



# COVID-19 and beef consumption in Colombia: effects on consumer preferences and beliefs

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## Introduction

- » Hunger in Latin America and the Caribbean was already increasing before COVID-19, and the pandemic has put more households at risk of food insecurity, increasing the number of people suffering from hunger and challenging difficulties for adequate nutrition, in addition to an increase in poverty.
- » On the demand side, COVID-19 came along with a reduction in household incomes and food consumption, or even a change in the quality of food accessible to the households.
- » On the supply side, there have been changes in food prices, reductions in production volumes, difficulties in accessing productive inputs, and border closures that have caused a reduction in food and input imports and exports.

## Objective

To estimate the effect of the COVID-19 lockdown on changes in food consumer preferences in Colombia, with a particular emphasis on beef consumer preferences and beliefs.

## Results and analysis

- » 60–80% of the surveyed consumers have strong beliefs for most of the analyzed attributes [except food appearance (57.3%) and food packaging (46.6%)], shedding light on the unbalanced nature of consumer beliefs (Table 1).

Table 1. Changes in consumer preferences, binary variables.

Attributes	Difference (compared to before the lockdown)	
	n	%
<b>Animal welfare</b>		
Change in preferences (1)	101	17.4%
No change in preferences (0)	480	82.6%
<b>Environmental sustainability</b>		
Change in preferences (1)	95	16.4%
No change in preferences (0)	486	83.6%
<b>Information on the origin and manufacturing of food</b>		
Change in preferences (1)	99	17.0%
No change in preferences (0)	482	83.0%
<b>Food appearance</b>		
Change in preferences (1)	123	21.2%
No change in preferences (0)	458	78.8%
<b>Fair payment to the producer</b>		
Change in preferences (1)	134	23.1%
No change in preferences (0)	447	76.9%
<b>Food price</b>		
Change in preferences (1)	155	26.7%
No change in preferences (0)	426	73.3%
<b>Food packaging</b>		
Change in preferences (1)	133	22.9%
No change in preferences (0)	448	77.1%

## Methodology

- » Descriptive analysis and literature review of the direct and indirect effects of the pandemic on the food system both on the supply and demand side.
- » Data sources: Survey with 581 food consumers in Bogotá, Medellín, Cali, and Barranquilla.
- » Logit binomial regression analysis to identify the relevant factors for changing consumer preferences.
- » We considered seven attributes for our analysis namely (i) animal welfare, (ii) environmental sustainability, (iii) information on the origin and manufacturing of food, (iv) food appearance, (v) food price, (vi) fair payment to the producer, and (vii) food packaging.



- » The shock caused by the COVID-19 pandemic has not resulted in major changes regarding consumer preferences and beliefs. The surveyed consumers prioritize access to food (price) and a constant flow of food over other aspects such as food packaging and food appearance.

- » Larger households are less likely to reduce their beef consumption compared to single-person households. The same occurs in households with higher incomes. Households with COVID-19-related income reductions are more likely to reduce their beef consumption, suggesting a substitution effect of beef during the lockdown (Table 2).

Table 2. Beef consumption, original and binary variable.

Beef consumption	n	%
<b>Original variable</b>		
Increased	60	10.3%
Decreased	278	47.8%
Remained stable	232	39.9%
n.a.	11	1.9%
<b>Recoded binary variable</b>		
Decreased (1)	278	49.6%
Remained stable or increased (0)	282	50.4%

## Conclusions

- » The effect of the COVID-19 related lockdown in Colombia is not very noticeable in the change of consumer beliefs regarding the analyzed attributes. Consumer beliefs rather remained stable, and the evaluated attributes receive a generally high valuation among food consumers.
- » Changes in household income result in the adaptation of households and the substitution of more expensive food with cheaper alternatives. However, beef consumption does not decrease proportionally to decreasing household incomes.

### Further reading

Ramírez Ó; Charry A; Díaz MF; Enciso K; Mejía D; Burkart S. The Effects of COVID-19 on Beef Consumer Preferences and Beliefs in Colombia: A Logit Model Approach. *Front. Sustain. Food Syst.* 5:725875. <http://doi.org/10.3389/fsufs.2021.725875>

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### Acknowledgements

This work was undertaken as part of the CGIAR Research Program (CRP) on Livestock and the CGIAR Initiative on Livestock, Climate and System Resilience (LCSR). We thank all donors that globally support through their contributions to the CGIAR system.

