

SOCIOECONOMIC DISPARITIES IN DIET VARY ACCORDING TO MIGRATION STATUS AMONG ADOLESCENTS IN BELGIUM

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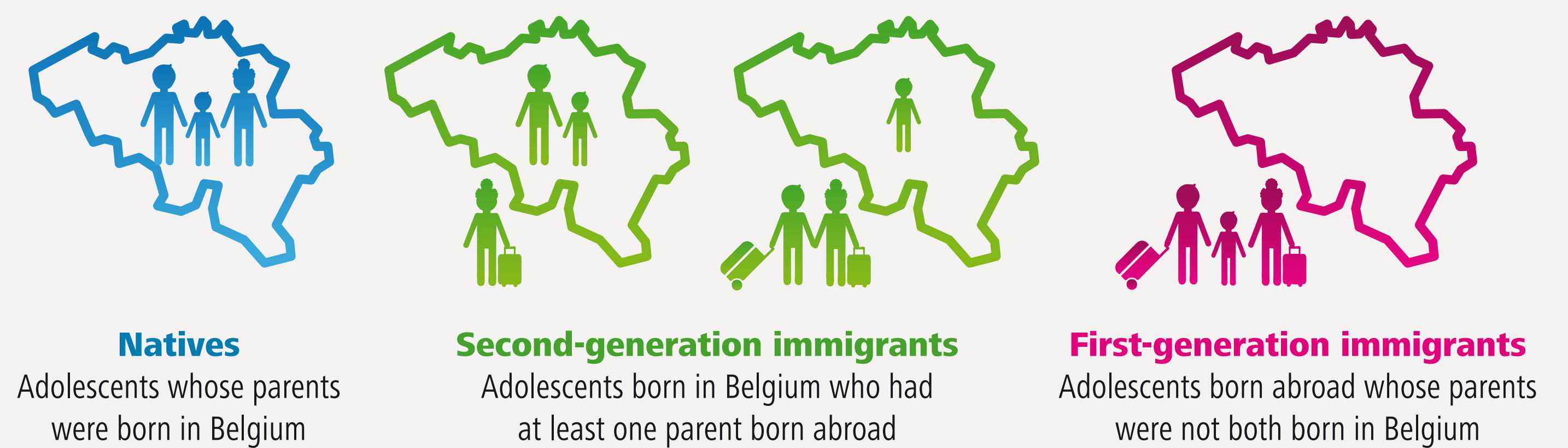
BACKGROUND

- Dietary habits during adolescence are among determinants of non-communicable diseases, especially since they may track into adulthood.¹ Nevertheless, little information concerning social disparities in adolescent dietary habits is currently available.
- Studies in adults have highlighted an acculturation process in dietary habits according to migration generation.² In addition, health-related interactions between migration and socioeconomic characteristics were found.^{3,4}

OBJECTIVE

To estimate socioeconomic disparities in dietary habits in school adolescents from different migration backgrounds.

Definition of the three migration backgrounds



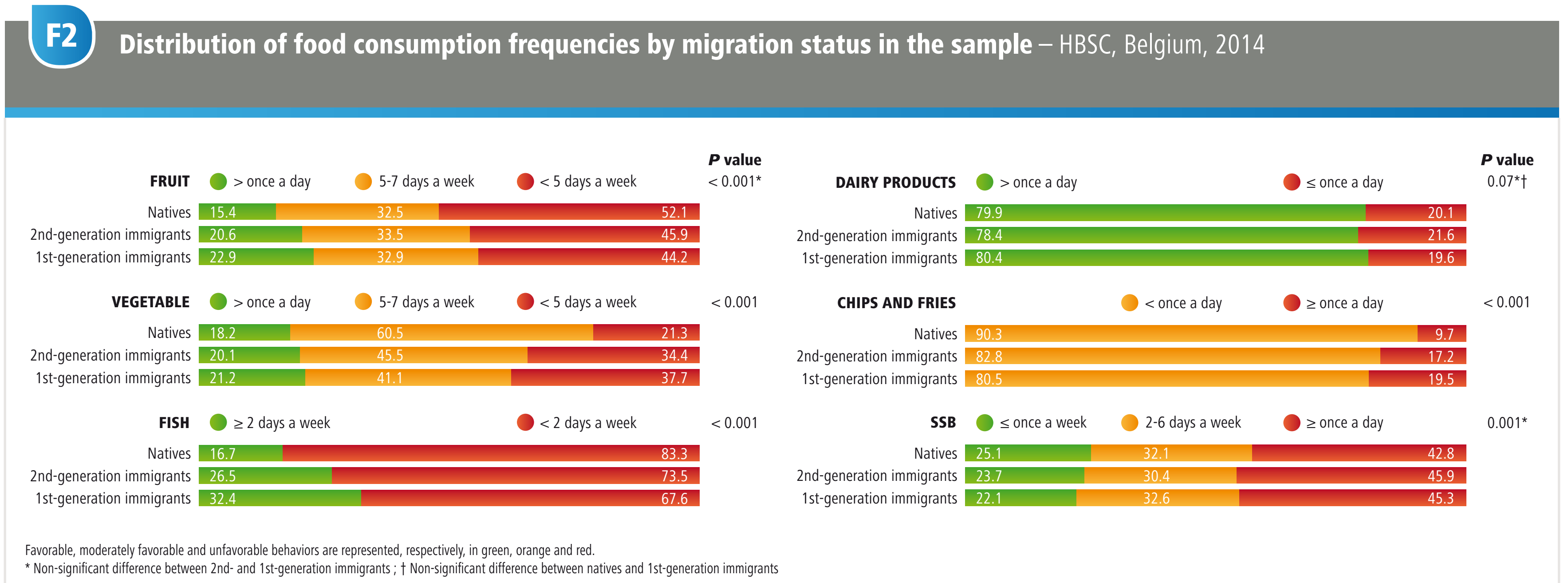
RESULTS

T1 Health Behaviour in School-Aged Children (HBSC) cross-sectional survey

Sample ⁵	Statistical analyses
<ul style="list-style-type: none"> • Belgium, 2014 • Two-stage stratified random sampling plan • 19,172 10-19-year-old school adolescents 	<ul style="list-style-type: none"> • Significant effect modification of migration status on several co-variables for each food group • Analyses stratified by migration status • Multilevel models • Model "null" – estimation of the school effect • Model 1 – univariate logistic regression + school effect • Final model – multiple logistic regression + school effect – Binary logistic regressions for food groups with consumption frequencies in two categories – Multinomial logistic regressions for food groups with consumption frequencies in three categories
Co-variables	
<ul style="list-style-type: none"> • Sociodemographic: age, gender, siblings • Economic: Family Affluence Scale (FAS), family structure, parental working status, school region • FAS is a score measuring material family wealth, divided in three categories: low; medium; high 	
Outcomes	
Collected by a validated short Food Frequency Questionnaire ⁶ that included a total of 23 food groups and 7 answer categories from "more than once a day" to "never"	
Fruit, Vegetable	> once a day 5-7 days a week <5 days a week
Fish	≥ 2 days a week <2 days a week
Dairy product	> once a day ≤ once a day
Chips and fries	< once a day ≥ once a day
Sugar-sweetened beverages (SSB)	≤ once a week 2-6 days a week ≥ once a day
REFERENCE = most favorable category in terms of health	

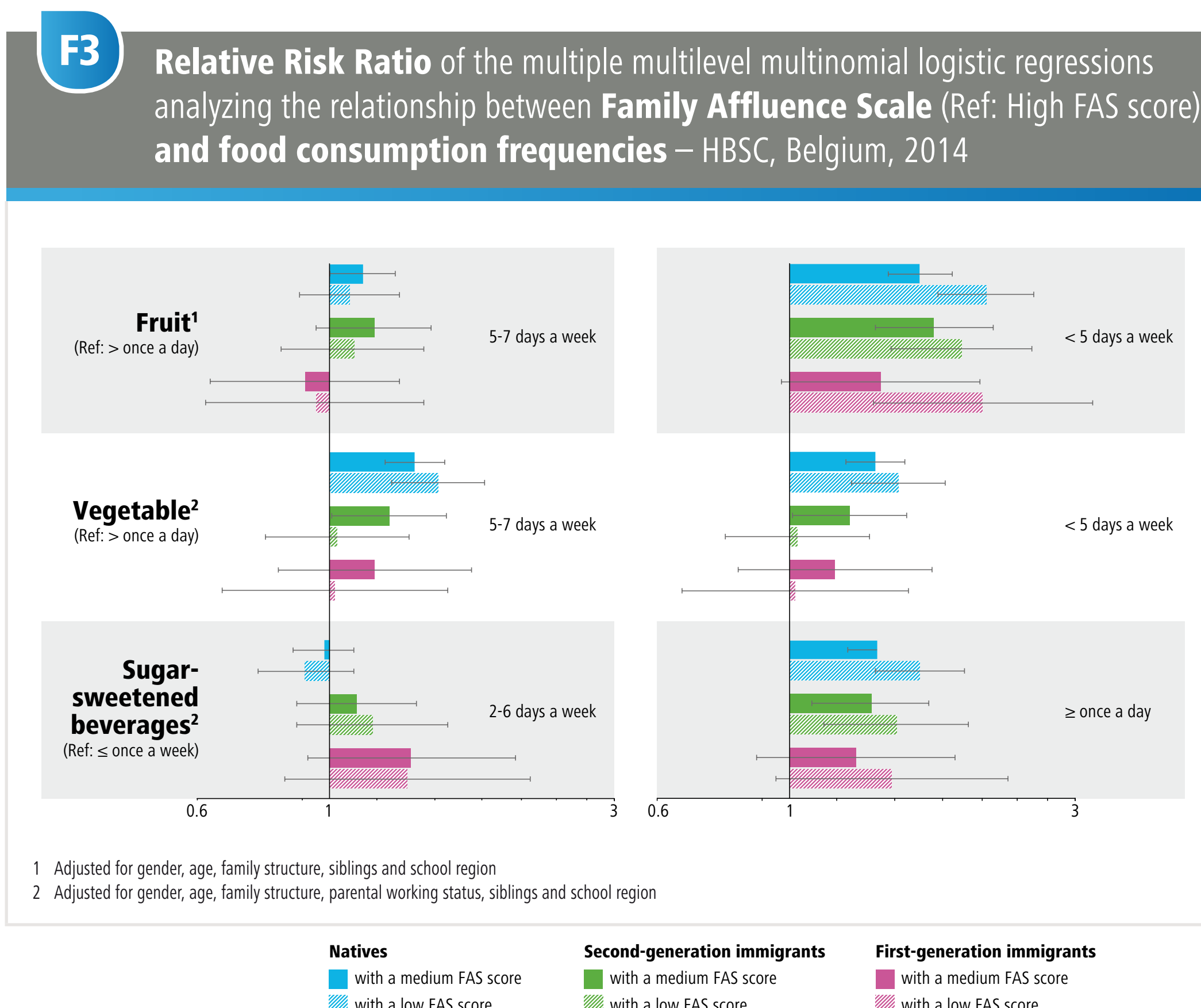
F1 Distribution of migration status in Belgium (HBSC 2014 – n=19,172)

The sample of 19,172 school participants included 69.6% natives and 30.4% immigrants (Fig. 1). Among natives, 13.3% had a low FAS score while they were 23.2% and 30.3% among second-generation immigrants and first-generation immigrants, respectively.

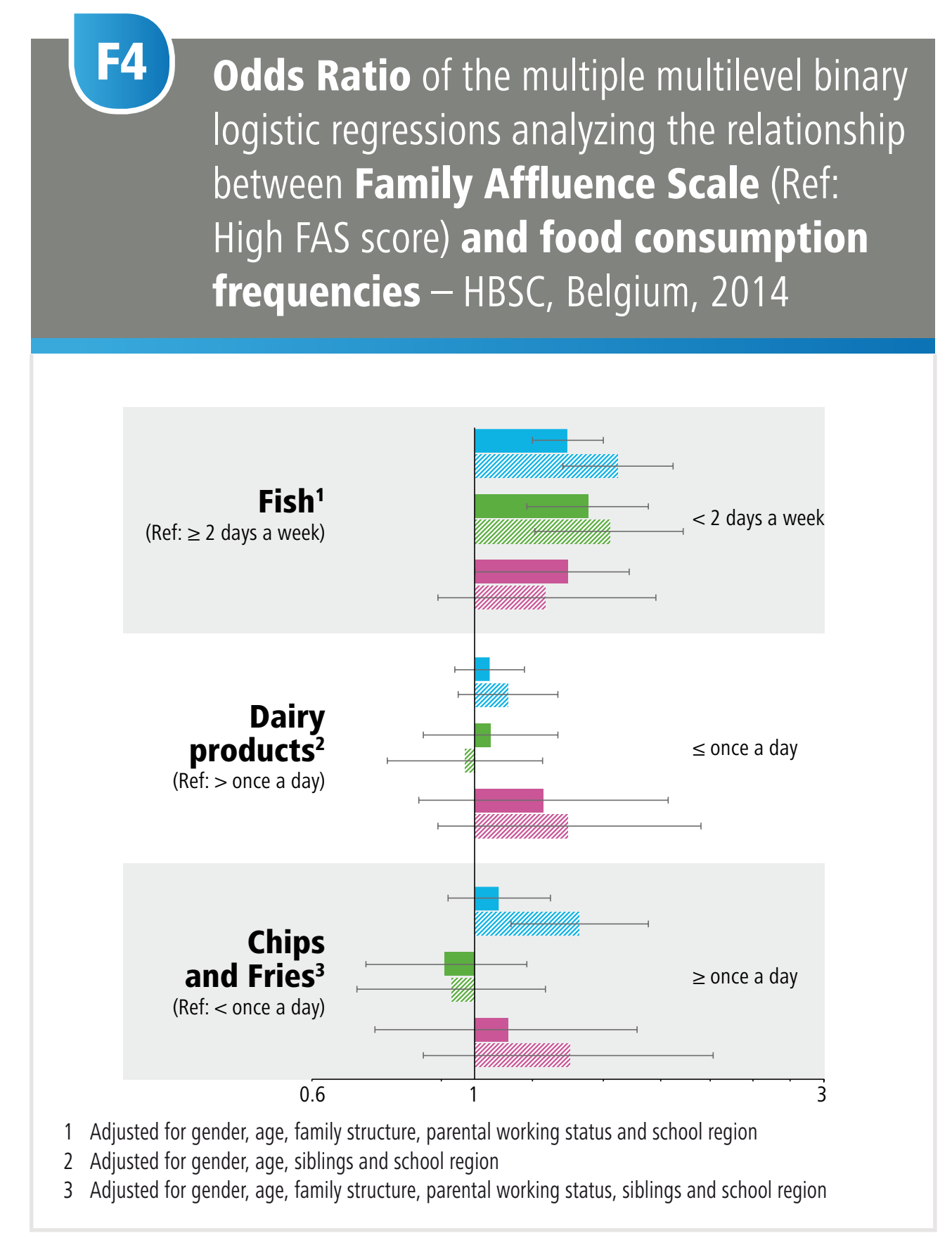


Immigrant adolescents, whether of the 1st- or 2nd-generation, were more likely to frequently consume both healthy (fruits, vegetables and fish) and unhealthy foods (chips and fries, SSB) (Fig. 2). In addition, a migration gradient in food frequencies was

underlined for vegetables, fish, and chips and fries: consumption gradually increased (or decreased) from natives to 2nd-generation immigrants, and from 2nd-generation immigrants to 1st-generation immigrants.



Adolescents with lower FAS less frequently ate healthy foods like fruits, and more frequently consumed unhealthy foods like SSB (Fig. 3-4), consistently with previous studies.⁷ These disparities may be explained by a lower level of familiarity or adoption of dietary recommendations by parents,⁸ and by the affordability of healthy foods.⁹ In addition, FAS-related disparities were observed mainly in natives and second-generation immigrants, which suggested the prevailing



role of the culture over the economic dimension in 1st-generation immigrants. In the same way, disparities related to gender, age, family structure, parental working status, siblings, school region were wider in natives than in immigrants. In addition, the widest socioeconomic disparities were observed for SSB and vegetables, and the least for dairy foods (data not shown).⁵

References

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CONCLUSION

- Overall, dietary habits of adolescents in Belgium were rather poor.
- Dietary habits related to migration status were mixed: immigrants were more likely to frequently consume both healthy (fruits, vegetables and fish) and unhealthy foods (chips and fries, SSB).
- The migration gradient observed here underlines a process of acculturation but warrants confirmation by considering the number of years in the host country and the age of arrival in that country.
- Narrower socioeconomic disparities in immigrant dietary habits compared with natives suggest that such habits are primarily defined by culture of origin.

