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Position Paper

Why menthol as a tobacco additive should be banned

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Background

The question of how to regulate additives used in tobacco products, such as menthol, is one of the issues addressed in the proposal for revision of the EU Tobacco Product Directive, which was submitted in December 2012¹. Menthol has a characteristic odour and taste. It is the additive most widely used in cigarettes and the tobacco industry uses it for targeted advertising. Article 6 of the proposed directive states that "member states shall prohibit the placing on the market of tobacco products with a characterising flavour."

Currently, the proposal is being deliberated upon hearings and consultations. In anticipation of stricter regulation, several publications of the tobacco industry and documents authored by lobbyists of the industry have been published. The current state of scientific knowledge is often represented in a biased or selective manner in these papers.

Menthol increases the attractiveness of tobacco products

Menthol in tobacco products has various pharmacological effects on the human body, for example masking the irritating effect of tobacco smoke, making it easier to inhale, increasing the potential for addiction and thereby increasing the risk of cancer² (Figure 1). It helps to increase the attractiveness of inherently harmful and addictive products among consumers, especially among young people and new smokers.

There is a global consensus that the attractiveness of toxic tobacco products should be significantly reduced through the WHO Framework Convention on Tobacco Control (FCTC) international law, which has been already adopted by 177 nations³. Article 9 and 10 of the FCTC are concerned with the regulation of tobacco product composition, including dissemination of information on tobacco products to the general public. The partial guideline of FCTC article 9 states that regulating ingredients aimed at reducing tobacco product attractiveness can contribute to reducing the prevalence of tobacco use and dependence among new and continuing users.

Article 9 of the FCTC calls for effective measures for the regulation of the contents of tobacco products, and the guidelines to this article state as follows: "From the perspective of public health, there is no justification for permitting the use of ingredients, such as flavouring agents, which help make tobacco products attractive. [...] Attractiveness and its impact on dependence should be taken into account

1 European Commission (2012) Proposal for a Directive of the European Parliament and of the Council on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products. COM(2012) 788 final, Brussels, http://ec.europa.eu/health/tobacco/docs/com_2012_788_en.pdf

2 German Cancer Research Center (2012) Menthol Capsules in Cigarette Filters – Increasing the Attractiveness of a Harmful Product. Volume 17, Red Series Tobacco Prevention and Tobacco Control, http://www.dkfz.de/de/tabakkontrolle/download/Publikationen/RoteReihe/Band_17_Menthol_Capsules_in_Cigarette_Filters_en.pdf

3 <http://www.who.int/fctc/en>

when considering regulatory measures. [...] Masking tobacco smoke harshness with flavours contributes to promoting and sustaining tobacco use." The guidelines recommend the banning of ingredients that improve the taste of tobacco products as they increase the attractiveness of harmful products and thus in the end foster the emergence of addiction.

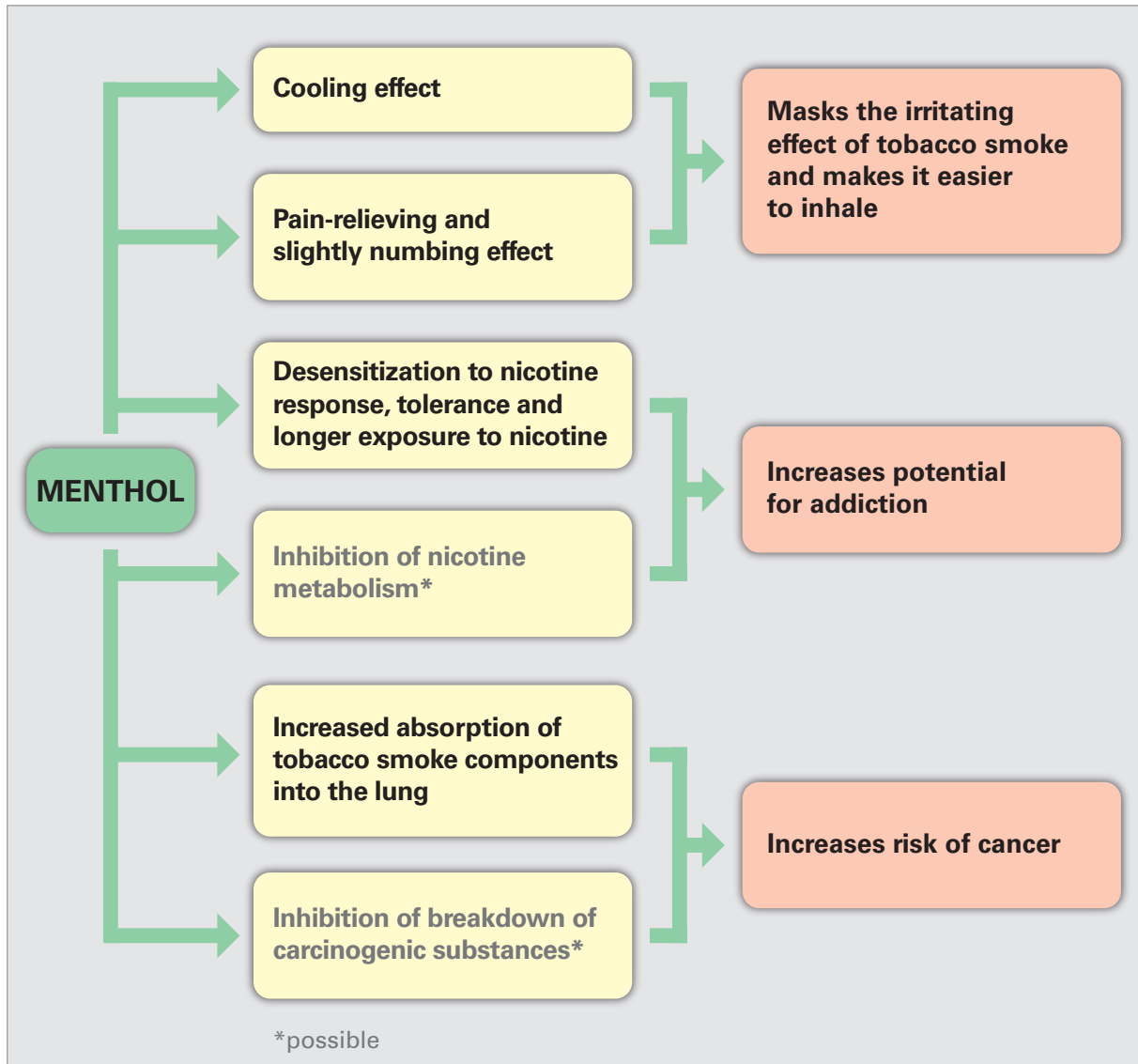


Figure 1: Pharmacological effects of menthol and their impact during the course of smoking. Illustration: German Cancer Research Center, Unit Cancer Prevention, 2012.

Menthol as a tobacco additive targets youth and may promote smoking initiation

The Tobacco Products Scientific Advisory Committee (TPSAC) of the U.S. Food and Drug Administration (FDA) concluded in its detailed report on menthol cigarettes and public health⁴ "that menthol has cooling and anesthetic effects that reduce the harshness of cigarette smoke. Research indicates that menthol acts on both thermal and nociceptive receptors. This dual action results in both cooling and counter irritant effects. Menthol desensitizes receptors by which nicotine produces irritant effects,

4 Tobacco Products Scientific Advisory Committee (2011) Menthol Cigarettes and Public Health: Review of the Scientific Evidence and Recommendations. Submitted to FDA: March 23, 2011, final edits from the July 21, 2011 meeting are included, <http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/TobaccoProductsScientificAdvisoryCommittee/UCM269697.pdf>

thereby, reducing the irritation from nicotine in tobacco smoke. The implications of these findings are that by reducing the harshness of tobacco smoke menthol could facilitate initiation or early persistence of smoking by youth. Also, by reducing the harshness of smoke, it is biologically plausible that menthol would facilitate deeper and more prolonged inhalation of tobacco smoke, resulting in greater smoke intake per cigarette.”

Countries, where menthol cigarette use is widely prevalent and data is available, show that menthol cigarettes especially attract youth:

In the USA, cigarette sales decreased by 22 per cent between 2000 and 2005, the menthol cigarette sales remained stable during this period. Moreover, between 2004 and 2008, the share of smokers stating they had consumed menthol cigarettes during the past month actually increased from 31 per cent to almost 34 per cent, the largest increases being among younger people, with whom menthol cigarette consumption is very popular. These figures include those smokers who only occasionally consume menthol cigarettes. The share of regular smokers of menthol cigarettes is just under 27 per cent, according to a survey from 2006/2007.

Among American adolescents while the overall share of smokers decreased, the share of smokers of menthol cigarettes increased. According to a study from the year 2000 the share of menthol cigarette smokers among 12-to-18-year-old smokers was 40 per cent, this rose to 47 per cent in 2002. This represents an increase by 18.5 per cent within this menthol group. Taking the period between 2004 and 2008 as a reference, there is an increase among the 12-to-17-year-olds from 43.5 per cent to 47.7 per cent. Generally speaking, the share of menthol brand smokers was lower among higher age groups than among adolescents and younger age groups. Correspondingly, the increase was also less in the higher age group compared to the lower age group (Figure 2). Furthermore, the share of menthol brands is higher among adolescent new smokers, who have been smoking for not more than one year, than in those who have smoked for more than one year. **This case study of USA implies that menthol cigarettes could be gateway products for smoking.**

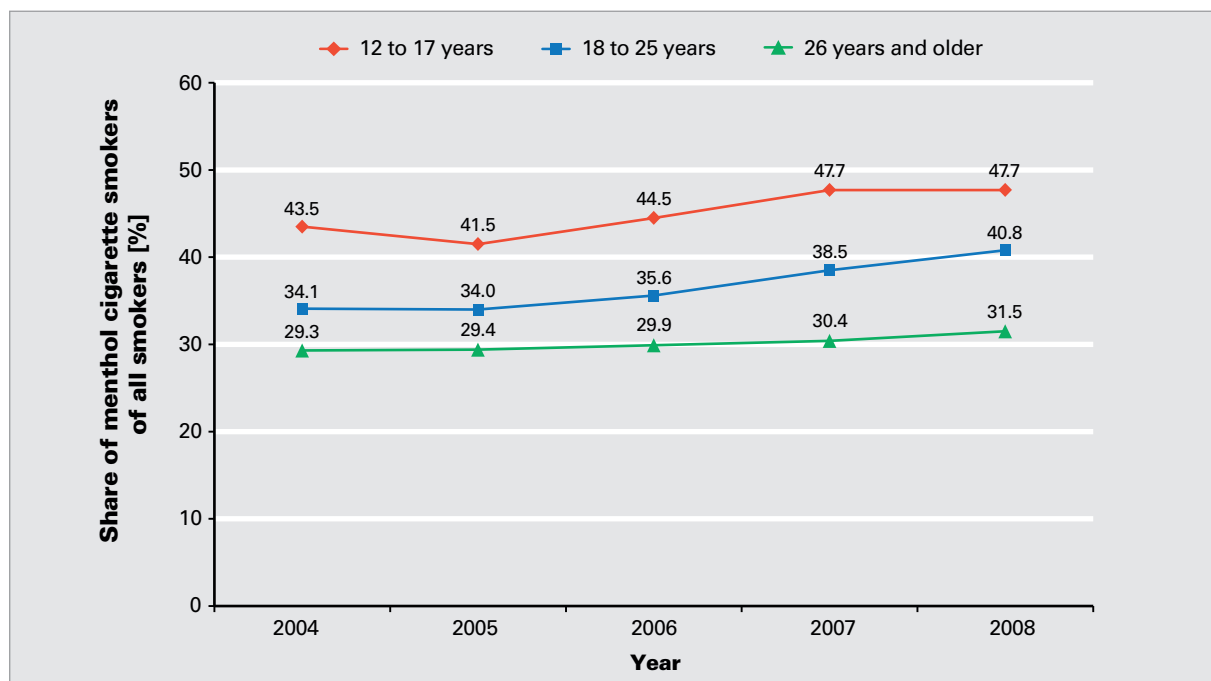


Figure 2: Share of menthol cigarette smokers of all smokers according to age in the USA (smoker = “have consumed cigarettes during the past month”; Data: SAMHSA 2009⁵). Illustration: German Cancer Research Center, Unit Cancer Prevention, 2012.

⁵ Substance Abuse and Mental Health Services Administration (2009) The NSDUH Report: Use of Menthol Cigarettes. U.S. Department of Health and Human Services, Rockville, Maryland, USA

In Japan, smoking prevalence among men is among the highest smoking prevalence world-wide while smoking prevalence among Japanese women is among the lowest. Since the 1990s, when the smoking prevalence among men was higher than 50 per cent, the figures have decreased to just fewer than 37 per cent by 2008. Among women, it was constantly at about ten per cent during this whole period of time. However, the prevalence among young and youthful women (20 to 40 years of age) has increased from 11 per cent in 1990 to 18 per cent in 2005. Here, too, is a possible connection to the specific, women-oriented marketing of menthol cigarettes. In 1986, the Japanese cigarette market was opened to foreign brands, and advertising of the newly introduced menthol brands was specifically directed towards young women. The menthol content in the cigarettes created especially for the Japanese market was much lower than that in US cigarettes. Menthol cigarettes in Japan were mainly smoked because they lacked the tar-like smell of regular cigarettes. Their marketing was based on typically female attributes such as "slim," "light" or "mild". Producers also noticed that menthol was not only attractive for young women but also for new smokers. Between 1996 and 2000, the preference for menthol brands increased among female high school student smokers from roughly 20 to almost 50 per cent, while the increase among male student smokers during the same period of time was from 8 to 18 per cent. The market share of menthol cigarettes, which had been less than one per cent in 1980, reached 20 per cent in 2008. **The case study of Japan very clearly shows that menthol cigarettes can serve as a gateway product⁶.**

The TPSAC makes the overall recommendation to FDA, that "Removal of menthol cigarettes from the market place would benefit public health in the United States."⁷ This was based on the concerning rise of menthol cigarette smoking among youth. Menthol cannot be considered merely a flavouring additive to tobacco. Its pharmacological actions reduce the harshness of smoke and the irritation from nicotine, and may increase the likelihood of nicotine addiction in adolescents and young adults who experiment with smoking. Furthermore, the distinct sensory characteristics of menthol may enhance the addictiveness of menthol cigarettes, which appears to be the case among youth. TPSAC has found that the availability of menthol cigarettes has an adverse impact on public health by increasing the numbers of smokers with resulting premature death and avoidable morbidity.

Conclusion

The German Cancer Research Center strongly supports the proposal for revision of the EU Tobacco Product Directive, which includes a ban on menthol together with other characterizing flavours. The proposal of the EU Commission will go a long way in protecting the youth from tobacco initiation and in reducing the use of tobacco, thus reducing the high tobacco related mortality and morbidity in the EU.

6 German Cancer Research Center (2012) Menthol Capsules in Cigarette Filters – Increasing the Attractiveness of a Harmful Product. Volume 17, Red Series Tobacco Prevention and Tobacco Control, http://www.dkfz.de/de/tabakkontrolle/download/Publicationen/RoteReihe/Band_17_Menthol_Capsules_in_Cigarette_Filters_en.pdf

7 Tobacco Products Scientific Advisory Committee (2011) Menthol Cigarettes and Public Health: Review of the Scientific Evidence and Recommendations. Submitted to FDA: March 23, 2011, final edits from the July 21, 2011 meeting are included, <http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/TobaccoProductsScientificAdvisoryCommittee/UCM269697.pdf>