## Revisiting Food Waste in Low-Income Households: Evidence from Chile



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- Previous research has examined fruit and vegetable (FV) waste without accounting for changes in FV purchases. However, interventions may simultaneously influence both purchasing and waste behaviors, making it important to consider them together.
- We measured fruit and vegetable (FV) purchases and waste over two one-week periods in a sample of 68 low-income households in Santiago, Chile. Households were randomly assigned to one of three educational video interventions.
- We also compare direct food waste estimation with *Encuesta de Presupuestos Familiares* (FV purchase \* food waste conversion factor), which is a nationally representative survey.
  - Timeline

    Phase

    Online surveys

    Online surveys

    Survey promotion through social media

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    Feedback, refinement and validation of questions

    Pilot survey

    Developed in Talagante, Santiago Metropolitan Region.

    Survey promotion through social media, referees and municipalities

    Survey promotion through social media, referees and municipalities of Santiago Metropolitan Region.
    - Fruits wegetable Purchases

      Fruits

      Vegetables

- Videos: T1 Recipes regular fruits
  - T2 Cleaning fridge instructions
  - T3 Recipes overripe fruits
- Using direct food waste measurement, lowincome households have 1.6 portions of FV waste (12.4 FV portions of purchases) compared to 2.2 from indirect estimations (11.1 FV portions of purchases).
- The video content resulted in distinct effects on fruits compared to vegetables, and on the amount of FV purchased compared to the amount of FV wasted.
- A payment at the end of the protocol was key to keep the interest of the participants.

Effect on Fruit and Vegetable Waste Purchases and Waste

Variable	Purchases		Waste	
	Vegetables	Fruits	Vegetables	Fruits
T2	0.273	2.868	0.564	0.327
	(1.008)	(2.616)	(0.449)	(0.121)
Т3	-0.276	1.219	0.008	0.423
	(0.472)	(2.467)	(0.219)	(0.357)
Week	1.590	2.843	0.276	-0.036
	(1.182)	(0.696)	(0.455)	(0.101)
T2 # Week	-0.786	-4.512	-0.219	-0.046
	(2.446)	(0.830)	(0.795)	(0.423)
T3 # Week	0.203	-0.874	0.972	0.020
	(3.081)	(1.848)	(1.517)	(0.190)
Constant	5.479	5.465	0.383	0.545
	(0.045)	(1.918)	(0.065)	(0.095)



