

Switching Behaviors and Use Patterns of a Novel Nicotine Pouch Product among Adults Who Use Dip or Snuff: Results from an Actual Use Study

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Introduction

- Over five million adults in the United States use moist smokeless tobacco (MST) products, which includes dip/snuff; a substantial portion of which (>20%) also smoke cigarettes.¹
- Adults who use dip/snuff are exposed to harmful and potentially harmful constituents (HPHCs), including nitrosamines, acetaldehyde, and formaldehyde.
- Exposure to HPHCs is greater when adults use dip/snuff and smoke cigarettes (i.e., dual use).
- For adults who cannot or will not stop using dip/snuff, completely switching to on! PLUS™ nicotine pouch (NP) products—oral tobacco-derived NP products that are tobacco leaf-free—can reduce exposure to HPHCs.
- Study Aim:** To characterize tobacco use patterns and behaviors among adults who use dip or snuff, with and without cigarette smoking, when provided with on! PLUS™ NPs for actual use in their natural environment

Methods

- Study Design:** Longitudinal observational study (Figure 1)
- Products Provided:** on! PLUS™ NP, nine varieties consisting of three flavor varieties (mint, wintergreen, tobacco flavor) in three nicotine levels (6mg, 9mg, 12mg)
- Assessment:** Self-reported product use and other tobacco-use-related variables collected via daily diaries and weekly surveys.
- Participants:** Adults who use dip/snuff and Adults who use dip/snuff and cigarettes; both groups were not planning to quit tobacco in 30 days from screening

Results

- A total of 917 participants completed the study and were included in the analysis.
- During the five-week Extended Use period (Weeks 2-6):
 - Participants used NPs almost daily.
 - More than 70% of participants behaviorally switched to on! PLUS™ NPs (Figure 2).
 - The proportion of participants who did not use dip/snuff increased from Week 2 to Week 6 (Figure 3).
 - Among participants who used both dip/snuff and smoked cigarettes at enrollment, the proportion of those who did not smoke increased from Week 2 to Week 6 (Figure 4).
 - Most participants (56%-70%) used mint and/or wintergreen flavors; <25% used the tobacco flavor (Figure 5).
 - Among those who behaviorally switched to NPs, the majority (90%) used mint and/or wintergreen flavors in Week 6.

Conclusion

- on! PLUS™ NPs can potentially facilitate switching from dip/snuff among adults who use dip or snuff as well as switching from cigarettes to the NPs among those who use dip/snuff and cigarettes.
- Mint and wintergreen varieties were much more commonly used than tobacco varieties, including among those who switched completely from dip/snuff or dip/snuff and cigarettes.

Limitations

- Cannot infer causality due to the observational study design
- Analyses were based on participants who completed the study. Nonetheless, a substantial portion (~56%) of participants behaviorally switched when assuming no switching for all participants who dropped out (i.e., intent-to-treat analysis).

References

1.Cornelius ME, Loretan CG, Jamal A, et al. Tobacco Product Use Among Adults — United States, 2021. MMWR Morb Mortal Wkly Rep. 2023;72(18):475–483.
2.Tomar SL, et al. Patterns of dual use of cigarettes and smokeless tobacco among US males: findings from national surveys. Tob Control. 2010. PMID: 20008157

- Over 70% of participants (i.e., adults who used dip or snuff) switched to on! PLUS™ nicotine pouches by the end of this actual use study.
- Among participants who behaviorally switched from dip/snuff to on! PLUS™ nicotine pouches, >90% used mint and/or wintergreen flavor varieties; <10% used the tobacco flavor only.

Figure 1: Study Design

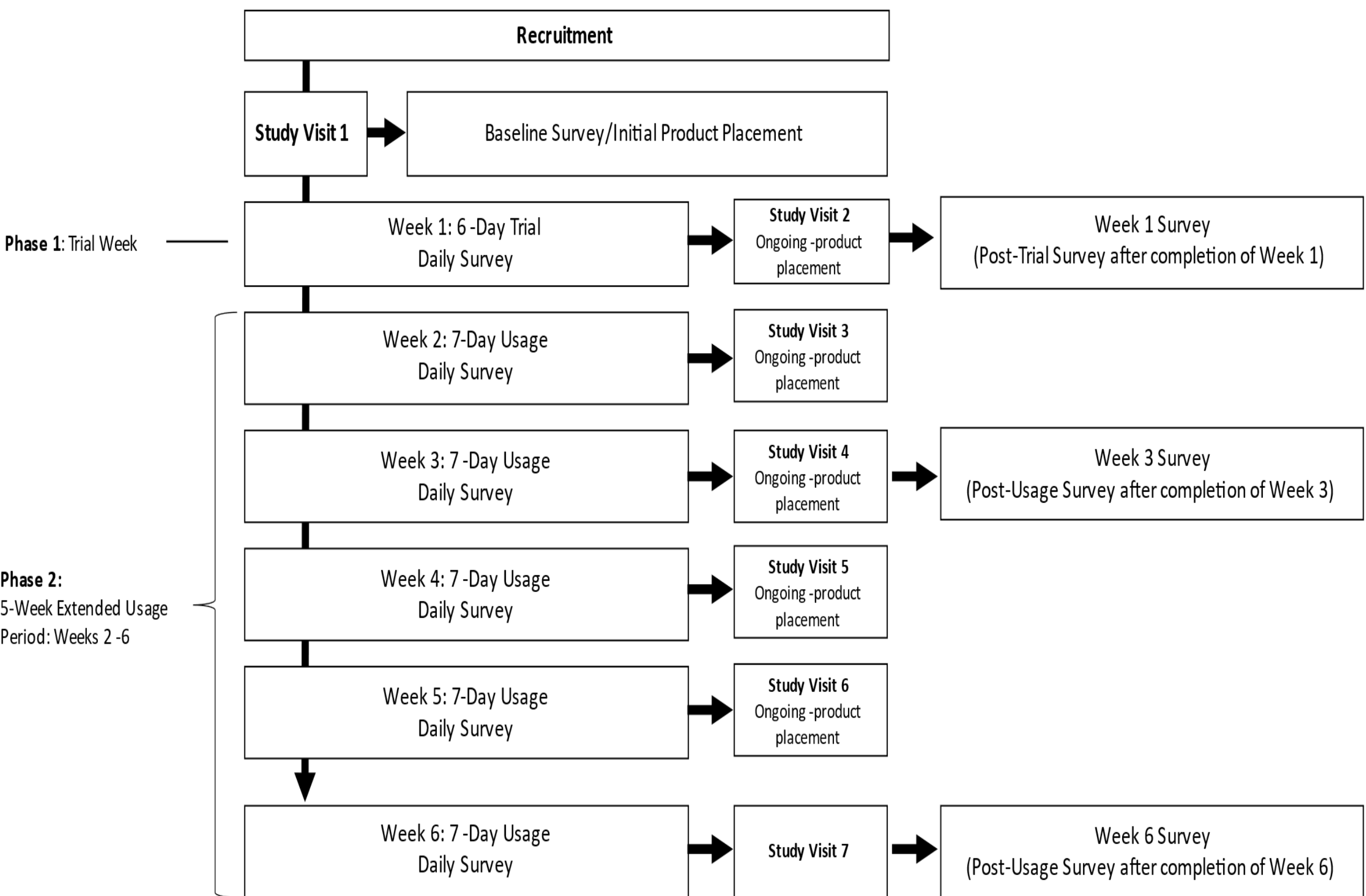


Figure 2. Week 6 Behavioral Switching and Reduction in MST or Cigarette Consumption

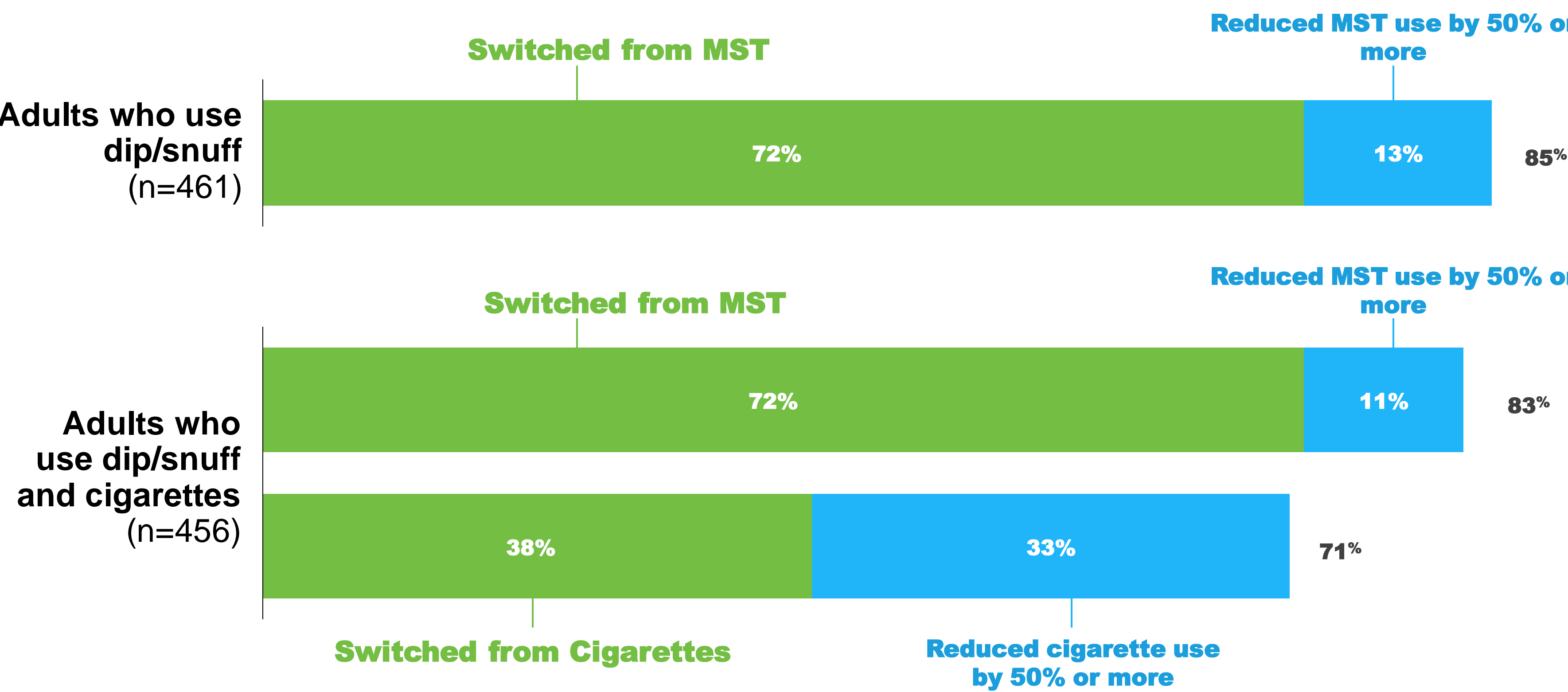


Figure 3. Change in MST Use: Adults Who Use Dip/Snuff (n= 461)

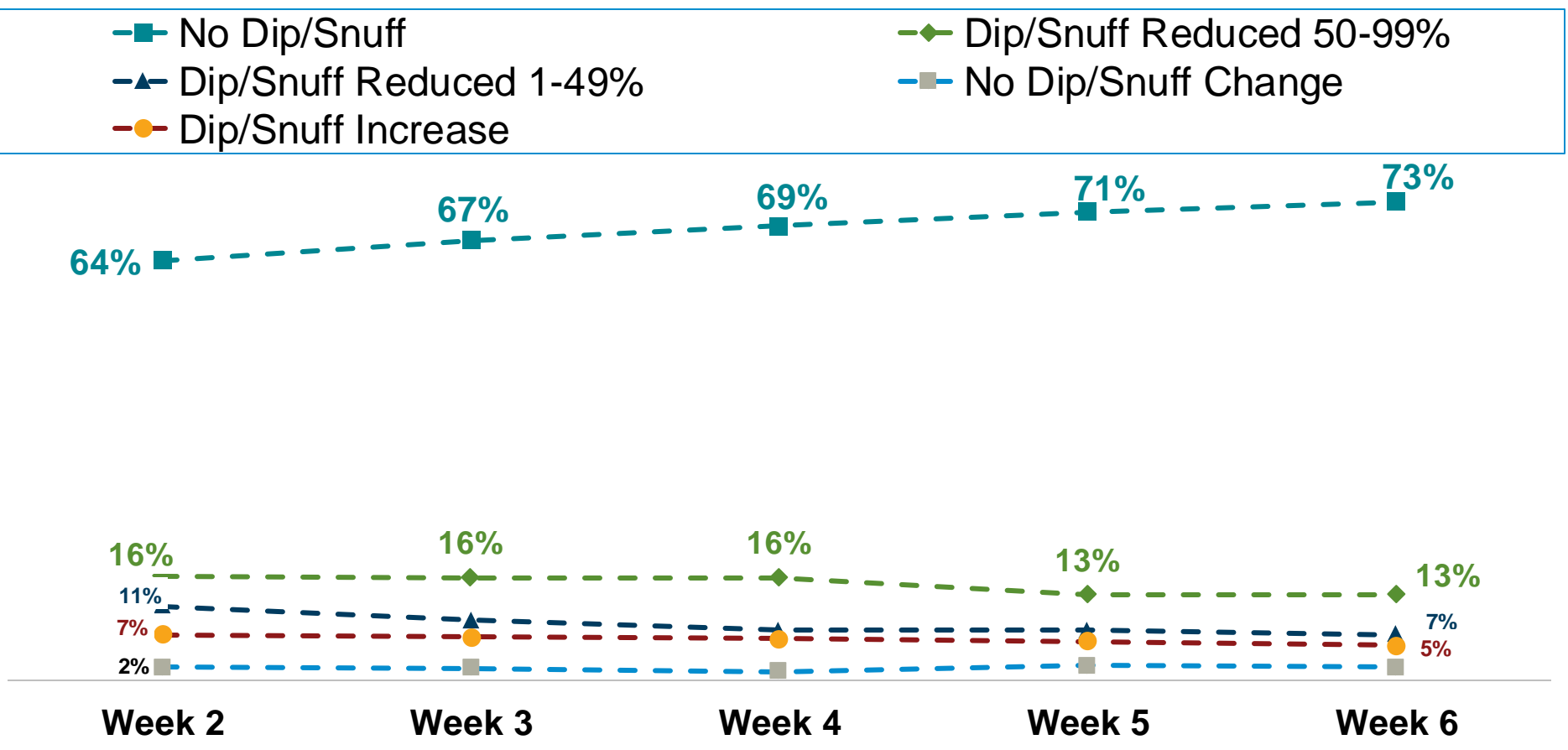


Figure 4. Change in Cigarette Consumption: Adults Who Use Dip/Snuff and Cigarettes (n= 456)

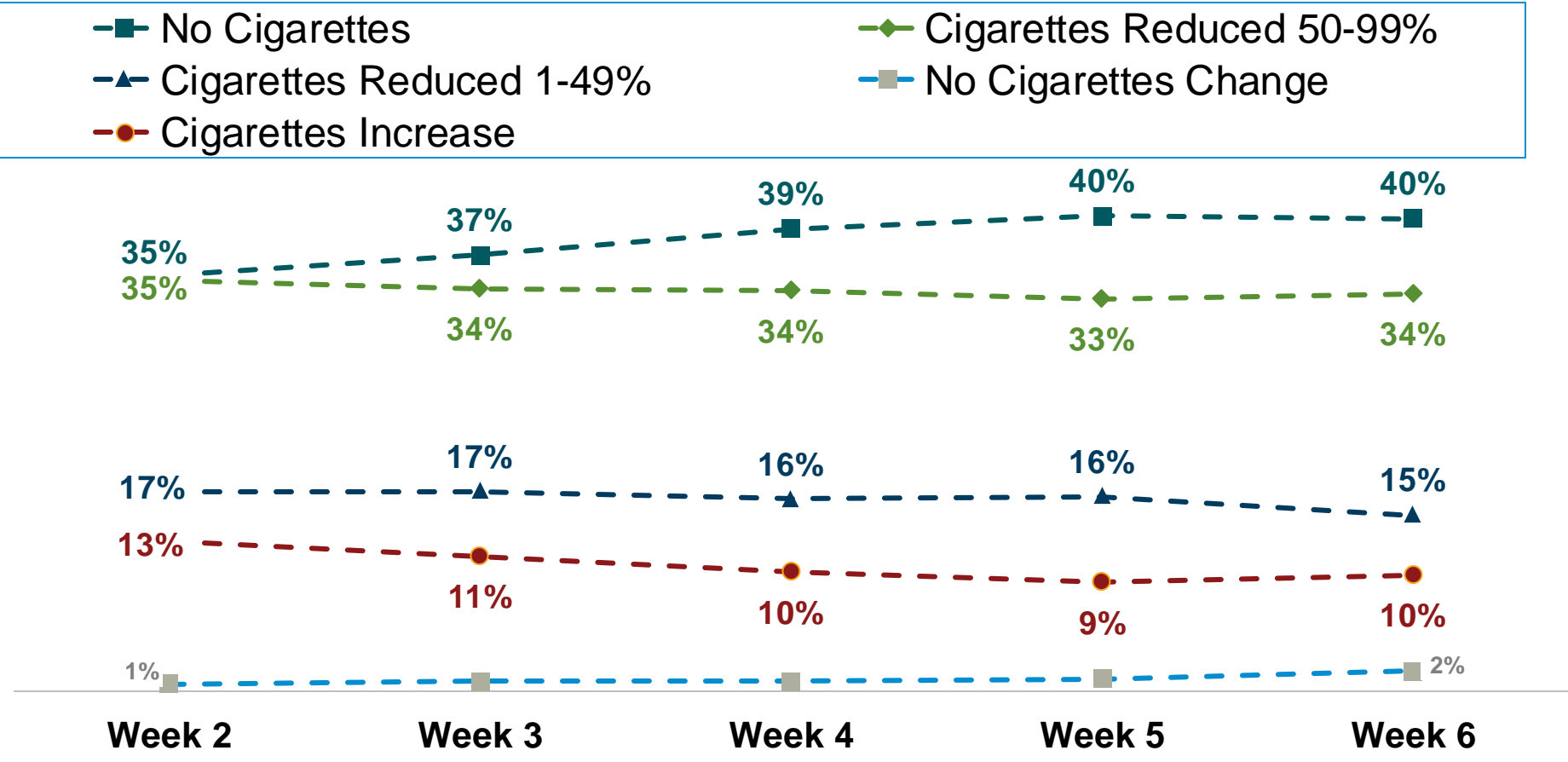
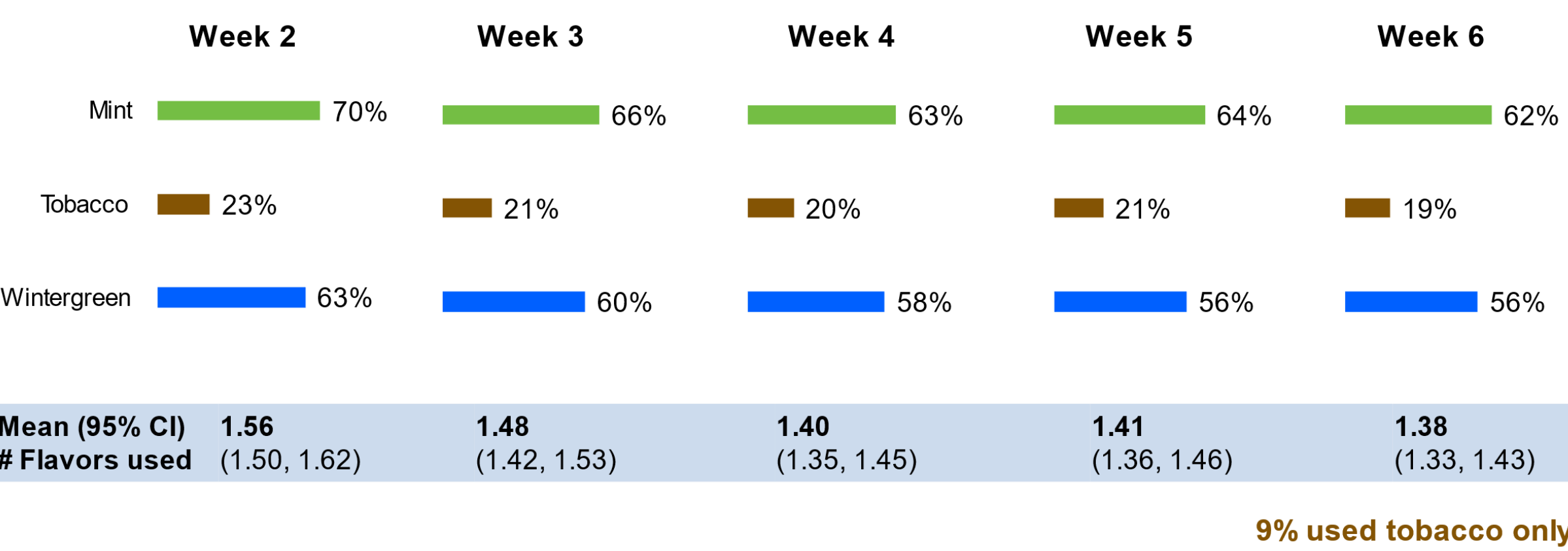


Figure 5. on! PLUS™ NP Flavor Used among Adults Who Used MST But Did Not Smoke Cigarettes (n=461)



9% used tobacco only



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