Strategies, Motivations and Unmet Needs to Reduce Household Food Waste
Reported by Self-identified Food Conservers

Gwendoline Balto, Shelly Palmer, Elizabeth Gutierrez, Jade Hamman, Eva Liu, Melissa Pflugh Prescott
Department of Food Science and Human Nutrition, College of Agricultural Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign

INTRODUCTION
Wasted food results in (i):

- Land Use
- Water Use
- Fossil Fuel Use

Food waste produced at the household level contributes 43% of total food waste in the U.S. (ii) Household food waste involves the interaction between technical, temporal and spatial factors along with individuals' tastes, preferences, & food habits. (iii) Self-Determination Theory (SDT) is increasingly being used to facilitate food waste mitigation. (iv) SDT suggests a range of motivational regulatory styles. On the self-determined behavior end of the spectrum, intrinsic motivation is the most powerful and sustainable form, occurring when individuals pursue a specific behavior because it provides them with personal satisfaction and enjoyment. Conversely, on the non-self-determined end, extrinsic motivation is less effective and occurs when behavior is intended to obtain outcomes outside from the self, itself often in response to external pressures or consequences. (v)

An estimated 33% of Americans "put a lot of effort" to reduce food waste, suggesting an opportunity to utilize a positive deviance approach to identify waste reduction strategies that may be acceptable and applicable to other consumers. (vi) Positive deviance is defined as an approach that is based on the observations of successful individuals in determining solutions to problems compared to their peers who may have the same constraints. (vii) However, little is known regarding the motivations driving strategies and behaviors of active food conservers.

AIM
The purpose of the study was to identify food conservation practices, and psychosocial drivers, and unmet waste mitigation needs of self-identified food conservers.

METHODS
Participant Recruitment:
- Self-identifying food conservers recruited through an online University weekly email during the Fall 2021.
- Interested individuals screened for eligibility criteria: over the age of 18 years, not enrolled in an on-campus meal plan, ability to complete an online survey, and access to microphone for online focus group.

Focus Groups:
- Each 90-minute recorded Zoom focus group included questions on current household food waste-related behaviors, why participants classify themselves as food conservers, and their inspiration to conserve food.
- All interview transcripts were professionally transcribed verbatim. Three independent researchers thematically coded transcripts. Discrepancies were addressed and resolved by a fourth-party researcher.

RESULTS
Table 1: Participant Characteristics

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<th>Identity</th>
<th>Male</th>
<th>Female</th>
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<td>Households</td>
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<td>Total Members</td>
<td>2.6 ± 1.4</td>
<td>1.5 ± 1.0</td>
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</table>

Non Self-Determined Behavior
Self-Determined Behavior

Figure 1: Self-Determination Theory continuum as applied to reported food conservation motivations

3 Psychological Needs:
- Autonomy
- Motivation
- Relatedness

<table>
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<th>Regulatory Styles</th>
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<th>Motivated</th>
<th>Related</th>
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</table>

Figure 2: Psychosocial drivers and reported food behaviors of self-identified food conservers

Figure 3: Self-identified food conservers unmet needs

CONCLUSIONS
Self-identified food conservers reported a variety of household food waste mitigation strategies that can be summarized into five processes: plan, shop, store/organize, prepare/cook, and reuse/recycle. These household food conservation practices may be promoted to other non-conservers households to reduce household food waste. Consumers reported inspirations for food waste conservation efforts that can be categorized across the SDT self-determined behaviors, ranging from extrinsic to intrinsic motivation.

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REFERENCES