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| **Supplementary Table 1.** Knowledge related to salt intake by socio-demographic characteristics |
| Question | Gender | Age group | Level of education | Area of origin |
| male | female | *P*-value | 18-20 | 21-23 | 24-26 | 27-30 | *P*-value | Higher | Professional secondary | General secondary | *P*-value | North | Central | West | South | East | *P*-value |
| Salt may be defined in the product’s contents as ‘salt’ and as ‘sodium’. What is the relationship between salt and sodium? |
| *Salt contains sodium* | 58.33 | 65.36 | 0.284 | 66.67 | 76.19 | 50 | 65.12 | **0.029** | 63.83 | 30 | 66.67 | 0.089 | 55.21 | 75 | 63.33 | 66.67 | 71.43 | 0.299 |
| Incorrect answer | 41.67 | 34.64 |  | 33.33 | 23.81 | 50 | 34.88 |  | 36.17 | 70 | 33.33 |  | 44.79 | 25 | 36.67 | 33.33 | 28.57 |  |
| In your opinion, how much salt do Kazakhstani people consume? |
| *Too much & More than needed* | 60.71 | 74.51 | **0.027** | 62.82 | 76.19 | 70.27 | 74.42 | 0.385 | 72.34 | 50 | 61.54 | 0.159 | 73.96 | 75 | 73.33 | 63.77 | 50 | 0.277 |
| Incorrect answer | 39.29 | 25.49 |  | 37.18 | 23.81 | 29.73 | 25.58 |  | 27.66 | 50 | 38.46 |  | 26.04 | 25 | 26.67 | 36.23 | 50 |  |
| Which of the following do you think is the main source of salt in the diet of Kazakhstan’s population? |
| *Salt contained in processed meat products and in other processed products* | 40.48 | 58.82 | **0.007** | 56.41 | 61.90 | 45.95 | 46.51 | 0.277 | 50 | 50 | 64.1 | 0.273 | 45.83 | 71.43 | 60 | 55.07 | 28.57 | **0.044** |
| Incorrect answer | 59.52 | 41.18 |  | 43.59 | 38.10 | 54.05 | 53.49 |  | 50 | 50 | 35.9 |  | 54.17 | 28.57 | 40 | 44.93 | 71.43 |  |
| Health professionals recommend that we should eat no more than a certain amount of salt each day. How much salt do you think it is?  |
| *5 grams* | 30.95 | 34.64 | 0.565 | 39.74 | 19.05 | 32.43 | 37.21 | 0.132 | 35.11 | 10 | 30.77 | 0.277 | 37.5 | 42.86 | 43.33 | 18.84 | 35.71 | **0.044** |
| Incorrect answer | 69.05 | 65.36 |  | 60.26 | 80.95 | 67.57 | 62.79 |  | 64.89 | 90 | 69.23 |  | 62.5 | 57.14 | 56.67 | 81.16 | 64.29 |  |
| Do you think eating too much salt could damage your health? |
| *Yes* | 94.05 | 95.42 | 0.644 | 93.59 | 92.86 | 97.30 | 95.35 | 0.672 | 95.21 | 100 | 92.31 | 0.669 | 92.71 | 92.86 | 93.33 | 98.55 | 100 | 0.357 |
| Incorrect answer | 5.95 | 4.58 |  | 6.41 | 7.14 | 2.70 | 4.65 |  | 4.79 | 0 | 7.69 |  | 7.29 | 7.14 | 6.67 | 1.45 | 0 |  |
| Which, if any, of the following do you think is linked to eating too much salt? |
| High blood pressure |
| *Yes* | 55.95 | 64.05 | 0.221 | 53.85 | 45.24 | 70.27 | 74.42 | **0.007** | 63.30 | 70.00 | 48.72 | 0.203 | 60.42 | 64.29 | 63.33 | 63.77 | 42.86 | 0.668 |
| Incorrect answer | 44.05 | 35.95 |  | 46.15 | 54.76 | 29.73 | 25.58 |  | 36.70 | 30.00 | 51.28 |  | 39.58 | 35.71 | 36.67 | 36.23 | 57.14 |  |
| Kidney disease |
| *Yes* | 78.57 | 86.27 | 0.126 | 78.21 | 76.19 | 89.19 | 90.70 | 0.089 | 83.51 | 90 | 82.05 | 0.939 | 86.46 | 82.14 | 66.67 | 89.86 | 71.43 | **0.037** |
| Incorrect answer | 21.43 | 13.73 |  | 21.49 | 23.81 | 10.81 | 9.30 |  | 16.49 | 10 | 17.95 |  | 13.54 | 17.86 | 33.33 | 10.14 | 28.57 |  |
| Heart disease  |
| *Yes* | 54.76 | 60.78 | 0.368 | 50 | 54.76 | 59.46 | 76.74 | **0.037** | 62.77 | 70.00 | 35.90 | **0.007** | 63.54 | 57.14 | 46.67 | 59.42 | 50.00 | 0.525 |
| Incorrect answer | 45.24 | 39.22 |  | 50 | 45.24 | 40.54 | 23.26 |  | 37.23 | 30.00 | 64.10 |  | 36.46 | 42.86 | 53.33 | 40.58 | 50.00 |  |
| Heart attack |
| *Yes* | 42.86 | 55.56 | 0.061 | 38.46 | 45.24 | 54.05 | 74.42 | **0.002** | 53.19 | 80 | 33.33 | **0.013** | 52.18 | 64.29 | 46.67 | 47.83 | 42.86 | 0.575 |
| Incorrect answer | 57.17 | 44.44 |  | 61.54 | 54.76 | 45.95 | 25.58 |  | 46.81 | 20 | 66.67 |  | 47.92 | 35.71 | 53.33 | 52.17 | 57.14 |  |

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| **Supplementary Table 2.** Attitudes related to salt intake and other food-related issues by socio-demographic characteristics |
| Question | Gender | Age group | Level of education | Area of origin |
| male | Female | *P*-value | 18-20 | 21-23 | 24-26 | 27-30 | *P*-value | Higher | Professional secondary | General secondary | *P*-value | North | Central | West | South | East | *P*-value |
| How do you think your daily salt intake compares to the amount of salt recommended by health professionals? |
| Less than recommended | 10.71 | 10.46 | 0.427 | 12.82 | 2.44 | 14.86 | 6.98 | 0.678 | 10.11 | 20 | 10.26 | 0.715 | 14.58 | 7.14 | 13.33 | 7.25 | 0 | 0.248 |
| About the right amount | 48.81 | 54.25 |  | 48.72 | 63.41 | 50 | 51.16 |  | 54.79 | 40 | 43.59 |  | 42.71 | 60.71 | 56.67 | 57.97 | 64.29 |  |
| More than recommended | 28.57 | 29.41 |  | 29.49 | 26.83 | 28.38 | 32.56 |  | 28.19 | 30 | 33.33 |  | 36.46 | 21.43 | 23.33 | 27.54 | 14.29 |  |
| Don’t know | 11.9 | 5.88 |  | 8.97 | 7.32 | 6.76 | 9.3 |  | 6.91 | 10 | 12.82 |  | 6.25 | 10.71 | 6.67 | 7.25 | 21.43 |  |
| Please indicate on the scale below how concerned you are about each of the following food related issues? |
| Healthy eating |
| Very / extremely concerned | 73.81 | 71.24 | 0.613 | 74.36 | 70.73 | 72.97 | 67.44 | 0.775 | 75 | 60 | 61.54 | 0.18 | 69.79 | 60.71 | 83.33 | 76.81 | 64.29 | 0.366 |
| Somewhat concerned | 22.62 | 26.8 |  | 23.08 | 24.39 | 24.32 | 32.56 |  | 23.4 | 30 | 33.33 |  | 26.04 | 39.29 | 16.67 | 21.74 | 28.57 |  |
| Not at all / not very concerned | 3.57 | 1.96 |  | 2.56 | 4.88 | 2.7 | 0 |  | 1.6 | 10 | 5.13 |  | 4.17 | 0 | 0 | 1.45 | 7.14 |  |
| Amount of sugar in food |
| Very / extremely concerned | 55.95 | 56.85 | 0.989 | 59.74 | 55 | 56.94 | 50 | 0.538 | 57.38 | 66.67 | 50 | 0.107 | 56.99 | 53.57 | 65.52 | 56.06 | 42.86 | 0.679 |
| Somewhat concerned | 34.52 | 33.56 |  | 27.27 | 37.5 | 33.33 | 45 |  | 34.97 | 33.33 | 28.95 |  | 31.18 | 42.86 | 31.03 | 31.82 | 50 |  |
| Not at all / not very concerned | 9.52 | 9.59 |  | 12.99 | 7.5 | 9.72 | 5 |  | 7.65 | 0 | 21.05 |  | 11.83 | 3.57 | 3.45 | 12.12 | 7.14 |  |
| Amount of salt in food |
| Very / extremely concerned | 37.35 | 53.47 | 0.064 | 44 | 39.02 | 50 | 57.5 | 0.161 | 49.17 | 71.43 | 35.9 | 0.061 | 44.44 | 50 | 57.14 | 50.75 | 28.57 | 0.406 |
| Somewhat concerned | 46.99 | 35.42 |  | 36 | 53.66 | 38.57 | 35 |  | 40.33 | 28.57 | 38.46 |  | 41.11 | 46.43 | 28.57 | 34.33 | 64.29 |  |
| Not at all / not very concerned | 15.66 | 11.11 |  | 20 | 7.32 | 11.43 | 7.5 |  | 10.5 | 0 | 25.64 |  | 14.44 | 3.57 | 14.29 | 14.93 | 7.14 |  |
| Amount of fat in food |
| Very / extremely concerned | 52.5 | 62.68 | 0.224 | 67.12 | 48.78 | 55.88 | 58.97 | 0.186 | 58.29 | 87.5 | 56.41 | **0.013** | 54.55 | 57.69 | 75 | 62.12 | 42.86 | 0.295 |
| Somewhat concerned | 36.25 | 25.35 |  | 19.18 | 39.02 | 36.76 | 25.64 |  | 32.57 | 12.5 | 17.95 |  | 35.23 | 30.77 | 14.29 | 22.73 | 50 |  |
| Not at all / not very concerned | 11.25 | 11.97 |  | 13.7 | 12.2 | 7.35 | 15.38 |  | 9.14 | 0 | 25.64 |  | 10.23 | 11.54 | 10.71 | 15.15 | 7.14 |  |
| Amount of saturated fat in food |
| Very / extremely concerned | 34.15 | 53.52 | **0.018** | 43.42 | 31.71 | 56.52 | 48.65 | 0.105 | 47.19 | 57.14 | 41.03 | 0.335 | 43.82 | 56 | 56.67 | 48.48 | 14.29 | 0.145 |
| Somewhat concerned | 46.34 | 30.99 |  | 40.79 | 53.66 | 24.64 | 32.43 |  | 38.2 | 28.57 | 30.77 |  | 41.57 | 24 | 23.33 | 34.85 | 64.29 |  |
| Not at all / not very concerned | 19.51 | 15.49 |  | 15.79 | 14.63 | 18.84 | 18.92 |  | 14.61 | 14.29 | 28.21 |  | 14.61 | 20 | 20 | 16.67 | 21.43 |  |
| Amount of calories in food |
| Very / extremely concerned | 41.46 | 45.07 | 0.457 | 42.11 | 41.46 | 44.93 | 45.95 | 0.998 | 47.75 | 28.57 | 28.21 | 0.117 | 38.2 | 53.85 | 44.83 | 53.03 | 14.29 | 0.072 |
| Somewhat concerned | 29.27 | 33.1 |  | 31.58 | 31.71 | 31.88 | 32.43 |  | 30.9 | 42.86 | 33.33 |  | 31.46 | 26.92 | 24.14 | 33.33 | 50 |  |
| Not at all / not very concerned | 29.27 | 21.83 |  | 26.32 | 26.83 | 23.19 | 21.62 |  | 21.35 | 28.57 | 38.46 |  | 30.34 | 19.23 | 31.03 | 13.64 | 35.71 |  |

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| **Supplementary Table 3.** Behaviors related to salt intake by socio-demographic characteristics |
| Question | Gender | Age group | Level of education | Area of origin |
| male | female | *P*-value | 18-20 | 21-23 | 24-26 | 27-30 | *P*-value | Higher | Professional secondary | General secondary | *P*-value | North | Central | West | South | East | *P*-value |
| How often do you add salt to your food at the table? |
| Often / always | 13.1 | 12.42 | 0.914 | 16.67 | 17.07 | 9.46 | 6.98 | 0.583 | 11.7 | 0 | 20.51 | **0.007** | 13.54 | 14.29 | 10 | 11.59 | 14.29 | 0.913 |
| Sometimes | 15.48 | 13.73 |  | 14.1 | 9.76 | 14.86 | 18.6 |  | 14.36 | 60 | 2.56 |  | 14.58 | 14.29 | 20 | 10.14 | 21.43 |  |
| Never / rarely | 71.43 | 73.86 |  | 69.23 | 73.17 | 75.68 | 74.42 |  | 73.94 | 40 | 76.92 |  | 71.88 | 71.43 | 70 | 78.26 | 64.29 |  |
| In the food you eat at home, how often is salt added during cooking? |
| Often / always | 90.48 | 92.16 | 0.889 | 91.03 | 87.8 | 94.59 | 90.7 | 0.702 | 92.55 | 90 | 87.18 | 0.495 | 92.71 | 96.43 | 90 | 86.96 | 100 | 0.570 |
| Sometimes | 5.95 | 4.58 |  | 6.41 | 7.32 | 1.35 | 6.98 |  | 4.79 | 10 | 5.13 |  | 3.12 | 0 | 6.67 | 10.14 | 0 |  |
| Never / rarely | 3.57 | 3.27 |  | 2.56 | 4.88 | 4.05 | 2.33 |  | 2.66 | 0 | 7.69 |  | 4.17 | 3.57 | 3.33 | 2.9 | 0 |  |
| Do you place a salt shaker on your table at meal times? |
| Often / always | 22.62 | 15.03 | **0.047** | 21.79 | 26.83 | 10.81 | 13.95 | 0.241 | 14.89 | 30 | 28.21 | 0.258 | 18.75 | 17.86 | 16.67 | 17.39 | 14.29 | 0.254 |
| Sometimes | 16.67 | 9.15 |  | 14.1 | 9.76 | 13.51 | 6.98 |  | 11.7 | 10 | 12.82 |  | 15.62 | 3.57 | 0 | 13.04 | 21.43 |  |
| Never / rarely | 60.71 | 75.82 |  | 64.1 | 63.41 | 75.68 | 79.07 |  | 73.4 | 60 | 58.97 |  | 65.62 | 78.57 | 83.33 | 69.57 | 64.29 |  |
| Below are some ways to lower the amount of salt in your diet. In the past month, to what extent have you personally done any of the following? |
| Avoided using packaged, ready-to-eat foods? |
| Often / always | 34.52 | 41.02 | 0.160 | 42.31 | 40 | 37.84 | 52.38 | 0.191 | 43.55 | 38.46 | 40 | 0.140 | 37.5 | 50 | 27.59 | 52.94 | 42.86 | 0.083 |
| Sometimes | 30.95 | 27.15 |  | 20.51 | 30 | 37.84 | 26.19 |  | 31.18 | 20.51 | 10 |  | 29.17 | 39.29 | 34.48 | 19.12 | 35.71 |  |
| Never / rarely | 34.52 | 25.83 |  | 37.18 | 30 | 24.32 | 21.43 |  | 25.27 | 41.03 | 50 |  | 33.33 | 10.71 | 37.93 | 27.94 | 21.43 |  |
| Used spices/herbs instead of salt during cooking? |
| Often / always | 32.53 | 29.25 | 0.206 | 28.95 | 37.5 | 27.78 | 29.27 | 0.739 | 28.57 | 35.9 | 44.44 | 0.598 | 24.73 | 22.22 | 34.48 | 38.81 | 35.71 | 0.188 |
| Sometimes | 18.07 | 28.57 |  | 22.37 | 17.5 | 27.78 | 37.71 |  | 26.92 | 17.95 | 11.11 |  | 19.35 | 33.33 | 24.59 | 25.37 | 35.71 |  |
| Never / rarely | 49.4 | 42.18 |  | 48.68 | 45 | 44.44 | 39.02 |  | 44.51 | 46.15 | 44.44 |  | 55.91 | 44.44 | 37.93 | 35.82 | 28.57 |  |
| Avoided eating food from fast food restaurants? |
| Often / always | 30.12 | 42.47 | 0.180 | 36.84 | 42.5 | 23.94 | 58.54 | **0.002** | 38.12 | 35.9 | 44.44 | 0.541 | 32.26 | 55.56 | 27.59 | 45.45 | 28.57 | 0.089 |
| Sometimes | 30.12 | 24.66 |  | 21.05 | 20 | 42.25 | 17.07 |  | 28.73 | 17.95 | 22.22 |  | 30.11 | 25.93 | 17.24 | 22.73 | 42.86 |  |
| Never / rarely | 39.76 | 32.88 |  | 42.11 | 37.5 | 33.8 | 24.39 |  | 33.15 | 46.15 | 33.33 |  | 37.63 | 18.52 | 55.17 | 31.82 | 28.57 |  |
| When eating out, asked to have your meal prepared without salt? |
| Often / always | 2.41 | 3.47 | 0.467 | 1.32 | 2.5 | 4.17 | 5.26 | 0.852 | 3.31 | 2.56 | 0 | 1 | 2.17 | 3.85 | 6.67 | 1.54 | 7.14 | 0.468 |
| Sometimes | 6.02 | 2.78 |  | 5.26 | 5 | 2.78 | 2.63 |  | 4.42 | 2.56 | 0 |  | 5.43 | 7.69 | 3.33 | 1.54 | 0 |  |
| Never / rarely | 91.95 | 93.75 |  | 93.42 | 92.5 | 93.06 | 92.11 |  | 92.27 | 94.87 | 100 |  | 92.39 | 88.46 | 90 | 96.92 | 92.86 |  |