

Findings from a global civil science project

Vegetable diversity reduced in times of COVID-19

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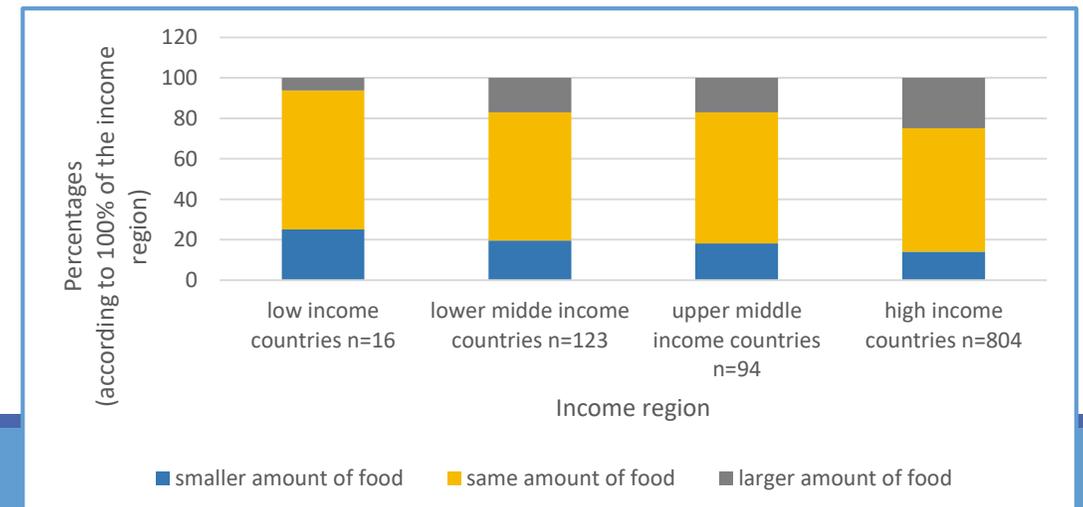
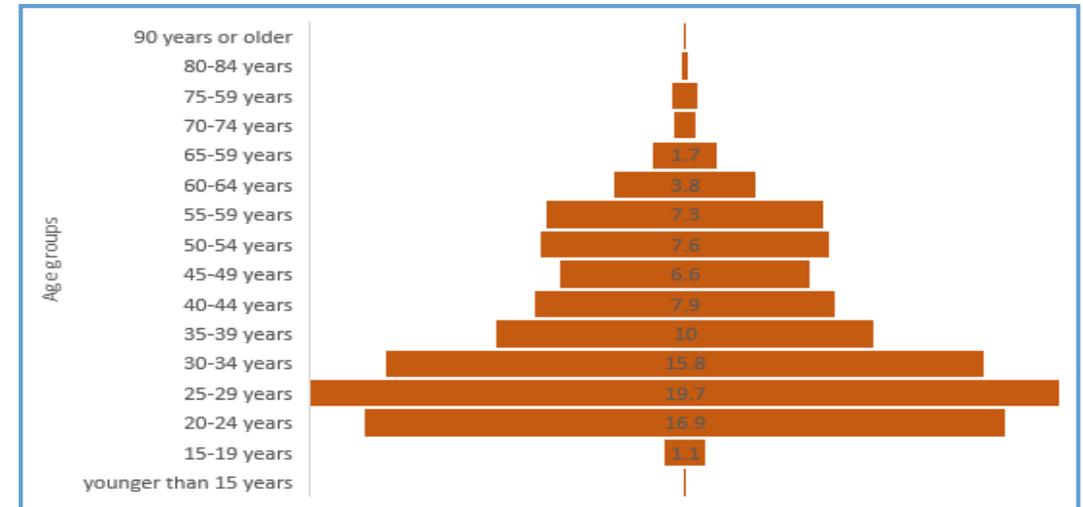
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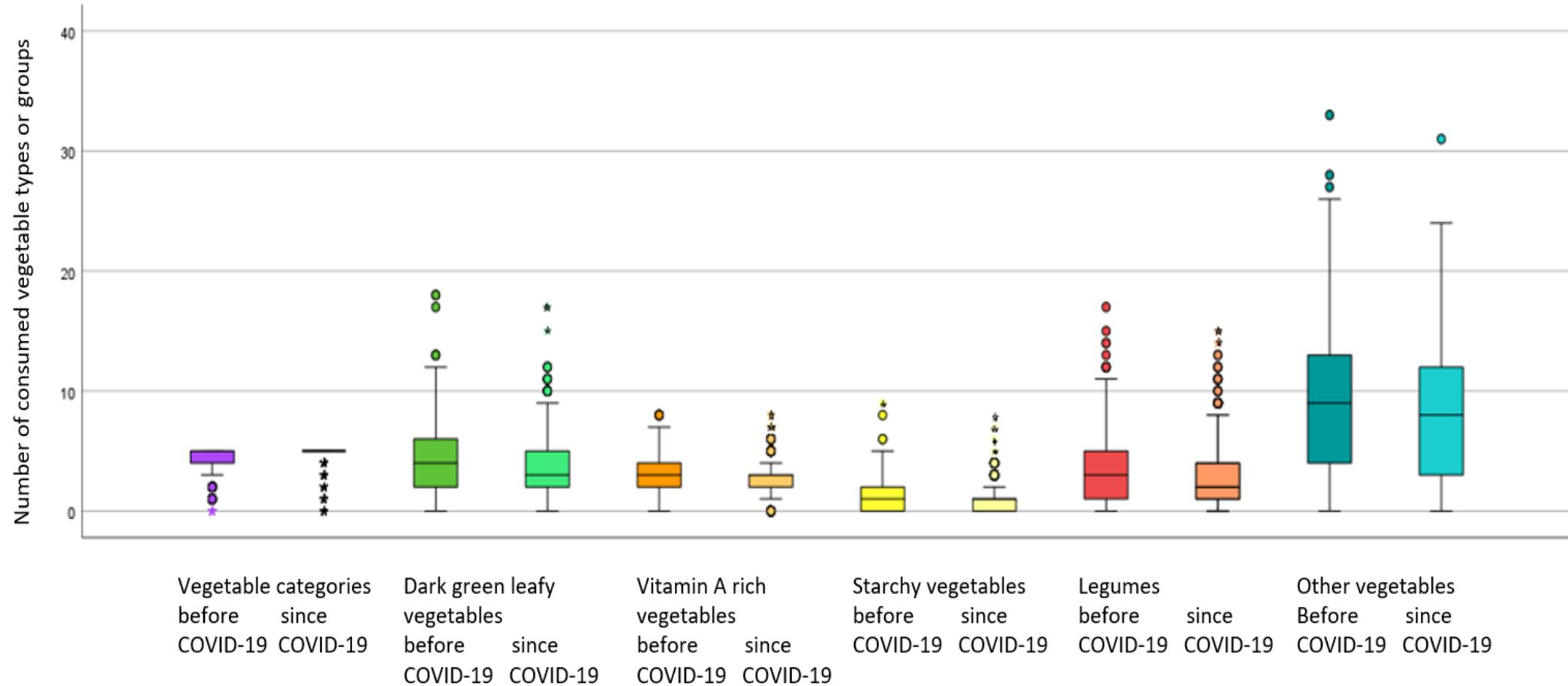
Aim & Methods & Descriptives

“ I increased my vegetable consumption for better health and immunity”
(Colombia, Ecuador, Ethiopia, Germany, Honduras, Vietnam)

- to identify COVID-19 “lockdown” constraints affect the food systems and dietary behaviour of populations across the globe
- special attention was paid to the consumption of vegetables and legumes.
- Online survey with semi-structured questionnaire translated into >10 languages
- Regression models ->
 - a) changes in consumption patterns,
 - b) potential determinants for change
- Qualitative analysis of open ended questions
- Data collection period: 17.4.-15.7.2020
- 1042 participants from 62 countries (uneven distribution)
- ♂:♀=77% vs. 22% (0.7% non-binary)



Vegetable variety



Results of binary logistic and Poisson regressions & Conclusion

More vegetables were consumed also because “no fish or butchery are open” (India, 50–54 years, male) or “mainly due to the fact that stores run out of pasta” (Germany, 50–54 years, female)

I eat more carrots and reduce the total amount of vegetables (China, 30–34 years, male)

Food systems are not static and are transitioning quickly as could be observed during the Covid-19 pandemic. There is a need for a nutrition strategy to strengthen the resilience of vulnerable households to consume a diverse diet in adequate amount even in times of a pandemic.

	Coefficient	p	OR	95% CI lower bound	95% CI upper bound
Decrease in food quantity [§]	0.022	0.280	1.022	0.982	1.064
Increase in food quantity [§]	0.015	0.656	1.015	0.950	1.084
Vegetable consumption [§]	0.039	0.003	1.040	1.014	1.067
Vegetable categories* [#]	-0.006	0.024	0.994	0.989	0.999
Dark green leafy vegetables [#]	-0.007	0.202	0.993	0.981	1.004
Provitamin A rich vegetables [#]	-0.011	0.029	0.989	0.980	0.999
Starchy vegetables [#]	-0.014	0.062	0.986	0.972	1.001
Legumes [#]	-0.012	0.067	0.988	0.975	1.001
Other vegetables [#]	-0.008	0.195	0.993	0.981	1.004

independent variable ‘perceived price changes’: the changes in prices for all food groups were summed up with 2 points for a ‘strong increase’, 1 point for a ‘little increase’, 0 points for ‘no change’, -1 points for a ‘little decrease’ and -2 points for a ‘strong decrease’ per food group
 *Vegetable categories=dark green leafy vegetables, provitamin A rich vegetables, starchy vegetables, legumes, and other vegetables
[§]Binary logistic regression (food quantity, vegetables consumption)
[#]Poisson regression (vegetable categories), OR=Odds ratio, Significance level: p<0.05, 95% CI=95% confidence intervals, adjusted for age, gender and income regions