## Supplementary Tables and Figures

Table S1. Food items included in the short questionnaire, household measuring units to estimate quantities per time, sodium content per 100 g of food and maximum values set by National Act 26905.

| Food product | Units | $\begin{aligned} & \text { Sodium } \\ & (\mathrm{mg} / 100 \mathrm{~g}) \end{aligned}$ | Max. values: <br> Sodium <br> $\mathrm{mg} / 100 \mathrm{~g}$ |
| :---: | :---: | :---: | :---: |
| Cheeses |  |  |  |
| Soft and semi-soft cheeses such as Brie or Port Salut | [slices, 1 slice $=60 \mathrm{~g}$ ] | 443 | - |
| Medium-hard cheeses such as Gouda, Mar del Plata, Edam | [slices, 1 slice $=60 \mathrm{~g}$ ] | 624 | - |
| Hard cheeses or "grating cheeses" such as Parmesan or Reggianito | SP (10 g)* | 804 | - |
| Cheese without added salt | SP (60 g)* | 55.3 | - |
| Meats |  |  |  |
| Vienna sausage | [units, 1 unit=40 g] | 978 | 1196 |
| Chorizo or chorizo-sausage, fresh sausage | [units, 1 unit=90 g] | 1041 | 950 |
| Other cold cuts as ham salami bologna and other sliced cold cuts | [slices, 1 slice $=20 \mathrm{~g}$ ] | 833 | 1196 |
| Pre-processed hamburgers | [units, 1 unit=90 g] | 720 | 850 |
| Frozen pre-cooked breaded chicken nuggets or fish | [medallions, 1 medallion=82 g] | 515 | 736 |
| Canned fish | SP (60 g)* | 346 | - |
| Dought |  |  |  |
| "Empanadas" (individual pies), puff pastry | [units, 1 unit=30 g] | 619 | - |
| Quiches/pies (any filling), puff pastry | [servings, 1 serving=50 g] | 625 | - |
| Pizza | [servings, 1 serving=60 g] | 505 | - |
| Breads, Crackers and Cookies |  |  |  |
| French bread or whole-wheat bread | ["mignones"(bread rolls), 1 mignon=40 g] | 800 | - |
| Sliced or sandwich bread, white or whole-wheat | [slices, 1 slice $=25 \mathrm{~g}$ ] | 494 | 530/501 |
| Hamburger or hot dog buns | [units, 1 unit=50 g] | 474 | 530 |
| Bread without added salt | ["mignones" (bread rolls), 1 mignon=40 g ] | 10 | - |
| White or whole wheat crackers | [units, 1 unit=6 g] | 629 | 941 |
| Crackers without added salt made with white or whole flour | [units, 1 unit=6 g] |  | - |
| Cookies | [units, 1 unit=7 g] | 283 | 512 |
| Filled/Sandwich cookies such as Oreo ${ }^{\circledR}$ | [units, 1 unit=13 g] | 251 | 429 |
| Danish/croissants and other baked/fried sweet dough as churros | [units, 1 unit=35 g] | 55 | - |
| Biscuits or savory bizcochos | [units, 1 unit=11 g] | 747 | 530 |
| Cakes, pies, muffins, cupcakes | [servings or slices, 1 serving $=40 \mathrm{~g}$ ] | 280 |  |
| Alfajor | [units, 1 unit=50 g] | 100 | - |
| Other products |  |  |  |
| Margarines | [teaspoons, 1 teaspoon=5 g] | 435 | - |
| Butter, salted | [indiv. pack/teaspoons, 1 teaspoon=5 g] | 160 | - |
| Salted snacks (such as salted sticks, cheese puffs, chips) | [cups, 1 cup=25 g] | 768 | 950 |
| Salted peanuts | [cups, 1 cup=100 g] | 1451 | 950 |
| Sauces, ready-to-use (such as Italian or Spaghetti sauce) | SP (50g)* | 389 | - |
| Canned vegetables and/or legumes (such as corn, garden salad, lentils) | SP (100 g) ${ }^{*}$ | 212 | - |
| Bouillon cubes or powder | SP (quantity to prepare one serving of 200 ml$)^{*}$ | 352 | 430 |
| Instant soups | [individual pouches, cups or bowls, 1 cup = 235 ml ] | 239 | 352 |
| Mayonnaise, mustard, ketchup, etc | SP (12 g)* | 916 | - |

[^0]Table S2. Sodium content in food products/100g of food: Source of data

| Food products | Source | Observations |
| :--- | :---: | :--- |
| French bread or whole-wheat bread, [bread | Ferrante et al | Direct Analysis |
| rolls] | $2011[2]$ | French bread. |
|  |  | Representative sample of |
|  |  | bakeries from Argentina |
|  |  | affiliated with the |
|  |  | Argentinean Federation of |
|  |  | Bakeries. |

Cheeses, Meat Products (Vienna sausage, Chorizo or chorizo-sausage sausage, Other cold cuts as ham, salami, bologna and other sliced cold cuts, Pre-processed hamburgers, Frozen pre-cooked breaded chicken, nuggets). Canned fish. Canned vegetables. Bouillon cubes or powder, Instant soups. Empanadas/pies/quiches (puff pastry), Pizza Margarines, Butter (salted). Salted snacks, Salted peanuts. Sauces (ready-to-use). Alfajores. Cakes, pies, muffins, cupcakes.

Sliced or sandwich bread, white or wholewheat, Hamburger or hot dog buns, Bread without added salt, White or whole wheat crackers, Cookies, Filled/Sandwich cookies such as Oreo®, Crackers without added salt, made with white or whole flour, Biscuits or savory bizcochos

| Danish/croissants and other baked/fried sweet <br> dough as churros | SARA <br> Software[5] | Direct Analysis. (INFOODS <br> Methodology) |
| :--- | :---: | :--- |
|  |  | Food codes A14, A15, A16 |

Table S3. Weighted linear regression models of sodium intake from food products.

|  | Sodium intake from food <br> products(md/day) $)^{12}$ |  |
| :--- | :---: | :---: |
|  | Coefficient (95\%CI) | $\boldsymbol{P}$ value |
| Male | $439.1(304.8 ; 573.5)$ | $<0.001$ |
| Age $(\geq 55 y)$ | $-94.9(-223.8 ; 334.0)$ | 0.149 |
| Education Level, $>8 y$ | $-191.7(-327.5 ;-55.8)$ | 0.006 |

$95 \% \mathrm{CI}$ : $95 \%$ confidence interval.
${ }^{1}$ Values are expressed in mg of sodium per day; to calculate grams of salt, multiply mg of sodium by 0.0025
${ }^{2}$ Models included age, sex, level of education

Table S4. Reported weighted frequency of consumption of separated food items included in the short questionnaire during the last 12 months

| Food items | Every day, once or more times (\%) | 2-6 times a week (\%) | Once a week (\%) | Less than once a week (\%) | Never or less than once a month (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Soups, dressings, canned foods and other convenience foods |  |  |  |  |  |
| Bouillon cubes or powder | 8.9 | 21 | 16.3 | 19.9 | 33.9 |
| Instant soups | 9.1 | 7.0 | 9.6 | 20.9 | 53.4 |
| Empanadas (meat pies) | 0.1 | 13.9 | 32.4 | 46.2 | 7.4 |
| Quiches (any filling such as vegetables, ham and cheese, poultry, etc) | 1 | 20.0 | 24.7 | 36.8 | 17.5 |
| Pizza | 0.1 | 9.1 | 38.2 | 45.7 | 6.9 |
| Canned vegetables/legumes | 0.5 | 20.8 | 20.7 | 19.4 | 38.6 |
| Canned Fish | 0.0 | 7.9 | 22.7 | 39.9 | 29.5 |
| Sauces, ready-to-use | 0.2 | 18.5 | 18.7 | 15.5 | 47.1 |
| Mayonnaise, mustard, kétchup, etc. | 1.0 | 12.9 | 19.4 | 28.4 | 38.3 |
| Bread, crackers, cookies |  |  |  |  |  |
| French bread or whole wheat bread (from bakeries) | 26.4 | 28.5 | 17.2 | 8.8 | 19.1 |
| Sliced or sandwich bread | 2.2 | 7.5 | 6.8 | 13.5 | 70 |
| Bread, Vienna | 0.3 | 2.4 | 5.7 | 9.6 | 82 |
| Bread, any type without added salt | 5.5 | 4.1 | 3.9 | 6.3 | 80.2 |
| White or whole wheat crackers | 21.3 | 11.8 | 8.1 | 14.6 | 44.2 |
| White or whole wheat crackers, without added salt | 16.6 | 7.3 | 5.4 | 12.2 | 58.5 |
| Cookies | 6 | 13.7 | 11.3 | 26.3 | 42.7 |
| Filled/sandwich cookies such as Oreo | 4.6 | 12.8 | 10.5 | 24.9 | 47.2 |
| Meats Products |  |  |  |  |  |
| Vienna sausage | 0.0 | 6.3 | 13.7 | 30.8 | 49.2 |
| Chorizo/Chorizo sausage /Argentinean sausage | 0.1 | 1.7 | 19.8 | 48.2 | 30.2 |
| Other cold cuts (such as ham, salami, bologna, etc.) | 0.9 | 22 | 19.7 | 38.3 | 19.1 |
| Pre-processed hamburgers | 0.0 | 8.2 | 13.4 | 25.4 | 53 |
| Frozen pre-cooked breaded chicken, nuggets or fish Cheeses | 0.2 | 11.7 | 12.8 | 12.8 | 62.5 |


| Soft cheeses (not including pizza, pies and cakes) | 4.8 | 29.9 | 23.8 | 29.2 | 12.3 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Semi-hard cheeses | 1.7 | 23.8 | 22 | 32.3 | 20.2 |
| Hard cheese (grated cheese type), alone or as part of <br> another dish * | 1.6 | 30.2 | 23.9 | 30.1 | 14.2 |
| Without added salt | 16.1 | 6.5 | 5.4 | 13.7 | 58.3 |
| $\quad$ Pastry, other bakery products, sweets |  |  |  |  |  |
| Danish/croissants and other "Argentine facturas" | 1.7 | 12.2 | 22.4 | 37.9 | 25.8 |
| Biscuits or savory bizcochos | 3.7 | 11.1 | 9.1 | 19.4 | 56.7 |
| Cakes, pies, muffins, etc | 0.3 | 1.7 | 9 | 41.1 | 47.9 |
| Alfajores | 1.4 | 3.5 | 5.9 | 15.2 | 74 |
| $\quad$ Other |  |  |  |  |  |
| Margarine | 1.0 | 2.2 | 3.8 | 6 | 87 |
| Butter | 4.9 | 20.8 | 18.3 | 10.5 | 45.5 |
| Salted snacks | 0.0 | 1 | 7.2 | 24.8 | 67.0 |
| Salted peanuts | 0.0 | 0.7 | 6 | 24.2 | 69.1 |

Table S5.1 Main dietary sources of sodium among women by age group

| Food products | Age |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<55 \mathrm{y}(\mathrm{n}=724)$ |  |  | $\geq 55$ years ( $\mathrm{n}=586$ ) |  |  |
|  | Sodium consumed per person mg/day Mean (SE) | \% | Ranking | Sodium consumed per person mg/day Mean (SE) | \% | Ranking |
| Sodium from food products | 1675 (50) |  | 0 | 1604 (52) |  |  |
| Bouillon cubes, powder/ Instant soups | 322 (16) | 19.2 | 1 | 363 (19) | 22.6 | 1 |
| Meat products | 310 (14) | 18.5 | 2 | 249 (12) | 15.6 | 2 |
| Traditional Bread (from bakery) | 268 (15) | 16 | 3 | 236 (18) | 14.7 | 4 |
| Cheeses | 252 (11) | 15.1 | 4 | 247 (12) | 15.4 | 3 |
| Empanada/Pie, puff pastry | 148 (6) | 8.8 | 5 | 153 (7) | 9.5 | 5 |
| Pizza | 74 (3) | 4.4 | 6 | 69 (3) | 4.3 | 6 |
| Crackers | 57 (4) | 3.4 | 7 | 57 (4) | 3.5 | 7 |
| Canned foods, (vegetables/fish) | 49 (2) | 2.9 | 8 | 56 (4) | 3.5 | 8 |
| Peanuts, salty | 33 (2) | 2 | 9 | 26 (3) | 1.6 | 10 |
| Sliced or sandwich bread | 27 (3) | 1.6 | 10 | 29 (3) | 1.8 | 9 |
| Cookies | 26 (2) | 1.5 | 11 | 18 (1) | 1.1 | 12 |
| Sauces, ready- to-use | 24 (1) | 1.4 | 12 | 22 (1) | 1.4 | 11 |
| Biscuits or savory bizcochos | 18 (1) | 1.1 | 13 | 16 (1) | 1 | 13 |
| Pastry and other | 16 (1) | 0.9 | 14 | 13 (1) | 0.8 | 14 |
| Seasonings | 12 (1) | 0.7 | 15 | 8 (1) | 0.5 | 16 |
| Bread, (Vienna, Hamb./ hot dog bun) | 12 (1) | 0.7 | 16 | 13 (2) | 0.8 | 15 |

Table S5.2 Main dietary sources of sodium among men by age group

| Food products | Age |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<55 \mathrm{y}$ ( $\mathrm{n}=406$ ) |  |  | $\geq 55$ years ( $\mathrm{n}=413$ ) |  |  |
|  | Sodium consumed per person mg/day Mean (SE) | \% | Ranking | Sodium consumed per person mg/day Mean (SE) | \% | Ranking |
| Sodium from food products | 2104 (76) |  | 0 | 2085 (77) |  |  |
| Meat products | 427 (22) | 20.3 | 1 | 378 (20) | 18.1 | 2 |
| Traditional Bread (from bakery) | 425 (27) | 20.2 | 2 | 423 (29) | 20.3 | 1 |
| Cheeses | 318 (18) | 15.1 | 3 | 301 (17) | 14.5 | 4 |
| Bouillon cubes, powder/ Instant soups | 290 (21) | 13.8 | 4 | 367 (22) | 17.6 | 3 |
| Empanada/Pie, puff pastry | 197 (10) | 9.3 | 5 | 194 (10) | 9.3 | 5 |
| Pizza | 105 (5) | 5 | 6 | 94 (5) | 4.5 | 6 |
| Crackers | 55 (5) | 2.6 | 7 | 60 (5) | 2.9 | 7 |
| Canned foods, (vegetables/fish) | 51 (3) | 2.4 | 8 | 56 (3) | 2.7 | 8 |
| Peanuts, salty | 47 (4) | 2.2 | 9 | 35 (3) | 1.7 | 9 |
| Cookies | 35 (3) | 1.6 | 10 | 27 (3) | 1.3 | 11 |
| Sliced or sandwich bread | 29 (4) | 1.4 | 11 | 32 (4) | 1.6 | 10 |
| Biscuits or savory bizcochos | 26 (2) | 1.3 | 12 | 20 (2) | 1 | 13 |
| Sauces, ready- to-use | 24 (2) | 1.1 | 13 | 26 (2) | 1.2 | 12 |
| Pastry and other | 18 (1) | 0.9 | 14 | 16 (1) | 0.8 | 14 |
| Seasonings | 17 (1) | 0.8 | 15 | 12 (1) | 0.6 | 16 |
| Bread, (Vienna, Hamb./ hot dog bun) | 15 (2) | 0.7 | 16 | 16 (3) | 0.8 | 15 |

SE: Standard Error

Table S5.3 Main dietary sources of sodium among women by level of education


[^1]Table S5.4 Main dietary sources of sodium among men by level of education

|  | Education |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | < 8years ( $n$ 465) |  |  | 8-12 years ( $n$ 243) |  |  | >12 years ( n 111) |  |  |
| Food products | Sodium consum per person mg/day <br> Mean (SE) | \% | Ranking | Sodium consum per person mg/day <br> Mean (SE) | \% | Ranking | Sodium consumed per person mg/day <br> Mean (SE) | \% | Ranking |
| Sodium from food products | 2147 (79) |  | - | 2138 (107) |  |  | 1912 (123) |  |  |
| Traditional Bread (from bakery) | 426 (26) | 19.9 | 1 | 450 (39) | 21 | 1 | 375 (51) | 19.6 | 1 |
| Meat products | 414 (21) | 19.3 | 2 | 439 (32) | 20.6 | 2 | 357 (37) | 18.7 | 2 |
| Bouillon cubes, powder/ Instant soups | 385 (27) | 17.9 | 3 | 260 (22) | 12.2 | 4 | 247 (28) | 12.9 | 4 |
| Cheeses | 282 (15) | 13.1 | 4 | 346 (28) | 16.2 | 3 | 326 (30) | 17.1 | 3 |
| Empanada/Pie, puff pastry | 201 (11) | 9.3 | 5 | 196 (13) | 9.1 | 5 | 184 (17) | 9.6 | 5 |
| Pizza | 97 (5) | 4.5 | 6 | 104 (8) | 4.9 | 6 | 109 (9) | 5.7 | 6 |
| Canned foods, (vegetables/fish) | 59 (3) | 2.7 | 7 | 48 (3) | 2.2 | 8 | 48 (5) | 2.5 | 8 |
| Crackers | 57 (5) | 2.6 | 8 | 56 (7) | 2.6 | 7 | 58 (10) | 3 | 7 |
| Peanuts, salty | 42 (3) | 1.9 | 9 | 44 (5) | 2.1 | 9 | 43 (7) | 2.3 | 9 |
| Cookies | 32 (3) | 1.5 | 10 | 33 (4) | 1.5 | 10 | 32 (6) | 1.7 | 10 |
| Sliced or sandwich bread | 29 (4) | 1.4 | 11 | 31 (5) | 1.5 | 11 | 30 (8) | 1.6 | 11 |
| Sauces, ready- to-use | 27 (2) | 1.3 | 12 | 24 (2) | 1.1 | 13 | 18 (3) | 1 | 13 |
| Biscuits or savory bizcochos | 25 (2) | 1.2 | 13 | 28 (4) | 1.3 | 12 | 17 (3) | 0.9 | 14 |
| Bread, (Vienna, Hamb./hot dog bun) | 17 (3) | 0.8 | 14 | 15 (3) | 0.7 | 16 | 9 (2) | 0.5 | 16 |
| Pastry and other | 15 (1) | 0.7 | 15 | 21 (2) | 1 | 14 | 16 (2) | 0.8 | 15 |
| Seasonings | 12 (1) | 0.5 | 16 | 18 (2) | 0.8 | 15 | 22 (3) | 1.1 | 12 |

[^2]Figure S1. Sources of sodium from food products considering the inclusion in the National Act 26905, by sex and level of education


Table S6. Multiple-adjusted odds ratios of adding salt associated with demographic characteristics in adults aged 35-74y, Bariloche and Marcos Paz, Argentina, n=3026. ${ }^{\text {a }}$

## Adding salt in cooking ${ }^{\text {b }}$

Adding salt at the table ${ }^{\text {b }}$

|  | Adding salt in cooking ${ }^{\mathrm{b}}$ |  |  | Adding salt at the table ${ }^{\mathrm{b}}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | OR | $\mathbf{( 9 5 \% C I})$ | $P$ value | OR | $\mathbf{( 9 5 \% C I})$ | $P$ value |
| Male | 0.96 | $(0.78-1.20)$ | 0.735 | 1.38 | $(1.09-1.73)$ | 0.007 |
| Age (>55y) | 0.66 | $(0.59-0.73)$ | $<0.001$ | 0.67 | $(0.53-0.85)$ | 0.001 |
| Education Level |  |  |  |  |  |  |
| $\geq 8$ y | 0.90 | $(0.72-1.13)$ | 0.363 | 0.99 | $(0.78-1.26)$ | 0.940 |

[^3]
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[^0]:    *Quantities of these items were based on standardized portions (SP)

[^1]:    SE: Standard Error

[^2]:    SE: Standard Error

[^3]:    OR: Odds Ratio; (95\%CI): 95\% Confidence Interval
    ${ }^{\text {a }}$ Model included age, sex, level of education and city.
    ${ }^{\mathrm{b}}$ Often /always.

