When Ugly Meets Ugly: How "Ugly Bundling" Can Improve the Attractiveness of Imperfect Produce

Abstract

Every day, food retailers discard edible fruits and vegetables. One factor that contributes to the disposal of edible food by food distributors is the aesthetic standards imposed on fruits and vegetables by retailers. In the UK, about 9.5 million tonnes of food waste are disposed of annually, posing significant economic losses and environmental impacts, including biodiversity loss and resource depletion^{1,2}. To address this type of food loss, literature suggests factors that may increase acceptance of imperfect produce by consumers. Such proposals include, anthropomorphised imperfect produce^{3, 4}, marketing message framing ^{5,6}, and reduced pricing⁷.

This research contributes to this line of thought by investigating the effect of bundling multiple imperfect produce items together (what we call "ugly bundling") on increasing the attractiveness of imperfect produce to consumers. In an experimental study, 150 participants were recruited at a large state university campus in the UK for a food evaluation study. The participants were randomly assigned to one of three imperfect produce package types: 1) produce A only, 2) produce B only, or 3) produce A+B bundle. Produce used was potatoes (produce A) and carrots (produce B). Participants were provided with the respective produce package and asked to rate the attractiveness of the produce on three item measures (attractive, appealing, likeable; r = .93), on a seven-point scale (1 = "not at all" and 7 = "very much"). The results suggest significant main effect of package type (F (2, 147) = 4.92, p = .009). Planned contrast tests showed that participants in the bundled package condition (M = 5.75, SD = 1.01) reported the produce to be more attractive than in the produce A only package (M = 4.97, SD = 1.36; F(1, 147) = 9.75, p = .002) and the produce B only package (M = 4.31, SD = 1.83; F(1, 147) = 3.29, p = .072) conditions. The findings offer initial insights into how packaging type can be leveraged to improve attractiveness of imperfect produce.

References

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