**Table S1**. Dietary patterns and components, factor loadings and percentage of explained variance of residents in the coverage territory of a primary healthcare service, City of Porto Alegre, Rio Grande do Sul, Brazil (2018–2019) (n = 400).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Dietary patterns** | **Food items** | | **Factor loading** | **% Explained variance** |
| **Healthy** | Lettuce, watercress  Broccoli, Cauliflower, Cabbage  Strawberry, carrot, beetroot, tomato  Vegetable soup + chayote and eggplant  Grape + Watermelon + Mango + Papaya + Natural juice  Sweet Potato + Soft Polenta  Apple  Orange  Banana  Whole-grain rice + Whole-grain bread  Cassava/yam | | 0.678  0.659  0.610  0.590  0.563  0.523  0.435  0.410  0.356  0.345  0.317 | 10.84 |
| **Traditional** | White rice  Black beans  Fried steak + Fried chicken  Mince  Roast beef  Farofa + Fried Polenta  Pasta  Boiled or roast potato  Dried meat/jerky + Pork + Meat balls + Beef liver  Smashed potato | | 0.586  0.463  0.452  0.436  0.429  0.419  0.408  0.396  0.378  0.323 | 7.35 |
| **Refined Carbs and Sugars** | Cakes (simple and with topping) + Cookies (sweet, savory, sandwich)  Bread bun + Bread loaf  Powdered juice+ Carton juice  Sugar + Chocolate drinks + Candy/gum with sugar  Normal soft-drink + Zero-cal soft-drink  Mayonnaise + Margarine  Rapadura + Spreads + Fudge  Ice-cream  Yogurt + Milks (full-cream, semi-skimmed, skimmed) | | 0.574  0.565  0.540  0.501  0.499  0.471  0.363  0.357  0.314 | 4.86 |
| **Fast Food** | Pizza  Hamburger+ Fried snack+ Instant noodles + Hotdog  Chocolate/candies  French fries or shoestring potatoes  Roast snack (pasty, cheese bread)  Beer/wine + Spirits (cachaça, whisky)  Other legumes (peas, soya, chickpeas) | | 0.672  0.557  0.544  0.541  0.510  0.386  0.362 | 4.29 |
| **Total explained variance** | |  | | 27.34 |

Kaiser–Mayer–Olkin (KMO) test: 0.731; Bartlett’s test of sphericity: < 0.001

**Table S2.** Characteristics of availability, quality, and price of fruits, and vegetables commercialized in the establishments identified in the areas, total and by housing area, of coverage of a primary healthcare service, City of Porto Alegre, Rio Grande do Sul, Brazil (2020) (n = 51).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Availability  n (%) | Quality  n (%) | Price (R$/Kg) | | | |
| Mean (SD) | Min. | Max. | Amplitude |
| *FRUITS* |  |  |  |  |  |  |
| Avocado | 16 (31.4) | 14 (87.5) | 9.08 (2.14) | 5.80 | 12.90 | 7.10 |
| Pineapple | 22 (43.1) | 20 (90.9) | 6.32 (1.01) | 4.90 | 8.00 | 3.10 |
| Plum | 14 (27.5) | 12 (85.7) | 10.58 (2.86) | 2.50 | 13.90 | 11.40 |
| Banana | 26 (51.0) | 19 (73.1) | 4.59 (1.11) | 2.90 | 6.97 | 4.07 |
| Bergamot | 4 (7.8) | 3 (75.0) | 8.30 (7.75) | 3.80 | 19.90 | 16.10 |
| Persimmon | 5 (9.8) | 5 (100) | 11.70 (6.87) | 4.90 | 19.90 | 15.00 |
| Coconut | 6 (11.8) | 6 (100) | 7.62 (2.55) | 4.98 | 11.50 | 6.52 |
| Guava | 5 (9.8) | 3 (60.0) | 8.55 (3.85) | 3.49 | 11.90 | 8.41 |
| Jabuticaba | 0 (0.0) | -- | -- | -- | -- | -- |
| Orange (pear/juice) | 23 (45.1) | 18 (78.3) | 3.42 (1.13) | 1.99 | 7.80 | 5.81 |
| Lemon (Taiti) | 24 (47.1) | 20 (83.3) | 7.50 (2.40) | 3.90 | 12.90 | 9.00 |
| Apple | 23 (45.1) | 19 (82.6) | 7.22 (2.15) | 2.25 | 12.00 | 9.75 |
| Sleeve | 23 (45.1) | 18 (78.3) | 6.07 (1.77) | 3.99 | 8.99 | 5.00 |
| Papaya | 24 (47.1) | 20 (83.3) | 5.86 (1.47) | 2.50 | 10.50 | 8.00 |
| Passion fruit | 7 (13.7) | 5 (71.4) | 12.07 (3.43) | 6.98 | 16.90 | 9.92 |
| Melon (yellow) | 17 (33.3) | 17 (100) | 6.13 (2.38) | 3.50 | 11.90 | 8.40 |
| Strawberry | 14 (27.5) | 14 (100) | 12.73 (10.17) | 3.95 | 29.90 | 25.95 |
| Nectarine | 1 (2.0) | 1 (100) | 14.90 | 14.90 | 14.90 | 0.00 |
| Pear | 15 (27.5) | 11 (78.6) | 10.03 (1.85) | 6.50 | 13.90 | 7.40 |
| Peach | 18 (35.3) | 15 (83.3) | 7.63 (1.20) | 5.50 | 10.00 | 4.50 |
| Grape | 23 (37.3) | 19 (82.6) | 8.18 (2.10) | 4.95 | 12.90 | 7.95 |
|  |  |  |  |  |  |  |
| *VEGETABLES* |  |  |  |  |  |  |
| Pumpkin | 18 (35.3) | 17 (94.4) | 3.50 (0.93) | 1.99 | 5.50 | 3.51 |
| Chard | 2 (3.9) | 2 (100) | 3.99 (0.01) | 3.98 | 4.00 | 0.02 |
| Watercress | 7 (13.7) | 6 (85.7) | 2.24 (0.61) | 1.50 | 2.95 | 1.45 |
| Lettuce (curly) | 19 (37.3) | 16 (84.2) | 2.44 (0.58) | 1.49 | 3.50 | 2.01 |
| Garlic | 17 (33.3) | 15 (88.2) | 29.65 (9.27) | 2.59 | 45.00 | 42.41 |
| Eggplant | 9 (17.7) | 7 (77.8) | 6.25 (1.40) | 4.50 | 7.99 | 3.49 |
| Beetroot | 13 (25.5) | 7 (53.9) | 4.49 (0.60) | 3.50 | 5.98 | 2.48 |
| Broccoli (common) | 13 (25.5) | 13 (100) | 7.53 (7.21) | 3.49 | 29.16 | 25.67 |
| Onion | 30 (58.8) | 21 (70.0) | 4.28 (1.24) | 2.49 | 7.50 | 5.01 |
| Carrot | 19 (37.3) | 15 (79.0) | 4.77 (1.02) | 3.49 | 7.50 | 4.01 |
| Chayote | 14 (27.5) | 13 (92.9) | 4.13 (0.60) | 2.99 | 4.99 | 2.00 |
| Cauliflower | 9 (17.7) | 8 (88.9) | 11.12 (7.71) | 4.50 | 25.90 | 21.4 |
| Butter cabbage | 10 (19.6) | 10 (100) | 2.84 (0.43) | 2.39 | 3.50 | 1.11 |
| Spinach | 9 (17.7) | 8 (88.9) | 3.10 (0.93) | 1.49 | 4.50 | 3.01 |
| Turnip | 3 (5.9) | 3 (100) | 3.86 (0.71) | 3.40 | 4.68 | 1.28 |
| Cucumber (national) | 14 (27.5) | 12 (85.7) | 4.68 (2.32) | 1.99 | 11.75 | 9.76 |
| Chili (green) | 17 (33.3) | 11 (64.7) | 7.12 (1.35) | 4.50 | 9.25 | 4.75 |
| Radish | 3 (5.9) | 3 (100) | 3.92 (0.72) | 3.50 | 4.75 | 1.25 |
| Green cabbage | 10 (19.6) | 10 (100) | 5.02 (2.14) | 2.50 | 9.70 | 7.20 |
| Arugula | 11 (21.6) | 10 (90.9) | 3.13 (1.36) | 1.50 | 5.95 | 4.45 |
| Tomato | 30 (58.8) | 21 (70.0) | 5.75 (1.06) | 3.50 | 7.99 | 4.49 |
| Pod | 9 (17.7) | 9 (100) | 12.78 (9.53) | 4.50 | 30.24 | 25.74 |

Availability: number (n) and percentage (%) of establishments containing the fruit/vegetable.

Quality: number (n) and percentage (%) of establishments that contained the fruit/vegetable and that scored positively in the five quality evaluation items (integrity, maturation, color, odor, and cleanliness).

R$, Brazilian Real; SD, standard deviation; Min., minimum value; Max, maximum value; Amplitude = difference between minimum and maximum values.

**Table S3.** Measures of central tendency and dispersion for availability, general quality and price of fruits, and vegetables commercialized in the establishments identified in the areas, total and by housing area, of coverage of a primary healthcare service, City of Porto Alegre, Rio Grande do Sul, Brazil (2020) (n = 51).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Total  N=51 | Housing areas | | | | |  |
| Lower socioeconomic | |  | Higher socioeconomic | |  |
| 1  (n=10) | 3  (n=11) |  | 2  (n=13) | 4  (n=17) | p-value\* |
| *FRUITS* |  |  |  |  |  |  |  |
| Number per establishment |  |  |  |  |  |  | 0.175 |
| Mean (SD) | 6.06 (6.46) | 2.20 (3.97) | 6.45 (6.73) |  | 7.92 (6.24) | 6.65 (7.18) |  |
| Median (IQR) | 3 (0-12) | 0 (0-3) | 6 (0-14) |  | 9 (0-13) | 3 (0-12) |  |
| Min-Max | 0-20 | 0-10 | 0-17 |  | 0-18 | 0-20 |  |
| Number with high quality |  |  |  |  |  |  | 0.113 |
| Mean (SD) | 5.08 (6.01) | 1.10 (2.13) | 5.45 (6.38) |  | 6.62 (5.72) | 6.00 (6.90) |  |
| Median (IQR) | 2 (0-9) | 0 (0-1) | 2 (0-12) |  | 8 (0-9) | 2 (0-10) |  |
| Min-Max | 0-20 | 0-6 | 0-17 |  | 0-17 | 0-20 |  |
| Price (R$/Kg) |  |  |  |  |  |  | 0.791 |
| Mean (SD) | 7.02 (1.43) | 6.74 (1.95) | 7.29 (1.87) |  | 7.21 (1.08) | 6.75 (1.40) |  |
| Median (IQR) | 7.00 (6.15-8.10) | 6.82 (4.75-8.66) | 7.83 (5.53-8.99) |  | 7.03 (6.54-8.10) | 6.73 (5.59-7.44) |  |
| Min-Max | 4-9.31 | 4.75-8.66 | 4.00-9.14 |  | 5.83-9.12 | 4.73-9.32 |  |
| *VEGETABLES* |  |  |  |  |  |  |  |
| Number per establishment |  |  |  |  |  |  | 0.351 |
| Mean (SD) | 5.61 (6.74) | 2.20 (3.79) | 6.18 (7.60) |  | 6.85 (6.85) | 6.29 (7.30) |  |
| Median (IQR) | 3 (0-10) | 0 (0-2) | 4 (0-12) |  | 6 (0-9) | 3 (0-12) |  |
| Min-Max | 0-22 | 0-11 | 0-22 |  | 0-20 | 0-20 |  |
| Number with high quality |  |  |  |  |  |  | 0.195 |
| Mean (SD) | 4.65 (6.29) | 0.90 (1.60) | 5.18 (6.93) |  | 5.46 (6.33) | 5.88 (7.15) |  |
| Median (IQR) | 2 (0-5) | 0 (0-1) | 4 (0-5) |  | 4 (0-5) | 3 (0-12) |  |
| Min-Max | 0-22 | 0-5 | 0-22 |  | 0-20 | 0-20 |  |
| Price (R$/Kg) |  |  |  |  |  |  | 0.896 |
| Mean (SD) | 6.59 (2.85) | 5.60 (1.86) | 6.72 (3.18) |  | 7.24 (3.17) | 6.31 (1.44) |  |
| Median (IQR) | 6.22 (4.50-7.36) | 5.75 (4.03-7.17) | 6.13 (4.50-7.27) |  | 6.62 (4.54-7.40) | 6.20 (5.11-8.21) |  |
| Min-Max | 3.56-13.50 | 3.56-7.36 | 4.08-13.50 |  | 3.99-12.63 | 4.41-8.22 |  |

High quality: fruit/vegetable that scored positively in the five quality evaluation items (integrity, maturation, color, odor and cleanliness).

R$, Brazilian Real; SD, standard deviation; Min., minimum value; Max, maximum value; Amplitude = difference between minimum and maximum values.

\*p-value for the Kruskal–Wallis H test for score comparison between areas

**Table S4.** Characteristics of availability and price of food commercialized in the establishments identified in the areas of coverage of a primary healthcare service, City of Porto Alegre, Rio Grande do Sul, Brazil (2020) (n = 51).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NEMS-S GROUPS | Availability  n (%) | Price (R$) | | | |
| Mean (SD) | Min. | Max. | Amplitude |
| *GROUP 1 - Healthy* |  |  |  |  |  |
| Potato (kg) | 26 (50.1) | 4.12 (0.97) | 1.99 | 5.99 | 4 |
| Aipim (kg) | 10 (19.6) | 6.84 (2.36) | 2.50 | 10.98 | 8.48 |
| Sweet potato (kg) | 19 (37.3) | 4.19 (0.81) | 2.49 | 5.95 | 3.46 |
| Chicken (kg) | 22 (43.1) | 12.34 (6.02) | 4.43 | 34.17 | 29.74 |
| Eggs (dozen) | 30 (58.8) | 8.01 (9.92) | 4.00 | 60.00 | 56 |
| Fish (sardines/fish) (kg) | 22 (43.1) | 33.6 (12.30) | 4.20 | 55.20 | 51 |
| Fish (tuna) (kg) | 23 (45.1) | 45.69 (17.29) | 26.41 | 105.00 | 78.59 |
| Shrimp (400g) | 5 (9.8) | 31.13 (3.08) | 27.95 | 34.90 | 6.95 |
| Whole milk (box/1L) | 40 (78.4) | 3.58 (0.72) | 2.15 | 5.00 | 2.85 |
| Skimmed milk (box/1L) | 32 (62.8) | 3.64 (0.80) | 2.15 | 5.95 | 3.8 |
| Natural yogurt (170ml) | 18 (35.3) | 2.68 (1.08) | 0.66 | 6.00 | 5.34 |
| Flavored yogurt (170ml) | 18 (35.3) | 2.66 (1.23) | 0.80 | 4.96 | 4.16 |
| Yellow cheese (kg) | 36 (70.6) | 41.04 (7.76) | 25.90 | 53.33 | 27.43 |
| White cheese (kg) | 13 (25.5) | 19.64 (10.18) | 12.99 | 48.15 | 35.16 |
| Brown rice (kg) | 17 (33.3) | 5.12 (1.22) | 2.79 | 6.75 | 3.96 |
| Oats (200g) | 22 (43.1) | 3.92 (1.46) | 0.50 | 5.90 | 5.4 |
| Whole wheat flour (kg) | 6 (11.8) | 7.55 (10.50) | 2.29 | 28.90 | 26.61 |
| Wheat bran (200g) | 3 (5.9) | 2.34 (0.79) | 1.43 | 2.80 | 1.37 |
| Wheat grains (kg) | 0 | - | - | - | - |
| Wheat germ (300g) | 1 (2.0) | 3.85 | - | - | - |
| Rye (kg) | 0 | - | - | - | - |
| Barley (kg) | 0 | - | - | - | - |
| Carioca beans (500g) | 12 (23.5) | 5.67 (2.51) | 2.20 | 10.40 | 8.2 |
| Black beans (kg) | 28 (54.9) | 6.86 (2.33) | 3.89 | 13.00 | 9.11 |
| Lentil (500g) | 22 (43.1) | 6.12 (1.29) | 3.89 | 8.90 | 5.01 |
| Soybeans in grains (500g) | 4 (7.8) | 8.68 (4.87) | 6.25 | 15.98 | 9.73 |
| Chickpeas (500g) | 6 (11.8) | 12.01 (2.23) | 9.20 | 15.87 | 6.67 |
| Peanut (500g) | 29 (56.7) | 10.23 (8.32) | 4.39 | 42.58 | 38.19 |
| Brazil Chestnut (kg) | 7 (13.7) | 95.98 (18.65) | 83.33 | 136.25 | 52.92 |
| Walnuts (kg) | 6 (11.8) | 94.07 (22.91) | 68.00 | 137.25 | 69.25 |
| Cashew nuts (kg) | 8 (15.7) | 128.03 (43.15) | 99.00 | 199.00 | 100 |
| Almonds (kg) | 6 (11.8) | 90.66 (18.45) | 78.00 | 114.50 | 36.5 |
| Hazelnut (kg) | 4 (7.8) | 99.84 (26.62) | 60.00 | 115.63 | 55.63 |
| *GROUP 2 - Intermediate* |  |  |  |  |  |
| Butter (200g) | 33 (64.7) | 7.96 (2.57) | 3.40 | 14.90 | 11.5 |
| Vegetable oil (900ml) | 29 (56.9) | 5.64 (2.81) | 3.45 | 17.96 | 14.51 |
| Olive oil (500ml) | 27 (52.9) | 26.03 (15.16) | 5.50 | 59.00 | 53.5 |
| White Rice (kg) | 32 (62.8) | 3.74 (0.95) | 1.99 | 6.50 | 4.51 |
| White wheat flour (kg) | 29 (56.9) | 3.55 (1.36) | 1.99 | 9.98 | 7.99 |
| Pasta (500g) | 33 (64.7) | 3.67 (1.02) | 1.98 | 6.50 | 4.52 |
| Whole meal pasta (500g) | 14 (27.5) | 4.88 (1.92) | 2.49 | 9.80 | 7.31 |
| Whole meal bread (400g) | 31 (60.8) | 5.60 (1.60) | 3.19 | 10.66 | 7.47 |
| *GROUP 3 - Unhealthy* |  |  |  |  |  |
| White bread (500g) | 37 (72.6) | 4.99 (2.00) | 3.32 | 13.46 | 10.14 |
| Instant noodles (80g) | 37 (72.6) | 2.01 (1.06) | 0.89 | 6.37 | 5.48 |
| Refrigerant (350ml) | 47 (92.2) | 3.58 (0.92) | 1.75 | 6.50 | 4.75 |
| Juice powder (25g) | 37 (72.6) | 1.30 (0.44) | 0.19 | 2.50 | 2.31 |
| Industrialized juice (1L) | 38 (74.5) | 13.04 (8.37) | 4.79 | 37.50 | 32.71 |
| Sweet biscuit (120g) | 39 (76.5) | 2.36 (1.26) | 1.20 | 6.60 | 5.4 |
| Burger (box w/ 12) | 4 (7.8) | 13.72 (2.50) | 10.90 | 16.99 | 6.09 |
| Nuggets (300g) | 10 (19.6) | 6.48 (1.91) | 2.39 | 8.50 | 6.11 |
| Inlaid (mort./pres./sal.) (kg) | 36 (70.6) | 27.16 (14.92) | 4.99 | 69.89 | 64.9 |
| Sausage (kg) | 23 (45.1) | 16.32 (7.39) | 5.28 | 33.29 | 28.01 |
| Margarine (500g) | 34 (66.7) | 8.34 (12.74) | 2.21 | 79.00 | 76.79 |
| Morning cereal (300g) | 12 (23.5) | 10.59 (5.05) | 5.40 | 25.36 | 19.96 |
| Snack (45g) | 39 (76.5) | 2.57 (1.38) | 1.13 | 7.50 | 6.37 |
| Chocolate (90g) | 38 (74.5) | 5.59 (1.78) | 2.50 | 11.25 | 8.75 |
| Ice cream (kg) | 30 (58.8) | 22.10 (25.28) | 6.50 | 133.33 | 126.83 |
| Bullets/gum (unit) | 37 (72.6) | 0.33 (0.43) | 0.10 | 2.29 | 2.19 |
| Sugar (kg) | 38 (74.5) | 3.48 (0.85) | 1.99 | 5.98 | 3.99 |

NEMS-S (Nutrition Environment Measurement Tool for Stores)

Availability: number (n) and percentage (%) of establishments that contained the food.

R$, Brazilian Real; SD, standard deviation; Min., minimum value; Max, maximum value; Amplitude = difference between minimum and maximum values.