**Supplemental data**

**Supplemental Figure 1.** Flowchart of the study design

a) 2008-2009 Household Budget Survey

Integrated System of Household Surveys1

n= 12,800 census sectors (master sample)

2008-2009 Household Budget Survey2

n= 4,696 census sectors

2008-2009 Household Budget Survey

Selection of 59,548 households3

from 4,696 census sectors

Exclusion of 3,578 households

(Reason: Residents who refused to respond the survey)

2008-2009 Household Budget Survey

n=55,970

Brazilian National Dietary Survey4

n=13,596 households

n=34,003 subjects ≥10 years old

b) 2017-2018 Household Budget Survey

Integrated System of Household Surveys1

n= 15,096 census sectors (master sample)

2017-2018 Household Budget Survey2

n= 5,504 census sectors

2017-2018 Household Budget Survey

n= 57,920 households3

Brazilian National Dietary Survey

n=20,112 households4

n=46,164 subjects ≥10 years old

1Set of census sectors used in the various surveys conducted in the national territory by the Brazilian Institute of Geography and Statistics

2Selection of census sectors carried out using the pre-defined stratification system for the Integrated System of Household Surveys

3 Households selected at random from the pre-defined stratification system. An average loss of 15% was estimated due to possible refusals to answer the survey, and this same proportion was added to the final number of households to minimize possible losses

4 Households selected at random from the pre-defined stratification system

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| **Supplemental table 1.** Total and polyphenol class intake (mg/d as aglycone equivalents) by demographic characteristics in HBS 2017-18 and changes from the HBS 2008-09\*† | | | | | | | | | | | | | |
|  |  | Total polyphenols | | | Phenolic acids | | | Flavonoids | | | Other polyphenols‡ | | |
|  | *n* | Median | 25-75th. percentiles | Δ | Median | 25-75th. percentiles | Δ | Median | 25-75th. percentiles | Δ | Median | 25-75th.percentiles | Δ |
| All | 46,164 | 366.9 | 216.8-837.1 | 2.6 | 147.8 | 87.3-250.9 | -6.2 | 111.3 | 44.6-556.0 | -8.8 | 11.2 | 6.3-27.4 | 6.0 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 21,460 | 374.8 | 223.6-840.8 | -3.6 | 156.1 | 91.6-261.1 | -7.1 | 106.5 | 45.2-540.7 | -9.7 | 11.7 | 6.6-27.7 | 6.3 |
| Female | 24,704 | 359.6 | 210.6-833.9 | 9.0 | 141.6 | 84.2-237.8 | -5.8 | 115.2 | 44.3-571.3 | -8.2 | 10.9 | 6.0-26.7 | 5.0 |
| *P* |  | <0.0001 | |  | <0.0001 | |  | 0.4375 | |  | <0.0001 | |  |
| Race |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 17,204 | 385.4 | 227.5-920.3 | 16.5 | 152.0 | 88.7-258.7 | 6.3 | 124.5 | 48.2-600.2 | -14.5 | 12.4 | 6.8-31.4 | 7.1 |
| Others | 28,960 | 352.7 | 208.6-790.7 | -7.0 | 145.0 | 86.4-244.6 | -17.3 | 101.4 | 42.1-536.6 | 1.1 | 10.5 | 5.9-24.4 | 5.5 |
| *P* |  | <0.0001 | |  | <0.0001 | |  | <0.0001 | |  | <0.0001 | |  |
| Age (years) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10-13 | 3,271 | 337.1 | 205.8-819.8 | 12.5 | 89.7 | 46.5-169.0 | -10.5 | 137.0 | 59.8-625.7 | 0.1 | 17.2 | 6.8-62.5 | 12.3 |
| 14-18 | 4,407 | 342.5 | 202.4-841.1 | -12.5 | 103.8 | 53.0-196.4 | -11.0 | 124.9 | 49.1-604.8 | -27.6 | 13.4 | 6.3-47.9 | 8.3 |
| 19-59 | 30,150 | 368.7 | 218.4-840.4 | -4.1 | 151.4 | 91.8-255.6 | -7.5 | 107.6 | 44.0-547.0 | -12.3 | 11.2 | 6.3-25.5 | 5.9 |
| ≥60 | 8,336 | 380.7 | 220.4-833.0 | 23.8 | 165.6 | 104.0-265.6 | -15.1 | 105.1 | 42.5-547.5 | 15.5 | 10.0 | 6.0-19.4 | 5.1 |
| *P* |  | <0.0001 | |  | <0.0001 | |  | <0.0001 | |  | <0.0001 | |  |
| Area |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 35,391 | 367.9 | 218.1-855.3 | 5.8 | 145.9 | 85.4-248.1 | -4.5 | 114.7 | 45.6-574.9 | -12.2 | 11.6 | 6.4-28.9 | 8.4 |
| Rural | 10,773 | 360.5 | 209.8-773.7 | -13.3 | 157.3 | 98.7-268.3 | -24.9 | 94.1 | 39.1-468.8 | 7.0 | 9.5 | 5.4-19.6 | 4.8 |
| *P* |  | <0.0001 | |  | <0.0001 | |  | 0.0003 | |  | <0.0001 | |  |
| Brazilian region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North | 6,836 | 348.9 | 197.0-751.7 | -18.1 | 122.5 | 79.4-193.4 | -14.4 | 89.6 | 41.1-516.4 | -55.0 | 10.1 | 5.5-44.0 | 5.5 |
| Northeast | 16,097 | 320.9 | 195.2-676.3 | -29.3 | 135.1 | 84.5-217.6 | -34.3 | 95.4 | 40.6-439.2 | 16.6 | 9.1 | 5.4-19.4 | 4.2 |
| Midwest | 5,740 | 335.4 | 200.2-725.2 | 37.6 | 142.0 | 83.2-237.7 | 25.8 | 97.5 | 41.1-385.9 | -13.8 | 10.7 | 5.6-27.1 | 5.7 |
| Southeast | 11,471 | 367.9 | 227.5-836.1 | -4.9 | 154.1 | 89.1-253.1 | -5.8 | 110.2 | 44.1-574.7 | -26.9 | 12.1 | 6.9-29.9 | 6.8 |
| South | 6,020 | 591.9 | 282.8-1263.4 | 184.1 | 182.8 | 98.4-356.6 | 40.0 | 196.2 | 69.4-924.8 | 41.1 | 14.6 | 4.5-34.3 | 8.9 |
| *P* |  | <0.0001 | |  | <0.0001 | |  | <0.0001 | |  | <0.0001 | |  |
| Estimates were performed using sample weights to allow population representativeness. | | | | | | | | | | | | | |
| †Comparisons across categories were performed by using the Kruskal–Wallis test. | | | | | | | | | | | | | |
| ‡ Other polyphenols as the sum of lignans, stilbenes, alkylphenols, alkylmethoxyphenols, methoxyphenols, furanocoumarins, hydroxybenzaldehydes, hydroxycoumarins, tyrosols, catechol, phenol, pyrogallol and arbutin. | | | | | | | | | | | | | |

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| **Supplemental table 2.** Consumption of major food sources of polyphenols of Brazilian population in 2008-2009 and 2017-2018 NDS | | |
| Food | 2008-2008 | 2017-2018 |
| Mean intake (g/d) | Mean intake (g/d) |
| Coffee | 215.1 | 163.2 |
| Potato | 14.7 | 10.7 |
| Bean | 182.9 | 142.2 |
| Bean preparations | 8.4 | 28.3 |
| Cowpea | 6.3 | 8.8 |
| Rice | 160.3 | 131.4 |
| Rice preparations | 2.4 | 4.7 |
| Beer | 31.1 | 34.7 |
| Wine | 1.6 | 1.9 |
| Orange | 20.6 | 10.7 |
| Fruit juices | 145.0 | 124.5 |
| Chocolate | 3.5 | 1.5 |
| Chocolate powder | 0.8 | 0.5 |
| Banana | 18.6 | 16.3 |
| Salted bread | 53.0 | 49.4 |
| Salted cracker | 6.8 | 7.0 |
| Sweet cracker | 4.0 | 4.2 |
| Kale | 3.8 | 1.2 |
| Apple | 11.6 | 9.2 |
| Açaí | 3.0 | 1.5 |
| Tea | 31.3 | 48.4 |
| Pasta | 36.3 | 36.7 |
| Raw salads | 14.8 | 20.7 |
| Sandwiches | 11.8 | 21.0 |
| Reference: Instituto Brasileiro de Geografia e Estatística (IBGE) (2020) *Pesquisas de Orçamentos Familiares 2017-2018: Análise do consumo alimentar pessoal no Brasil (2017–2018 Family Budget Surveys: Analysis of Personal Food Consumption in Brazil)*. Rio de Janeiro: Ministério do Planejamento, Orçamento e Gestão, IBGE. | | |