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Healthiness, processing, and price discounts of foods advertised in supermarket flyers in Buenos Aires, Argentina

<u>Propiedades saludables, procesamiento y descuento de precios de los alimentos</u> anunciados en los volantes de supermercados en Buenos Aires, Argentina

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Table S1. Categorization of food and beverages according to Argentinian Dietary Guidelines.

	Category	Selection				
Recommended "core" food groups	Fruits and vegetables	Fruits Fresh, dried, canned fruit without added sugars. Vegetables Fresh, canned, frozen, pickled vegetables, tomato puree.				
. I	Beans, grains, starchy vegetables, bread, and pasta	Rice, lentils, chickpeas, other beans, flour, pasta (fresh and dried), oats, bread, breakfast cereals (<30 g/100 g sugar), rye, plain popcorn, potato, corn, sweet potato.				
	Milk, yogurt, and cheese	Milk (fresh, long-life, powder), all yogurt (added fruit & full fat), a cheese.				
	Meat and eggs	Fresh/frozen/roasted, beef, lamb, pork, chicken, veal, mince, fish, canned fish (tuna), smoked fish, seafood products, eggs.				
	Vegetable oils, nuts, and seeds	Vegetable oils, raw nuts, and seeds, unsalted nuts				
	Water	Unflavoured mineral water, sparkling water				
Optional/ Discretionary foods	Fats and spreads	Butters, margarine, cream, mayonnaise, alternative spreads				
	Processed meat and ready meals	Sausages, hamburgers, bacon, processed delicatessen meats (salar ham), dried meats, chicken nuggets, pizza, crumbed/fried/battered meats, ready to eat meat products in sauce, meat pies, sausage roll ready to eat burgers				
	Sugar, cordials, and jams	Sugar, condensed milk, icing sugar, pre-prepared syrups and concentrate, jams				
	Confectionary & chocolate	Blocks, bars, chocolate-coated products, lollies, chocolate toppings sweets				
	Chips	Potato crisps, corn chips, other crisps				
	Desserts & ice-creams	Cake, cake mixes, sweet biscuits, slices, scones, canned fruit in syrup, sweetbreads (buns, scrolls), pastries (croissant), doughnuts icy poles				
	Other snacks	Breakfast cereals (>30 g/100 g sugar), savory biscuits, dips, salted roasted nuts, muesli bars, snack bars, salted and flavored popcorn, corn, and rice-based biscuits				
	Soft drinks	Full sugar soft drinks				
	Soft drinks, diet	Sugar-free soft drinks				
	Energy drinks	Energy drinks				
	Fruit drink	Fruit flavored drinks				
	Other drinks	Flavored milks, flavored mineral waters, sports drinks, electrolyte drinks				
Alcoholic Beverages	Alcohol	Beers, wines, spirits, alcoholic mixers				
Other	Other	Products that could not be classified into any other category, tea, coffee, "yerba mate", non-nutritive sweeteners, vinegar, salt, herbs and spices, infant food products. Ready to eat and frozen meals tha could not be classified as unhealthy (weight control meals), stock powder, and liquid.				

Table S2. Junk and fresh foods definitions according to the Food Retail INFORMAS Protocol

	Selection					
Junk Food	Confectionary/chocolate; Ice cream/ frozen yogurt/sorbet; Sugar-sweetened					
	beverages (soft drinks, fruit and vegetable juice, flavored milk, sports drinks)					
	Artificially sweetened beverages; Energy drinks; Crisps; Snack bars (muesli,					
	granola, and fruit); Biscuits/cakes/muffins/pastries; 2-minute noodles/ instant					
	soup; Deep-fried foods; Pies/ sausage rolls; Burgers/ pizzas.					
Fresh Fruit and	Fresh fruit, vegetables. Only fresh products are included, i.e. frozen vegetables are					
Vegetables	excluded.					
Fresh Meat and	Fresh meat and fish. This includes fresh, unprocessed (or minimally processed					
Fish	products. I.e. Frozen products are excluded, along with pre-prepared meat patties					
	and sausages. Fresh minced meat is included.					

^a Alcohol, baby food (baby formula and other baby foods), supplements and meal replacements (and related products) are excluded.

Table S3: Minimum purchase amount and price discount level by food categories and food processing categories in promotional flyers of seven supermarket chains in Buenos Aires City. Multivariable linear models

	Minimum purchase amount (units)			Price discount level		
Food categories/ Food Groups	b	SE	P- value	b	SE	P- value
Based on National Guidelines						
n	4355			4080)	
Core Food Groups	ref			ref		
Optional / Discretionary foods	0.37	0.03	< 0.001	1.83	0.29	< 0.001
Alcoholic beverages	0.22	0.05	< 0.001	1.32	0.45	0.003
Other products1	0.04	0.06	0.518	0.55	0.58	0.344
Indicators based on INFORMAS ²						
n	3829			3584		
Non-junk-food promotions	ref			ref		
Junk-food promotions	0.39	0.03	< 0.001	2.01	0.29	< 0.001
Other products (non-fresh fruits						
and vegetables promotions)	ref			ref		
Fresh fruits and vegetables	-0.62	0.09	< 0.001	-4.99	0.86	< 0.001
Other products (non-fresh meats						
and fish promotions)	ref			ref		
Fresh meats and fish	-0.59	0.07	< 0.001	-2.61	0.61	< 0.001
Based on Food processing (NOVA) ³						
n	3844			3599)	
Unprocessed or minimally						
processed foods	ref			ref		
Processed culinary ingredients	-0.13	0.09	0.152	-2.18	0.85	0.010
Processed foods	0.00	0.05	0.945	-0.41	0.48	0.398
Ultra-processed foods	0.45	0.04	< 0.001	2.39	0.34	< 0.001

Ref, category of reference in the linear regression model; SE, Standard Error

All multivariable models were adjusted by the type of supermarket (traditional vs. discounter) and the type of page (inner vs. cover pages)

¹ Products that could not be classified into any other category (e.g. infusions, infant food)

² The analysis excluded the following items: alcohol, baby food (baby formula and other baby foods), supplements and meal replacements (and related products).

³ The analysis excluded alcoholic beverages

⁴ The sample size is smaller than the original due to non-available data (the price was reported, but not the magnitude of the discount nor the original price)