

Analysis of Consumer Cooking Spray Usage in a Simulated Free-living Environment

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INTRODUCTION: Non-stick cooking sprays are commonly used in food preparation to allow for easy removal and cleaning of food from cookware. The serving size of the spray, which is supposed to reflect actual use by consumers, is 0.25 seconds in the United States. The small serving size allow companies to advertise cooking spray as fat-free and calorie-free despite the main ingredient being oil (a calorie dense nutrient), which may be misleading to consumers who are attempting to make health-conscious nutrition decisions. A previous survey of almost 1,100 respondents administered by our research group found an average cooking spray use of 1.5-2.0 seconds, which is 6-8 times the serving size and provides preliminary evidence that the current serving size is not reflective of actual use. **PURPOSE:** This study seeks to determine the true use of cooking spray in a free-living environment to establish the appropriateness of the current cooking spray serving size. **METHODS:** Participants (n= 25-35, Age \geq 18 years) will complete one laboratory visit, spraying aerosol-based cooking spray on seven different items (8.5-inch pan, 9-inch pan, 11-inch pan, small/medium/large baking sheets, cake pan) with their dominant or non-dominant hand while being video-recorded. After the items have all been sprayed, the participant will wash the cookware; the spraying and washing will be repeated with the opposite hand. The participants will be encouraged to apply spray as they would if using the cookware for preparing food, but no instruction on method of spraying will be given. The videos of the participants will be analyzed using Adobe Premiere Pro to determine the exact spraying time for each participant. Additionally, the aforementioned survey will be administered to those who complete the spraying and washing protocol. **CONCLUSION:** The analysis of the cooking spray use in a free-living environment will help determine if the current serving size represents actual consumer use. If cooking spray use is substantially different than what is reflected in the serving size and if the nutrition label is misleading to consumers, it will provide justification for the Food and Drug Administration to consider a change regarding the serving size for cooking spray.