A, & Sang, BI. (2024). Enhancing cellulose acetate biodegradability in cigarette filters: an in-depth analysis of thermal alkaline pretreatment, microbial dynamics, and breakdown pathway prediction. *Microb Cell Fact*, 23(1), 199. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39026314>

Veljkovic, F, Dodevski, V, Marinovic-Cincovic, M, Velickovic, S, & Jankovic, B. (2024). Combustion Behavior of Cellulose Ester Fibrous Bundles from Used Cigarette Filters: Kinetic Analysis Study. *Polymers (Basel)*, 16(11). Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/38891427>

Romero, DR, Appolon, G, Novotny, TE, Pulvers, K, Tracy, L, Satybaldiyeva, N et al. (2024). Switching people who smoke to unfiltered cigarettes: Effects on smoking topography. *Addict Behav Rep*, 19, 100548. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/38706887>

Song, Y, Liu, Z, Sun, Z, Du, W, Wang, Z, Hu, Z et al (2024). Flow field analysis of cigarette filter through micro-CT-based geometries and CFD simulation. *Heliyon*, 10(8), e29253. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/38644843>

Mercincavage, M, Waugh, LK, Gratale, S, Wackowski, O, Pearson, JL, House, K et al. (2024). Acute effects of charcoal filters and package color on cigarette perceptions and use behaviors: Results from a randomized pilot study examining Natural American Spirit "Sky". *Drug Alcohol Depend*, 255, 111080. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/38198898>

Everaert, S, Schoeters, G, Lardon, F, Janssens, A, Van Larebeke, N, Raquez, JM et al. (2023). Protecting public health and the environment: towards a general ban on cellulose acetate cigarette filters in the European Union. *Front Public Health*, 11, 1282655. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/38026410>

Sakulaue, P, Jitapunkul, K, Inthasuwana, P, Takano, H, Ishii, T, Kongpatpanich, K et al (2023). Insight into the effects of different oxygen heteroatoms on nicotine adsorption from cigarette mainstream smoke. *Sci Rep*, 13(1), 15311. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/37714873>

Cummings, KM, Roberson, A, Carroll, DM, Stepanov, I, Hatsukami, D, Rees, VW, & O'Connor, RJ. (2023). Illusion of filtration: Evidence from tobacco industry documents. *Tob Induc Dis*, 21, 85. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/37360043>

Ogunnaike A, Gallegos Carrillo K, Barrientos-Gutierrez I, Arillo Santillan E, Cho YJ, et al. Why smoke flavor capsule cigarettes? Preferences and perceptions among adult smokers in Mexico. *Nicotine & Tobacco Research*, 2022. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35244723>

<https://academic.oup.com/ntr/advance-article-abstract/doi/10.1093/ntr/ntac057/6542427?redirectedFrom=fulltext>

Delnevo CD, Giovenco DP, and Villanti AC. Impact of menthol capsule cigarettes on menthol and non-menthol cigarette consumption in the USA, 2008-2020. *Tobacco Control*, 2022. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35537814>

Wakefield MA, Dunstone K, Brennan E, Vittiglia A, Scollo M, et al. Australian smokers' experiences and perceptions of recessed and firm filter cigarettes. *Tobacco Control*, 2021; 30(6):660-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33115960>

Pearson J, Giovenco DP, Lewis MJ, Moran M, and Ganz O. Natural American Spirit launches 'sky', the brand's first commercial organic cigarette with a charcoal filter. *Tobacco Control*, 2021. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34593613>

Kyriakos CN, Zatonski MZ, and Filippidis FT. Flavour capsule cigarette use and perceptions: A systematic review. *Tobacco Control*, 2021. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34607888>

Reilly SM, Goel R, Trushin N, Bitzer ZT, Elias RJ, et al. Effects of charcoal on carbonyl delivery from commercial, research, and make-your-own cigarettes. *Chemical Research in Toxicology*, 2018; 31(12):1339-47. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30426738>

Perkins KA and Karelitz JL. Acute perceptions of preferred cigarettes when blinded to brand. *Tobacco Control*, 2018. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/29991640>

Goel R, Bitzer ZT, Reilly SM, Bhangu G, Trushin N, et al. Effect of charcoal in cigarette filters on free radicals in mainstream smoke. *Chemical Research in Toxicology*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29979036>

Emond JA, Soneji S, Brunette MF, and Sargent JD. Flavour capsule cigarette use among US adult cigarette smokers. *Tobacco Control*, 2018.

Moodie C, Ford A, Dobbie F, Thrasher JF, McKell J, et al. The power of product innovation: Smokers' perceptions of capsule cigarettes. *Nicotine & Tobacco Research*, 2017. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29059391>

Joly FX and Coulis M. Comparison of cellulose vs. Plastic cigarette filter decomposition under distinct disposal environments. *Waste Manag*, 2017. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29153904>

Agnew-Hheard KA, Lancaster VA, Bravo R, Watson CH, Walters MJ, et al. Multivariate statistical analysis of cigarette design features influence on ISO tnc0 yields. *Chemical Research in Toxicology*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27222918>

O'Connor RJ, Bansal-Travers, M., Cummings, K.M., Hammond, D., Thrasher, J.F. and Tworek, C. Filter presence and tipping paper colour influence consumer perceptions of cigarettes. *BMC Public Health*, 2015; 15. Available from: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-015-2643-z>

Moodie C, Ford A, Mackintosh A, and Purves R. Are all cigarettes just the same? Female's perceptions of slim, coloured, aromatized and capsule cigarettes. *Health Education Research*, 2015; 30(1):1-12. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/25341674>

Harris B. The intractable cigarette 'filter problem.'. *Tobacco Control*, 2011; 20(Suppl1):i10 - i6. Available from: https://tobaccocontrol.bmj.com/content/20/Suppl_1/i10

Dey N, Das A, Ghosh A, and Chatterjee I. Activated charcoal filter effectively reduces p-benzosemiquinone from the mainstream cigarette smoke and prevents emphysema. *Journal of Biosciences*, 2010; 35(2):217–30. Available from: <http://www.ias.ac.in/jbiosci/jun2010/217.pdf>

Polzin GM, Zhang L, Hearn BA, Tavakoli AD, Vaughan C, et al. Effect of charcoal-containing cigarette filters on gas phase volatile organic compounds in mainstream cigarette smoke. *Tobacco Control*, 2008; 17 Suppl 1:i10-6. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/18768454>

Coggins CR and Gaworski CL. Could charcoal filtration of cigarette smoke reduce smoking-induced disease? A review of the literature. *Regulatory Toxicology and Pharmacology*, 2008; 50(3):359-65. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/18289753>

Muscat JE, Takezaki T, Tajima K, and Stellman SD. Charcoal cigarette filters and lung cancer risk in Aichi Prefecture, Japan. *Cancer Science*, 2005; 96(5):283-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/15904469>

Kozlowski L, Dreschel N, Stellman S, Wilkenfeld J, Weiss E, et al. An extremely compensatable cigarette by design: Documentary evidence on industry awareness and reactions to the barclay filter design cheating the tar testing system. *Tobacco Control*, 2005; 14(1):64–70. Available from: <http://ejournals.ebsco.com/direct.asp?ArticleID=4D458B67AC619260FCA9>

King B and Borland R. The 'low tar' strategy and the changing construction of Australian cigarettes. *Nicotine & Tobacco Research*, 2004; 6(1):85–94. Available from: <https://pubmed.ncbi.nlm.nih.gov/14982692>

Kozlowski L and O'Connor R. Cigarette filter ventilation is a defective design because of misleading taste, bigger puffs, and blocked vents. *Tobacco Control*, 2002; 11(suppl.1):i40-i50. Available from: http://tc.bmjournals.com/cgi/content/abstract/11/suppl_1/i40

Hastrup JL, Cummings KM, Swedrock T, Hyland A, and Pauly JL. Consumers' knowledge and beliefs about the safety of cigarette filters. *Tobacco Control*, 2001; 10(1):84. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/11347536>

Pauly J, Cummings K, and al e. Brave new world in tobacco product design. *Cancer Epidemiology, Biomarkers and Prevention*, 1998; 7(11):967–79. Available from: <http://cebp.aacrjournals.org/cgi/reprint/7/11/965>

Pauly JL, Stegmeier SJ, Mayer AG, Lesses JD, and Streck RJ. Release of carbon granules from cigarettes with charcoal filters. *Tobacco Control*, 1997; 6(1):33-40. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/9176984>

Hoffmann D, Djordjevic, MV and Brunnemann, KD. Changes in cigarette design and composition over time and how they influence the yields of smoke constituents., in *The FTC cigarette test method for determining tar, nicotine, and carbon monoxide yields of U.S. Cigarettes. Smoking and Tobacco control monograph 7*. Bethesda, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health.; 1996. p 15-37 Available from: <https://cancercontrol.cancer.gov/brp/tcrb/monographs/monograph-07>.

John J and Wakeman H. Breakthrough of the high taste, low tar cigarette -- a case history of innovation Bates No 2021566196-2021566216. Richmond, Virginia Philip Morris Research Centre, 1980. Available from: <http://legacy.library.ucsf.edu/tid/pgb68e00/pdf?search=%222021566196%22>

12.8.2.2 Filter ventilation

Eaton, AA, Hatsukami, DK, Stepanov, I, Shields, PG, & Carroll, DM. (2024). Estimating the causal effect of filter ventilation levels in cigarettes on past 30-day smoking. *Nicotine Tob Res*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39096265>

Carroll, DM, Bittencourt, L, Tessier, KM, Usman, A, Stepanov, I, & Hatsukami, DK. (2024). Menthol and filter ventilation in cigarettes: prevalence estimates and relationships with harm perception and smoking exposure. *Tob Control*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/38658056>

Ashley, DL, Zhu, W, Watson, CH, Bravo, R, Ngac, PK, Valentin-Blasini, L et al. (2023). Mouth Level Intake of Nicotine from Three Brands of Little Filtered Cigars with Widely Differing Product Characteristics Among Adult Consumers. *Chem Res Toxicol*, 36(1), 43-52. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36598842>

Carroll, DM, Tessier, K, Luo, X, Stepanov, IS, Shields, PG, O'Connor, R et al. (2023). Switching to cigarette brand variants with different filter ventilation levels: a descriptive analysis. *Tob Control*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36690447>

Freitas-Lemos, R, Tegge, AN, Athamneh, LN, Yeh, YH, Craft, WH, Stein, JS et al. (2023). Is perception reality? Associations among "light" cigarettes and number of cigarettes smoked per day. *Drug Alcohol Depend*, 244, 109709. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36642000>

Diaz, D, Luo, X, Hatsukami, DK, Donny, EC, & O'Connor, RJ. (2022). Cigarette filter ventilation, smoking topography, and subjective effects: A mediational analysis. *Drug Alcohol Depend*, 241, 109683. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36379192>

Lee P and Fry J. Cigarette filter ventilation and biomarkers-letter. *Cancer Epidemiology, Biomarkers & Prevention*, 2021; 30(7):1449. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34210676>

King B, Borland R, Le Grande M, O'Connor R, Fong G, et al. Smokers' awareness of filter ventilation, and how they believe it affects them: Findings from the itc four country survey. *Tobacco Control*, 2021:tobaccocontrol-2020-056134. Available from:

<https://tobaccocontrol.bmj.com/content/tobaccocontrol/early/2021/06/15/tobaccocontrol-2020-056134.full.pdf>

Carroll DM, Tessier KM, Cummings KM, O'Connor RJ, Reisinger S, et al. Risk perceptions and continued smoking as a function of cigarette filter ventilation level among US youth and young adults who smoke. *Tobacco Control*, 2021. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/34857645>

Carroll DM, Stepanov I, O'Connor R, Luo X, Cummings KM, et al. Impact of cigarette filter ventilation on U.S. Smokers' perceptions and biomarkers of exposure and potential harm. *Cancer Epidemiology, Biomarkers & Prevention*, 2021; 30(1):38-44. Available from:

<https://pubmed.ncbi.nlm.nih.gov/33093163/>

Carroll DM and Hatsukami DK. Cigarette filter ventilation and biomarkers-reply. *Cancer Epidemiology, Biomarkers & Prevention*, 2021; 30(7):1450. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/34210677>

Pauwels C, Klerx WNM, Pennings JLA, Boots AW, van Schooten FJ, et al. Cigarette filter ventilation and smoking protocol influence aldehyde smoke yields. *Chemical Research in Toxicology*, 2018. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/29727173>

Stein JS, Koffarnus MN, O'Connor RJ, Hatsukami DK, and Bickel WK. Effects of filter ventilation on behavioral economic demand for cigarettes: A preliminary investigation *Nicotine and Tobacco Research*, 2017. Available from:

<https://academic.oup.com/ntr/article-abstract/doi/10.1093/ntr/ntx164/4004794/Effects-of-Filter-Ventilation-on-Behavioral?redirectedFrom=fulltext>

Song MA, Benowitz NL, Berman M, Brasky TM, Cummings KM, et al. Cigarette filter ventilation and its relationship to increasing rates of lung adenocarcinoma. *Journal of the National Cancer Institute*, 2017; 109(12). Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/28525914>

Samet JM and Aladadyan L. Should the FDA ban cigarette filter ventilation? *Journal of the National Cancer Institute*, 2017; 109(12). Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/28525913>

Caraway JW, Ashley M, Bowman SA, Chen P, Errington G, et al. Influence of cigarette filter ventilation on smokers' mouth level exposure to tar and nicotine. *Regulatory Toxicology and Pharmacology*, 2017; 91:235-9. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/29097238>

Agnew-Heard KA, Lancaster VA, Bravo R, Watson CH, Walters MJ, et al. Multivariate statistical analysis of cigarette design features influence on ISO tnco yields. *Chemical Research in Toxicology*, 2016. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27222918>

Schneller LM, Zwierzchowski BA, Caruso RV, Li Q, Yuan J, et al. Changes in tar yields and cigarette design in samples of chinese cigarettes, 2009 and 2012. *Tobacco Control*, 2014. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/25352560>

Elton-Marshall T, Fong GT, Yong HH, Borland R, Xu SS, et al. Smokers' sensory beliefs mediate the relation between smoking a 'light/low tar' cigarette and perceptions of harm. *Tobacco Control*, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25370698>

O'Connor RJ, Caruso RV, Borland R, Cummings KM, Bansal-Travers M, et al. Relationship of cigarette-related perceptions to cigarette design features: Findings from the 2009 itc U.S. Survey. *Nicotine & Tobacco Research*, 2013; 15(11):1943-7. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/23943847>

Yong HH, Borland R, Cummings KM, Hammond D, O'Connor RJ, et al. Impact of the removal of misleading terms on cigarette pack on smokers' beliefs about 'light/mild' cigarettes: Cross-country comparisons. *Addiction*, 2011; 106(12):2204-13. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21658140>

Harris B. The intractable cigarette 'filter problem.'. *Tobacco Control*, 2011; 20(Suppl1):i10 - i6. Available from: https://tobaccocontrol.bmj.com/content/20/Suppl_1/i10

US Department of Health and Human Services. How tobacco smoke causes disease: The biology and behavioral basis for smoking-attributable disease. A report of the Surgeon General., Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK53017/>.

Thrasher JF, Hammond D, and Arillo-Santillán E. The alchemy of Marlboro: Transforming "light"™ into "gold"™ in Mexico. *Tobacco Control*, 2010; 19(4):342-3. Available from: <http://tobaccocontrol.bmj.com/content/19/4/342.short>

Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR). Addictiveness and attractiveness of tobacco additives. Brussels, Belgium 2010. Available from: http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_031.pdf.

O'Connor R, Wilkins K, Caruso R, Cummings K, and Kozłowski L. Cigarette characteristic and emission variations across high-, middle- and low-income countries. *Public Health*, 2010; 124(12):667–74. Available from: <http://www.publichealthjrn.com/article/PIIS0033350610002908/fulltext>

Adam T, McAughey J, Mocker C, McGrath C, and Zimmermann R. Influence of filter ventilation on the chemical composition of cigarette mainstream smoke. *Analytica Chimica Acta*, 2010; 657(1):36–44. Available from: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=19951755

Wilson N, Weerasekera D, Peace J, Edwards R, Thomson G, et al. Misperceptions of "light" cigarettes abound: National survey data. *BMC Public Health*, 2009; 9(1):126. Available from: <http://www.biomedcentral.com/content/pdf/1471-2458-9-126.pdf>

Ozden O. Plug wrap papers. *Cellulose Chemistry and Technology*, 2009; 43(1-3):51-5. Available from: <https://www.cellulosechemtechnol.ro/pdf/CCT1-3-2009/p.51-55.pdf>

Johnson MD, Schilz J, Djordjevic MV, Rice JR, and Shields PG. Evaluation of in vitro assays for assessing the toxicity of cigarette smoke and smokeless tobacco. *Cancer Epidemiology, Biomarkers & Prevention*, 2009; 18(12):3263-304. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/19959677>

Borland R, Fong GT, Yong HH, Cummings KM, Hammond D, et al. What happened to smokers' beliefs about light cigarettes when "light/mild" brand descriptors were banned in the UK? Findings from the International Tobacco Control (itc) four country survey. *Tobacco Control*, 2008; 17(4):256-62.

Available from: <http://tobaccocontrol.bmj.com/cgi/content/abstract/17/4/256>

Reed MB, Anderson CM, and Burns DM. The temporal relationship between advertising and sales of low-tar cigarettes. *Tobacco Control*, 2006; 15(6):436-41. Available from:

<http://tc.bmj.com/cgi/content/abstract/15/6/436>

King B and Borland R. The 'low tar' strategy and the changing construction of Australian cigarettes. *Nicotine & Tobacco Research*, 2004; 6(1):85-94. Available from:

<https://pubmed.ncbi.nlm.nih.gov/14982692>

Lewis LS, Kozlowski LT, and O'Connor RJ. Filter vent blocking * authors' reply. *Tobacco Control*, 2002; 11(3):285-a-6. Available from: <http://tc.bmjournals.com>

Kozlowski L and O'Connor R. Cigarette filter ventilation is a defective design because of misleading taste, bigger puffs, and blocked vents. *Tobacco Control*, 2002; 11(suppl.1):i40-i50. Available from:

http://tc.bmjournals.com/cgi/content/abstract/11/suppl_1/i40

Kozlowski L, O'Connor R, and Sweeney C. Cigarette design. In: *Risks associated smoking cigarettes with low machine-measured yields of tar and nicotine smoking and Tobacco control monograph*. Bethesda, Maryland: US Department of Health and Human Services, Public Health Service, National Institutes of Health 2001. Available from:

https://cancercontrol.cancer.gov/brp/TCRB/monographs/13/m13_complete.pdf.

Kozlowski LT, Mehta NY, Sweeney CT, Schwartz SS, Vogler GP, et al. Filter ventilation and nicotine content of tobacco in cigarettes from Canada, the united kingdom and the United States. *Tobacco Control*, 1998; 7(4):369-75. Available from: <http://tobaccocontrol.bmj.com/cgi/content/full/7/4/369>

Kozlowski L, White E, Sweeney C, Yost B, Ahern F, et al. Few smokers know their cigarettes have filter vents. *American Journal of Public Health*, 1998; 88(4):681-2. Available from:

<http://www.ajph.org/cgi/reprint/88/4/681-a>

Kozlowski L, Goldberg ME, Yost BA, Ahern FM, Aronson KR, et al. Smokers are unaware of the filter vents now on most cigarettes: Results of a national survey. *Tobacco Control*, 1996; 5(4):265-70.

Available from: <http://tobaccocontrol.bmj.com/cgi/content/abstract/5/4/265>

Hoffmann D, Djordjevic, MV and Brunnemann, KD. Changes in cigarette design and composition over time and how they influence the yields of smoke constituents., in *The FTC cigarette test method for determining tar, nicotine, and carbon monoxide yields of U.S. Cigarettes*. Smoking and Tobacco control monograph 7. Bethesda, MD: U.S. Department of Health and Human Services, Public Health

Service, National Institutes of Health.; 1996. p 15-37 Available from:
<https://cancercontrol.cancer.gov/brp/tcrb/monographs/monograph-07>.

Cohen J. Smokers' knowledge and understanding of advertised tar numbers: Health policy implications. *American Journal of Public Health*, 1996; 86(1):18–24. Available from:
<http://www.ajph.org/cgi/reprint/86/1/18>

Kozlowski LT, Rickert WS, Pope MA, Robinson JC, and Frecker RC. Estimating the yield to smokers of tar, nicotine, and carbon monoxide from the 'lowest yield' ventilated filter-cigarettes. *British Journal of Addiction*, 1982; 77(2):159–65. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/6956362>

John J and Wakeman H. Breakthrough of the high taste, low tar cigarette -- a case history of innovation Bates No 2021566196-2021566216. Richmond, Virginia Philip Morris Research Centre, 1980. Available from: <http://legacy.library.ucsf.edu/tid/pgb68e00/pdf?search=%222021566196%22>

Wynder E and Hoffmann D, *Tobacco and tobacco smoke: Studies in experimental carcinogenesis*. New York: Academic Press; 1967.

Wynder EL, Graham EA, and Croninger AB. Experimental production of carcinoma with cigarette tar. II. Tests with different mouse strains. *Cancer Research*, 1955; 15(7):445-8. Available from:
<https://www.ncbi.nlm.nih.gov/pubmed/13240687>

Wynder EL, Graham EA, and Croninger AB. Experimental production of carcinoma with cigarette tar. *Cancer Research*, 1953; 13(12):855-64. Available from:
<https://www.ncbi.nlm.nih.gov/pubmed/13116124>

12.8.2.3 Compensatory smoking

Pauwels C, Boots AW, Visser WF, Pennings JLA, Talhout R, et al. Characteristic human individual puffing profiles can generate more tnco than ISO and health Canada regimes on smoking machine when the same brand is smoked. *Int J Environ Res Public Health*, 2020; 17(9). Available from:
<https://www.ncbi.nlm.nih.gov/pubmed/32384697>

Talhout R, Richter PA, Stepanov I, Watson CV, and Watson CH. Cigarette design features: Effects on emission levels, user perception, and behavior. *Tob Regul Sci*, 2018; 4(1):592-604. Available from:
<https://www.ncbi.nlm.nih.gov/pubmed/29250577>

Scherer G and Lee PN. Smoking behaviour and compensation: A review of the literature with meta-analysis. *Regulatory Toxicology and Pharmacology*, 2014. Available from:
<http://www.ncbi.nlm.nih.gov/pubmed/25277253>

Gan Q, Lu W, Xu J, Li X, Goniewicz M, et al. Chinese "low-tar" cigarettes do not deliver lower levels of nicotine and carcinogens. *Tobacco Control*, 2010; 19(5):374-9. Available from:
<http://tobaccocontrol.bmj.com/content/19/5/374.abstract>

Strasser A, Tang K, Sanborn P, Zhou J, and Kozlowski L. Behavioral filter vent blocking on the first cigarette of the day predicts which smokers of light cigarettes will increase smoke exposure from blocked vents. *Exp Clin Psychopharmacol*, 2009; 17(6):405–12. Available from:

<http://psycnet.apa.org/index.cfm?fa=buy.optionToBuy&id=2009-23091-005&CFID=27421646&CFTOKEN=66635420>

Lee J, Chen S, and Hsieh C. Does perceived safety of light cigarette encourage smokers smoke more or inhale more deeply? *International Journal of Public Health*, 2008; 53(5):236–44. Available from: <https://springerlink3.metapress.com/content/1x68321073336744/resource-secured/?target=fulltext.pdf&sid=1loiuhmjoxf5lfec55nenmn&sh=www.springerlink.com>

Kozlowski L, Dreschel N, Stellman S, Wilkenfeld J, Weiss E, et al. An extremely compensatable cigarette by design: Documentary evidence on industry awareness and reactions to the barclay filter design cheating the tar testing system. *Tobacco Control*, 2005; 14(1):64–70. Available from: <http://ejournals.ebsco.com/direct.asp?ArticleID=4D458B67AC619260FCA9>

Kozlowski L and O'Connor R. Cigarette filter ventilation is a defective design because of misleading taste, bigger puffs, and blocked vents. *Tobacco Control*, 2002; 11(suppl.1):i40-i50. Available from: http://tc.bmjournals.com/cgi/content/abstract/11/suppl_1/i40

National Cancer Institute. Risks associated with smoking cigarettes with low machine-measured yield of tar and nicotine. *Smoking and Tobacco Control Monograph*, No 13 Bethesda, MD: U.S. Department of Health and Human Services National Institutes of Health, National Cancer Institute, 2001. Available from: <https://cancercontrol.cancer.gov/brp/tcrb/monographs/monograph-13>.

Benowitz N. Compensatory smoking of low yield cigarettes, in Risks associated with smoking cigarettes with low machine-measured yields of tar and nicotine. Bethesda, MD: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute; 2001. p 39-63 Available from: <https://cancercontrol.cancer.gov/brp/tcrb/monographs/monograph-13>.

Kozlowski LT, Mehta NY, Sweeney CT, Schwartz SS, Vogler GP, et al. Filter ventilation and nicotine content of tobacco in cigarettes from Canada, the united kingdom and the United States. *Tobacco Control*, 1998; 7(4):369–75. Available from: <http://tobaccocontrol.bmj.com/cgi/content/full/7/4/369>

Kozlowski L, White E, Sweeney C, Yost B, Ahern F, et al. Few smokers know their cigarettes have filter vents. *American Journal of Public Health*, 1998; 88(4):681–2. Available from: <http://www.ajph.org/cgi/reprint/88/4/681-a>

Kozlowski L, Goldberg M, Yost B, White E, Sweeney C, et al. Smokers' misperceptions of light and ultra-light cigarettes may keep them smoking. *American Journal of Preventive Medicine*, 1998; 15(1):78–9. Available from: http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VHT-3V8RGD5-2&_user=559483&_rdoc=1&_fmt=&_orig=search&_sort=d&_view=c&_acct=C000028178&_version=1&_urlVersion=0&_userid=559483&md5=ff27f9f595e900718f561d509e68a9f

Kozlowski L, Goldberg ME, Yost BA, Ahern FM, Aronson KR, et al. Smokers are unaware of the filter vents now on most cigarettes: Results of a national survey. *Tobacco Control*, 1996; 5(4):265–70. Available from: <http://tobaccocontrol.bmj.com/cgi/content/abstract/5/4/265>

Schneider W. Consumer demand responsiveness (r & d report no. 126e). Brown & Williamson, 1992.

12.8.2.4 The health effects of smoking cigarettes with filters and filter ventilation

Tanik, A., & Demirci, F. (2022). Effect of unfiltered cigarettes on marginal bone loss of dental implants: A single center 4-year retrospective clinical study. *Am J Dent*, 35(5), 255-262. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36261406>

Okrit F, Chantranuwatana P, Werawatganon D, Chayanupatkul M, and Sanguanrungrsirikul S. Changes of vitamin d receptors (vdr) and mapk activation in cytoplasmic and nuclear fractions following exposure to cigarette smoke with or without filter in rats. *Heliyon*, 2021; 7(1):e05927. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33553726>

Freitas-Lemos R, Tegge AN, Stein JS, DeHart WB, Reisinger SA, et al. The experimental tobacco marketplace: Effects of low-ventilated cigarette exposure. *Addictive Behaviors*, 2021; 125:107160. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34710841>

ang SQ, Wang WJ, Wu CC, Bao LJ, Yu Y, et al. Low tar level does not reduce human exposure to polycyclic aromatic hydrocarbons in environmental Tobacco smoke. *Environmental Science & Technology*, 2020. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31859494>

Tanner NT, Thomas NA, Ward R, Rojewski A, Gebregziabher M, et al. Association of cigarette type and nicotine dependence in patients presenting for lung cancer screening. *Chest*, 2020. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32603713>

Oren E, Pulvers K, Romero DR, Barber C, Carter E, et al. Effects of unfiltered cigarettes on smoking behavior and toxicant exposure: Protocol for a randomized crossover clinical trial. *JMIR Res Protoc*, 2020; 9(12):e19603. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33289680>

Tanner NT, Thomas NA, Ward R, Rojewski A, Gebregziabher M, et al. Association of cigarette type with lung cancer incidence and mortality: Secondary analysis of the National Lung Screening Trial. *JAMA Internal Medicine*, 2019; 179(12):1710-2. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31633739>

Lee PN. Tar level of cigarettes smoked and risk of smoking-related diseases. *Inhalation Toxicology*, 2018; 30(1):5-18. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29488428>

Song MA, Benowitz NL, Berman M, Brasky TM, Cummings KM, et al. Cigarette filter ventilation and its relationship to increasing rates of lung adenocarcinoma. *Journal of the National Cancer Institute*, 2017; 109(12). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28525914>

Schulz M, Gerber A, and Groneberg DA. Are filter-tipped cigarettes still less harmful than non-filter cigarettes?-a laser spectrometric particulate matter analysis from the non-smokers point of view. *Int*

J Environ Res Public Health, 2016; 13(4). Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27092519>

US Department of Health and Human Services, The health consequences of smoking - 50 years of progress: A report of the Surgeon General. Atlanta GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health 2014. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/24455788>.

Nersesyan A, Muradyan R, Kundi M, and Knasmueller S. Impact of smoking on the frequencies of micronuclei and other nuclear abnormalities in exfoliated oral cells: A comparative study with different cigarette types. *Mutagenesis*, 2011; 26(2):295-301. Available from:

<https://pubmed.ncbi.nlm.nih.gov/21044989/>

Ito HM, K. et al Nonfilter and filter cigarette consumption and the incidence of lung cancer by histological type in japan and the United States: Analysis of 30-year data from population-based cancer registries. *International Journal of Cancer*, 2011; 128:1918-28.

Harris B. The intractable cigarette 'filter problem.'. *Tobacco Control*, 2011; 20(Suppl1):i10 - i6.

Available from: https://tobaccocontrol.bmj.com/content/20/Suppl_1/i10

Burns D, Anderson C, and Gray N. Do changes in cigarette design influence the rise in adenocarcinoma of the lung? *Cancer Causes and Control*, 2011; 22(1):13-22. Available from:

<http://www.springerlink.com/content/15252n560213x511/>

Hecht SS, Murphy SE, Carmella SG, Li S, Jensen J, et al. Similar uptake of lung carcinogens by smokers of regular, light, and ultralight cigarettes. *Cancer Epidemiology, Biomarkers & Prevention*, 2005; 14(3):693-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/15767351>

King W, Carter SM, Borland R, Chapman S, and Gray N. The Australian tar derby: The origins and fate of a low tar harm reduction programme. *Tobacco Control*, 2003; 12 Suppl 3(suppl. 3):iii61-70.

Available from: <https://www.ncbi.nlm.nih.gov/pubmed/14645950>

No authors listed. Monograph 13: Risks associated with smoking cigarettes with low tar machine-measured yields of tar and nicotine. National Cancer Institute, 2001. Available from:

<https://cancercontrol.cancer.gov/brp/tcrb/monographs/13/index.html>.

National Cancer Institute. Risks associated with smoking cigarettes with low machine-measured yield of tar and nicotine. Smoking and Tobacco Control Monograph, No 13 Bethesda, MD: U.S.

Department of Health and Human Services National Institutes of Health, National Cancer Institute, 2001. Available from: <https://cancercontrol.cancer.gov/brp/tcrb/monographs/monograph-13>.

Thun MJ and Heath CW, Jr. Changes in mortality from smoking in two American cancer society prospective studies since 1959. *Preventive Medicine*, 1997; 26(4):422-6. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/9245660>

Stellman SD, Muscat JE, Hoffmann D, and Wynder EL. Impact of filter cigarette smoking on lung cancer histology. *Prev Med*, 1997; 26(4):451-6. Available from:

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WPG-45R7505-

[C&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_version=1&_urlVersion=0&_userid=10&md5=968ebf8b023d32db169ef26f777b7171](https://pubmed.ncbi.nlm.nih.gov/8734831/)

Engeland A, Haldorsen T, Andersen A, and Tretli S. The impact of smoking habits on lung cancer risk: 28 years' observation of 26,000 Norwegian men and women. *Cancer Causes Control*, 1996; 7(3):366-76. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/8734831>

Pauly JL, Allaart HA, Rodriguez MI, and Streck RJ. Fibers released from cigarette filters: An additional health risk to the smoker? *Cancer Research*, 1995; 55(2):253-8. Available from: <http://cancerres.aacrjournals.org/content/canres/55/2/253.full.pdf>

Frost C, Fullerton FM, Stephen AM, Stone R, Nicolaides-Bouman A, et al. The tar reduction study: Randomised trial of the effect of cigarette tar yield reduction on compensatory smoking. *Thorax*, 1995; 50(10):1038-43. Available from: <http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=475015&blobtype=pdf>

Sidney S, Tekawa IS, and Friedman GD. A prospective study of cigarette tar yield and lung cancer. *Cancer Causes Control*, 1993; 4(1):3-10. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/8431528>

S Department of Health and Human Services, Health consequences of smoking: Cancer. Washington, DC 1982. Available from: <https://profiles.nlm.nih.gov/spotlight/nn/catalog/nlm:nlmuid-101584932X500-doc>.

US Office on Smoking and Health, The health consequences of smoking: The changing cigarette. Vol. DHHS Publication No. (PHS) 81-50156. Public Health Service, Office of the Surgeon General; 1981. Available from: <https://profiles.nlm.nih.gov/101584932X310>.

Rimington J. The effect of filters on the incidence of lung cancer in cigarette smokers. *Environmental research*, 1981; 24(1):162-6. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/7215323>

Howe GR, Burch JD, Miller AB, Cook GM, Esteve J, et al. Tobacco use, occupation, coffee, various nutrients, and bladder cancer. *Journal of the National Cancer Institute*, 1980; 64(4):701-13. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/6928984>

Wynder EL and Stellman SD. Impact of long-term filter cigarette usage on lung and larynx cancer risk: A case-control study. *Journal of the National Cancer Institute*, 1979; 62(3):471-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/283277>

Todd GF, Hunt BM, and Lambert PM. Four cardiorespiratory symptoms as predictors of mortality. *Journal of Epidemiology and Community Health*, 1978; 32(4):267-74. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/744818>

Hawthorne VM and Fry JS. Smoking and health: The association between smoking behaviour, total mortality, and cardiorespiratory disease in west central Scotland. *Journal of Epidemiology and Community Health*, 1978; 32(4):260-6. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/744817>

Bross ID and Gibson R. Risks of lung cancer in smokers who switch to filter cigarettes. *American Journal of Public Health and the Nations Health*, 1968; 58(8):1396-403. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/5691372>

News:

12.8 Construction of cigarettes and cigarette filters

12.8.1 Construction of cigarettes

No authors listed. Smoking long or ultralong cigarettes increases risk of lung cancer. *Medical Xpress*, 2013. Available from: <http://medicalxpress.com/news/2013-10-ultralong-cigarettes-lung-cancer.html>

Trade practices (consumer product safety standard) (reduced fire risk cigarettes) regulations 2008 Select Legislative Instrument 2008 no. 195; Available from: <https://www.legislation.gov.au/Details/F2009C00252>.

12.8.2 Cigarette filters

Callard, C. Growing support in Europe for banning cigarette filters. *Physicians for a Smoke-Free Canada*. 2023. April 26, 2023. Retrieved from <https://smoke-free-canada.blogspot.com/2023/04/growing-support-for-banning-cigarette.html>

No author listed. Cigarette filters. *Quartz*, 2018. Available from: <https://qz.com/emails/quartz-obsession/1408216/>

Rossel S. Focus on the filter. *Tobacco Reporter*, 2016. Available from: <https://www.tobaccoreporter.com/2016/08/focus-on-the-filter/>

12.8.2.1 Development of the modern cigarette filter

Menezes F. These biodegradable cigarette filter grow into plants. 2020. Last update: Viewed Available from: <https://www.brightvibes.com/1305/en/these-biodegradable-cigarette-filters-grow-into-plants>

No authors listed. BAT launches dunhill superslim capsule cigarette. *The Korea Herald*, 2014. Available from: <http://www.koreaherald.com/view.php?ud=20141105000745>

George TW and Keith CH. The selective filtration of tobacco smoke. *Lorillard records.*: Truth Tobacco Industry Documents, 1965. Last update: Viewed Available from: <https://www.industrydocuments.ucsf.edu/tobacco/docs/#id=rthl0118>.

12.8.2.2 Filter ventilation

Virginia Tech. Scientists seek unfiltered truth about 'light' cigarettes. *Medical Xpress*, 2018. Available from: <https://medicalxpress.com/news/2018-03-scientists-unfiltered-truth-cigarettes.html>

Cancer Council Australia. Filter ventilation. Position statement - Reducing the palatability of tobacco products: banning the use of filter design features and flavourings, 2018. Available from: https://wiki.cancer.org.au/policy/Position_statement_-_Reducing_palatability#Filter_ventilation

George TW and Keith CH. The selective filtration of tobacco smoke. Lorillard records.: Truth Tobacco Industry Documents, 1965. Last update: Viewed Available from: <https://www.industrydocuments.ucsf.edu/tobacco/docs/#id=rthl0118>.

12.8.2.3 Compensatory smoking

No authors listed. Is this the next Tobacco product to come under FDA scrutiny? CSP Daily News, 2017. Available from: <http://www.cspdailynews.com/category-news/tobacco/articles/next-tobacco-product-come-under-fda-scrutiny>

Tavernise S. F.D.A. Bans sales of 4 cigarette products by r.J. Reynolds. The New York Times, 2015. Available from: www.nytimes.com/2015/09/16/health/fda-orders-rj-reynolds-to-stop-selling-4-cigarette-products.html?emc=edit_tnt_20150915&nid=60534081&tntemail0=y

Myers M. FDA for first time orders major cigarette brand pulled off the market, sending strong message to manufacturers about complying with 2009 law. Campaign for Tobacco-Free Kids (CTFK), 2015. Available from: http://www.tobaccofreekids.org/press_releases/post/2015_09_15_fda

listed Na. Order #59-remand, reinstating the descriptor ban. Tobacco On Trial 2015. Available from: <http://www.tobacco-on-trial.com/2015/09/21/order-59-remand-reinstating-the-descriptor-ban-sept-21-2015/>

listed Na. FDA halts sales of 4 r.J. Reynolds cigarette brands AP - Associated Press, 2015. Available from: http://www.journalnow.com/business/national_international_ap/fda-halts-sales-of-r-j-reynolds-cigarette-brands/article_bde905ac-04b8-5f2e-ab64-2d8258359fa8.html

Kux L. Enforcement policy for certain (provisional) tobacco products that the food and drug administration finds not substantially equivalent; guidance for industry and tobacco retailers; availability. US 2015. Available from: <https://www.federalregister.gov/articles/2015/09/14/2015-23001/enforcement-policy-for-certain-provisional-tobacco-products-that-the-food-and-drug-administration>.

12.8.2.4 The health effects of smoking cigarettes with filters and filter ventilation

No authors listed. Smoking unfiltered cigarettes doubles risk for lung cancer mortality. Healio Pulmonology, 2019. Available from: <https://www.healio.com/pulmonology/smoking-and-tobacco/news/online/%7B4db1a1cc-f3df-4377-bab6-7adec149e3e5%7D/smoking-unfiltered-cigarettes-doubles-risk-for-lung-cancer-mortality>

National Cancer Institute. Light cigarettes and cancer risk. 2010. Last update: 28 October 2010; Viewed February 2017. Available from: <https://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco/light-cigarettes-fact-sheet>.

Australian Competition & Consumer Commission. Low yield cigarettes 'not a healthier option': \$9 million campaign. ACCC Media Release, 2005. Available from: <https://www.accc.gov.au/media-release/low-yield-cigarettes-not-a-healthier-option-9-million-campaign>