



UNITED ARAB EMIRATES
MINISTRY OF HEALTH & PREVENTION

UAE Nutritional Status Study

Statistic and Research Center

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Introduction

The UAE National Health survey of non-communicable disease (NCD) risk factors was carried out from Nov 2017-Apr 2018. The survey was a population-based survey of adults aged 18+. Around 10,000 Randomly selected Households across all seven Emirates were selected as sample design and was used to produce representative data for that age range. A total of 8214 adults participated in the survey. The overall response rate was 87% among Adults Participants. A repeat survey is planned for 2022-2023.

Data collected were on Socio demographic, behavioral information, Physical measurements such as height, weight, blood pressure, Blood glucose and cholesterol levels.

At present, proper nutrition has been acknowledged as a vital component of maintaining good health and in disease prevention [1]. Nutrition survey is effective and an essential measure to address the state of lifestyle, nutrition and health of the UAE population [2]. The findings of this survey offers scientific data that serves policy makers, when planning interventions and policies for the population sub-groups and the general population. In the past, the information on the nutritional state was limited. This was an obstacle to the optimal development of health promotion programs as well as for the formulation of nutritional guidelines for the population [3].



This survey has collected information on the dietary habits of the UAE population, focusing on types, food quantities, and amount of sugary drinks, salt or a salty sauce in diet. The findings of the survey facilitates the identification of the groups at risk along with the development of nutritional intervention programs. The survey results also serve as a baseline for following trends in the consumption patterns and on the health and nutrition of the population.

| Question D1-D4 Percentage of respondents eating less than 5 servings of fruits and/or vegetables on average per day | Nationality | | | |
|--|-------------|------------|---------------|------------|
| | Nationals | | Non-Nationals | |
| | Gender | | Gender | |
| | Males | Females | Males | Females |
| | Column N % | Column N % | Column N % | Column N % |
| | 83.7% | 81.3% | 83.8% | 81.9% |

Poor diet quality is a leading risk factor associated with death and disability worldwide [4]. This section refers to fruit and vegetables consumed as discrete items. Around, 83.7% of national's males and 81.3% nationals' females consumed less than 5 servings of fruits and/or vegetables on an average per day. While, 83.8% of non-nationals males and 81.9% of non-nationals females consumed less than 5 servings of fruits and/or vegetables on an average per day. This indicates that a greater number of males had less than 5 servings of fruits and/or vegetables on an average per day. Helping individuals develop healthy eating habits early in life may lead to healthier behaviors that last a lifetime.



| Question D5 How often do you add salt or a salty sauce such as soya sauce to your food right before you eat it or as you are eating it? | Nationality | | | | | | | |
|--|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Always | 55 | 9.7% | 71 | 12.5% | 990 | 27.7% | 909 | 26.1% |
| Often | 53 | 9.4% | 62 | 11.1% | 550 | 15.4% | 638 | 18.3% |
| Sometimes | 181 | 31.9% | 171 | 30.4% | 1047 | 29.3% | 995 | 28.6% |
| Rarely | 102 | 18.0% | 100 | 17.7% | 477 | 13.3% | 491 | 14.1% |
| Never | 7 | 1.3% | 4 | 0.7% | 51 | 1.4% | 9 | 0.2% |
| Don't know | 168 | 29.6% | 155 | 27.6% | 461 | 12.9% | 441 | 12.7% |

The table presented above aims to learn more about salt in diet. This section considered the discretionary use of salt in cooking and at the table. Salt is the primary source of sodium which is added to food during cooking (bouillon and stock cubes) or kept at the table (soy sauce, fish sauce and table salt). With regards to the use of salt or salty sauce to food before meal or during meal, 31.9% and 30.4% national males and females and 29.3% non-nationals males and 28.6% of non-nationals females reported to use salt or salty sauce sometimes. While 29.6% national men and 27.6% national women said they did not know if they had ever used salt or salty sauce to food before meal or during meal.

| Question D6 How often is salt, salty seasoning or a salty sauce added in cooking or preparing foods in your household? | Nationality | | | | | | | |
|---|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |



| | | | | | | | | |
|------------|-----|-------|-----|-------|------|-------|------|-------|
| Always | 114 | 20.2% | 120 | 21.3% | 1364 | 38.1% | 1323 | 38.0% |
| Often | 65 | 11.5% | 88 | 15.7% | 695 | 19.4% | 705 | 20.3% |
| Sometimes | 173 | 30.6% | 162 | 28.8% | 814 | 22.7% | 831 | 23.9% |
| Rarely | 83 | 14.7% | 80 | 14.2% | 324 | 9.1% | 316 | 9.1% |
| Never | 6 | 1.1% | 4 | 0.7% | 49 | 1.4% | 10 | 0.3% |
| Don't know | 124 | 22.0% | 109 | 19.4% | 330 | 9.2% | 298 | 8.5% |

Around 22.0% of total male national respondents (124), 9.2% (330) male non-national respondents, 19.4% of total female national respondents (109) and 8.5% (298) female non-national respondents said that they did not know if they added salt, salty seasoning or a salty sauce to prepare food in their household. While, 30.6% male national respondents and 22.7% male non-national respondents; 28.8% (162) female national respondents and 23.9% (831) female non-national respondents said that they add salt, salty seasoning or a salty sauce sometimes while preparing or cooking food in their household.

| Question D7 How often do you eat processed food high in salt? | Nationality | | | | | | | |
|--|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Always | 23 | 4.0% | 26 | 4.6% | 169 | 4.7% | 155 | 4.5% |
| Often | 43 | 7.6% | 57 | 10.2% | 382 | 10.7% | 354 | 10.2% |
| Sometimes | 184 | 32.5% | 170 | 30.2% | 1157 | 32.4% | 1192 | 34.2% |
| Rarely | 119 | 21.0% | 123 | 21.8% | 960 | 26.8% | 973 | 27.9% |



| | | | | | | | | |
|------------|-----|-------|-----|-------|-----|-------|-----|-------|
| Never | 3 | 0.5% | 6 | 1.1% | 62 | 1.7% | 15 | 0.4% |
| Don't know | 194 | 34.3% | 181 | 32.2% | 846 | 23.7% | 793 | 22.8% |

Dietary quality is affected by the consumption of processed foods and food products high in salt [5]. The above table indicates that around 34.3% of total male national respondents (194), 23.7% (846) male non-national respondents and 32.2% of total female national respondents (181) and 22.8% (793) female non-national respondents said that they do not know how often processed food high in salt is consumed by them. While, 4.0% and 4.6% of national males and females always eat processed food high in salt.

| Question D8 How much salt or salty sauce do you think you consume? | Nationality | | | | | | | |
|---|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Far too much | 9 | 1.6% | 10 | 1.8% | 213 | 5.9% | 147 | 4.2% |
| Too much | 21 | 3.8% | 26 | 4.7% | 129 | 3.6% | 148 | 4.2% |
| Just the right amount | 427 | 75.5% | 413 | 73.4% | 2679 | 74.9% | 2717 | 78.0% |
| Too little | 92 | 16.2% | 96 | 17.1% | 392 | 11.0% | 396 | 11.4% |
| Far too little | 10 | 1.8% | 12 | 2.2% | 86 | 2.4% | 55 | 1.6% |
| Don't know | 6 | 1.1% | 5 | 0.8% | 79 | 2.2% | 19 | 0.6% |

Around, 75.5% (427) of the male national respondents and 73.4% (413) of the female national respondents indicated that they consumed the right amount of salt or salty sauce. While majority of the male and female non-national respondent were reported to use the right amount of salt or salty sauce.



| Question D9 How important to you is lowering the salt in your diet? | | Nationality | | | | | | | |
|---|--|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | | Nationals | | | | Non-Nationals | | | |
| | | Gender | | | | Gender | | | |
| | | Males | | Females | | Males | | Females | |
| | | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Very important | | 299 | 52.8% | 327 | 58.1% | 1763 | 49.3% | 1567 | 45.0% |
| Somewhat important | | 217 | 38.4% | 202 | 35.9% | 1404 | 39.2% | 1569 | 45.1% |
| Not at all important | | 40 | 7.1% | 23 | 4.2% | 325 | 9.1% | 313 | 9.0% |
| Don't know | | 10 | 1.8% | 10 | 1.8% | 85 | 2.4% | 33 | 0.9% |

Reducing salt intake is one of the best ways to reduce the risk of future health problems. Respondent were inquired about their perceptions regarding the importance of lowering salt in their diet. Majority of the respondent reported that it was somewhat important to them to reduce the salt in their diet. While, 7.1% (40) male national respondents, 4.2% (23) female national respondents and 9.1% (325) male and 9.0% (313) female non-national respondent indicated that lowering salt in diet was not at all important.

| Question D10 Do you think that too much salt or salty sauce in your diet could cause a health problem? | | Nationality | | | | | | | |
|--|--|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | | Nationals | | | | Non-Nationals | | | |
| | | Gender | | | | Gender | | | |
| | | Males | | Females | | Males | | Females | |
| | | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| YES | | 412 | 72.8% | 414 | 73.4% | 2547 | 71.2% | 2252 | 64.7% |
| NO | | 133 | 23.5% | 134 | 23.9% | 911 | 25.5% | 1152 | 33.1% |



| | | | | | | | | | |
|--|------------|----|------|----|------|-----|------|----|------|
| | Don't know | 21 | 3.7% | 15 | 2.7% | 118 | 3.3% | 79 | 2.3% |
|--|------------|----|------|----|------|-----|------|----|------|

As it is well known that too much sodium can wreak havoc on your body. Therefore, respondents were inquired if too much salt or salty sauce in their diet can cause them health problem. Majority of the respondents were well aware of the fact that too much salt or salty sauce can cause health problems. While, only 23.5% male national respondents and 23.9% female national respondents reported that too much salt or salty sauce do not cause health issues.

| Question D11 Do you do any of the following on a regular basis to control your salt intake? | | Nationality | | | | | | | |
|--|-----|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | | Nationals | | | | Non-Nationals | | | |
| | | Gender | | | | Gender | | | |
| | | Males | | Females | | Males | | Females | |
| | | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Limit consumption of processed foods | Yes | 369 | 65.1% | 390 | 69.3% | 2408 | 67.3% | 2269 | 65.2% |
| | No | 197 | 34.9% | 173 | 30.7% | 1169 | 32.7% | 1213 | 34.8% |
| Look at the salt or sodium content on food labels | Yes | 198 | 34.9% | 223 | 39.5% | 1497 | 41.9% | 1560 | 44.8% |
| | No | 369 | 65.1% | 341 | 60.5% | 2079 | 58.1% | 1922 | 55.2% |
| Buy low salt/sodium alternatives | Yes | 193 | 34.0% | 208 | 36.9% | 1381 | 38.6% | 1358 | 39.0% |
| | No | 374 | 66.0% | 356 | 63.1% | 2195 | 61.4% | 2124 | 61.0% |
| | Yes | 342 | 60.3% | 374 | 66.4% | 2702 | 75.5% | 2720 | 78.1% |



| | | | | | | | | | |
|--|------------|------------|--------------|------------|--------------|-------------|--------------|-------------|--------------|
| Use spices other than salt when cooking | No | 225 | 39.7% | 189 | 33.6% | 875 | 24.5% | 762 | 21.9% |
| Avoid eating foods prepared outside of a home | Yes | 333 | 58.8% | 358 | 63.7% | 2108 | 58.9% | 2012 | 57.8% |
| | No | 233 | 41.2% | 205 | 36.3% | 1468 | 41.1% | 1470 | 42.2% |
| Do other things specifically to control your salt intake | Yes | 24 | 4.3% | 37 | 6.6% | 416 | 11.6% | 335 | 9.6% |
| | No | 542 | 95.7% | 526 | 93.4% | 3161 | 88.4% | 3147 | 90.4% |

Managing the amount of salt consumed on a daily basis and trying to reduce the amount of salt in diet may help reduce the risk of different chronic health conditions. Majority of the respondents limited their consumption of processed foods. Around 65.1% of national males and 69.3% of national females and 67.3% of non-national males and 65.2% non-national females were affirmative that they limited the consumption of processed food. On the contrary, around 60.3% of national male respondents and 66.4% of national female respondents used spice other than salt while cooking. However, majority of the non-national respondents i.e. 75.5% of non-national males and 78.1% of non-national females were reported to use spices other than salt while cooking.

| Question D12 What type of oil or fat is most often used for meal preparation in your household? | Nationality | | | | | | | |
|--|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Vegetable oil | 543 | 95.8% | 540 | 95.8% | 3402 | 95.1% | 3350 | 96.2% |
| Lard or suet (animal fat) | 0 | 0.0% | 2 | 0.3% | 6 | 0.2% | 8 | 0.2% |



| | | | | | | | | |
|--------------------|----|------|----|------|----|------|----|------|
| Butter or ghee | 12 | 2.2% | 16 | 2.8% | 74 | 2.1% | 63 | 1.8% |
| Margarine | 0 | 0.0% | 0 | 0.1% | 6 | 0.2% | 5 | 0.1% |
| Other | 0 | 0.1% | 2 | 0.3% | 32 | 0.9% | 29 | 0.8% |
| None in particular | 3 | 0.6% | 2 | 0.3% | 24 | 0.7% | 12 | 0.3% |
| None used | 1 | 0.2% | 0 | 0.1% | 12 | 0.3% | 0 | 0.0% |
| Refused | 0 | 0.0% | 0 | 0.0% | 5 | 0.1% | 4 | 0.1% |
| Don't know | 7 | 1.2% | 2 | 0.3% | 14 | 0.4% | 10 | 0.3% |

Majority of the respondents were reported to use vegetable oil for preparing meal in the household. About 95.8% of male national respondents, 95.8% of female national respondents, 95.1% of male non-national respondents and 96.2% of female non-national respondents were reported to use vegetable oil. On the other hand, butter or ghee was used by only 2.2% of male national respondents and 2.8% of the female national respondents.

| Question D13 | N | Minimum | Maximum | Mean | Std. Deviation |
|--|------|---------|---------|------|----------------|
| On average, how many meals per week do you eat that were not prepared at a home? | 7174 | 0 | 30 | 1.92 | 1.944 |



One of the simplest ways to improve physical and mental health is to prepare more meals at home. Preparing healthy meals at home often support an individual's immune system along with reducing the risk of illnesses such as high blood pressure, heart disease, cancer, and diabetes. On an average, 1.92 meals per week were consumed by the UAE population that were not prepared at home.

| Question D14 | N | Minimum | Maximum | Mean | Std. Deviation |
|---|------|---------|---------|------|----------------|
| How many glasses of milk or milk-based drinks do you usually have in a day? | 7529 | 0 | 15 | 1.25 | 1.524 |

Milk has long been seen as a healthy drink, because it is high in a range of nutrients. When consuming milk or dairy products, it is usually better to use low fat milk products. On an average, 1.25 glasses of milk or milk-based drinks were consumed by the UAE population in a day.

| Question D15 | N | Minimum | Maximum | Mean | Std. Deviation |
|---|------|---------|---------|------|----------------|
| How many eggs (cooked or fried whole eggs) do you usually eat per week? | 7482 | 0 | 104 | 3.89 | 3.508 |

On an average, 3.89 eggs (cooked or fried whole eggs) were consumed by the UAE population per week.

| Question D16 | Nationality |
|--------------|-------------|
|--------------|-------------|



| For those who are not consuming enough portions of fruits and vegetables: What are the main reasons behind that? | | Nationals | | | | Non-Nationals | | | |
|--|-----|------------|--------------|------------|--------------|---------------|--------------|------------|--------------|
| | | Gender | | | | Gender | | | |
| | | Males | | Females | | Males | | Females | |
| | | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Fruits and vegetables are expensive | NO | 442 | 78.1% | 444 | 78.9% | 2635 | 73.7% | 2671 | 76.7% |
| | YES | 124 | 21.9% | 119 | 21.1% | 942 | 26.3% | 812 | 23.3% |

| | | | | | | | | | |
|--|-----|------------|--------------|------------|--------------|------------|--------------|------------|--------------|
| Fruits and vegetables are not available in all seasons | NO | 424 | 74.8% | 411 | 73.0% | 2815 | 78.7% | 2755 | 79.1% |
| | YES | 143 | 25.2% | 152 | 27.0% | 762 | 21.3% | 728 | 20.9% |

| | | | | | | | | | |
|------------------------|-----|------------|--------------|------------|--------------|------------|--------------|------------|--------------|
| I don't like the taste | NO | 402 | 71.1% | 393 | 69.8% | 2670 | 74.6% | 2542 | 73.0% |
| | YES | 164 | 28.9% | 170 | 30.2% | 907 | 25.4% | 940 | 27.0% |

| | | | | | | | | | |
|--|-----|-----------|--------------|-----------|--------------|------------|--------------|------------|--------------|
| I don't recognize its important for health | NO | 486 | 85.9% | 490 | 87.0% | 3069 | 85.8% | 2956 | 84.9% |
| | YES | 80 | 14.1% | 73 | 13.0% | 507 | 14.2% | 526 | 15.1% |

| | | | | | | | | | |
|---|-----|-----------|--------------|-----------|--------------|------------|--------------|------------|-------------|
| I am afraid from growth development chemicals used in growing | NO | 492 | 86.8% | 484 | 85.9% | 3198 | 89.4% | 3145 | 90.3% |
| | YES | 74 | 13.2% | 79 | 14.1% | 378 | 10.6% | 337 | 9.7% |

| | | | | | | | | | |
|--------|-----|------------|--------------|------------|--------------|-------------|--------------|-------------|--------------|
| others | NO | 405 | 71.6% | 407 | 72.3% | 2224 | 62.2% | 2155 | 61.9% |
| | YES | 161 | 28.4% | 156 | 27.7% | 1353 | 37.8% | 1327 | 38.1% |

The main reason behind not consuming adequate proportion of fruits and vegetables included not liking its taste. Majority of the respondents i.e. 28.9% of national males, 30.2% of national females, 25.4% of non-national males and 27.0% of non-national females



stated that they don't like the taste of the fruits and vegetables. Only a smaller number of respondents indicated that they do not use fruits and vegetables because they are afraid from the chemicals used while growing these vegetables and fruits.

| Question D17 What types of vegetable oils you use? | | Nationality | | | | | | | |
|--|-----|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | | Nationals | | | | Non-Nationals | | | |
| | | Gender | | | | Gender | | | |
| | | Males | | Females | | Males | | Females | |
| | | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| olive oil | No | 129 | 22.7% | 115 | 20.4% | 1840 | 51.4% | 1555 | 44.6% |
| | Yes | 438 | 77.3% | 448 | 79.6% | 1737 | 48.6% | 1928 | 55.4% |
| corn oil | No | 269 | 47.4% | 275 | 48.9% | 2369 | 66.2% | 2458 | 70.6% |
| | Yes | 298 | 52.6% | 288 | 51.1% | 1207 | 33.8% | 1024 | 29.4% |
| sunflower oil | No | 378 | 66.8% | 379 | 67.3% | 1894 | 53.0% | 1833 | 52.6% |
| | Yes | 188 | 33.2% | 184 | 32.7% | 1682 | 47.0% | 1649 | 47.4% |
| canola oil | No | 550 | 97.2% | 545 | 96.8% | 3251 | 90.9% | 3147 | 90.4% |
| | Yes | 16 | 2.8% | 18 | 3.2% | 326 | 9.1% | 335 | 9.6% |
| Palm oil | No | 560 | 98.8% | 555 | 98.6% | 3515 | 98.3% | 3392 | 97.4% |
| | Yes | 7 | 1.2% | 8 | 1.4% | 61 | 1.7% | 91 | 2.6% |



| | | | | | | | | | |
|-------|-----|-----|-------|-----|-------|------|-------|------|-------|
| Other | No | 555 | 98.1% | 556 | 98.7% | 3407 | 95.3% | 3360 | 96.5% |
| | Yes | 11 | 1.9% | 8 | 1.3% | 169 | 4.7% | 122 | 3.5% |

Majority of nationals and non-nationals were reported to use olive oil in their food. As it can be seen from the table above, 77.3% of male nationals, 79.6% of female nationals, 48.6% of male non-national and 55.4% of non-national females were reported to use olive oil in their food in UAE.

| Question D18 How do you reduce your use of fats and oils? | | Nationality | | | | | | | |
|--|-----|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | | Nationals | | | | Non-Nationals | | | |
| | | Gender | | | | Gender | | | |
| | | Males | | Females | | Males | | Females | |
| | | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Eating grilled | No | 78 | 13.8% | 101 | 18.0% | 1388 | 38.8% | 1478 | 42.4% |
| | Yes | 488 | 86.2% | 462 | 82.0% | 2189 | 61.2% | 2005 | 57.6% |
| Eating boiled | No | 418 | 73.8% | 403 | 71.5% | 2026 | 56.6% | 2008 | 57.7% |
| | Yes | 149 | 26.2% | 161 | 28.5% | 1550 | 43.4% | 1474 | 42.3% |
| Fry the pan with 1 tablespoon of healthy vegetable oil | No | 513 | 90.6% | 503 | 89.3% | 2895 | 80.9% | 2645 | 76.0% |
| | Yes | 53 | 9.4% | 60 | 10.7% | 681 | 19.1% | 837 | 24.0% |
| Do not eat fat | No | 552 | 97.6% | 552 | 98.0% | 3382 | 94.6% | 3297 | 94.7% |
| | Yes | 14 | 2.4% | 11 | 2.0% | 194 | 5.4% | 185 | 5.3% |

The respondents were asked the ways through which they reduce fat and oil intake. Majority of the respondent said that they eat grilled food to balance the foods consumed. Around 86.2% of male nationals, 82.0% of female nationals, 61.2% of male non-nationals and 57.6% of female non-nationals were reported to eat grilled food. Only 2.4% of male nationals, 2.0% of female nationals, 5.4% of male non-nationals and 5.3% of female non-nationals did not eat fat at all.

Descriptive Statistics



| Question D19 | N | Minimum | Maximum | Mean | Std. Deviation |
|--|------|---------|---------|------|----------------|
| How many sweetened drinks (i.e. soft drink, manufactured juices) do you drink daily? | 7345 | 0 | 25 | 0.60 | 1.126 |

| Question D20 What is the type of bread and morning cereals you usually consume? | Nationality | | | | | | | |
|--|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| White (Normal) | 424 | 74.9% | 414 | 73.6% | 2399 | 67.1% | 2400 | 68.9% |
| Whole (bran and bran) | 119 | 21.0% | 125 | 22.2% | 879 | 24.6% | 789 | 22.6% |
| I do not use | 19 | 3.3% | 17 | 3.0% | 259 | 7.2% | 268 | 7.7% |
| I do not know | 4 | 0.8% | 7 | 1.3% | 39 | 1.1% | 26 | 0.7% |

As can be seen from the table above, majority of the individuals used white bread in the morning. Around 74.9% of male nationals, 73.6% of female nationals, 67.1% of male non-nationals and 68.9% of female non-nationals were reported to use white (normal bread). Only 3.3% of male nationals, 3.0% of female nationals, 7.2% of male non-nationals and 7.2% of female non-nationals did not use any of them in the morning.

| Question D21 What do you think is the appropriate salt ratio written on the label for each 100 g? | Nationality | | | |
|--|-------------|---------|---------------|---------|
| | Nationals | | Non-Nationals | |
| | Gender | | Gender | |
| | Males | Females | Males | Females |



| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
|-----------------|-------|------------|-------|------------|-------|------------|-------|------------|
| 0.3 g | 75 | 13.2% | 90 | 16.1% | 673 | 18.8% | 586 | 16.8% |
| 0.3-1.5 g | 23 | 4.0% | 24 | 4.2% | 376 | 10.5% | 552 | 15.8% |
| More than 1.5 g | 22 | 3.9% | 37 | 6.5% | 142 | 4.0% | 206 | 5.9% |
| I do not know | 447 | 78.9% | 412 | 73.2% | 2384 | 66.7% | 2139 | 61.4% |

As can be seen from the table above, majority of the respondents were unaware of the appropriate salt ratio written on the label for each 100 g. 78.9% of male nationals, 73.2% of female nationals, 66.7% of male non-nationals, and 61.4% of female non-nationals didn't know about the appropriate salt ratio written on the label for each 100 g. While only 3.9% of male nationals, 6.5% of female nationals, 4.0% of male non-nationals, and 5.9% of female non-nationals suggested that it should be more than 1.5 g.

| Question D22 Are you using ready-made soup cubes and ready-made soups? | Nationality | | | | | | | |
|--|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| YES | 258 | 45.6% | 266 | 47.3% | 917 | 25.6% | 1107 | 31.8% |
| NO | 308 | 54.4% | 297 | 52.7% | 2659 | 74.4% | 2375 | 68.2% |

As can be seen from the table above, majority of the respondents did not use ready-made soup cubes or ready-made soups in the United Arab Emirates. Approximately 54.4% of male nationals, 52.7% of female nationals, 74.4% of male non-nationals, and 68.2% of female non-nationals did not use ready-made soup cubes or soup while preparing their meal.



| Question D23 What is the type of milk, dairy products and milk that you usually eat in one day? | Nationality | | | | | | | |
|---|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Double cream | 19 | 3.4% | 15 | 2.6% | 120 | 3.4% | 158 | 4.5% |
| Full fat | 319 | 56.4% | 308 | 54.6% | 2028 | 56.7% | 1988 | 57.1% |
| low fat | 155 | 27.3% | 175 | 31.1% | 964 | 27.0% | 945 | 27.1% |
| I do not use milk | 66 | 11.6% | 58 | 10.3% | 410 | 11.5% | 351 | 10.1% |
| I do not know | 8 | 1.4% | 8 | 1.4% | 55 | 1.5% | 40 | 1.1% |

As can be seen from the table above, majority of the respondents were reported to use full fat milk daily. As evident from the statistics 56.4% of male nationals, 54.6% of female nationals, 56.7% of male non-nationals, and 57.1% of female non-nationals stated that they use full fat milk as dairy product on routine basis. Only 11.6% of male nationals, 10.3% of female nationals, 11.5% of male non-nationals, and 10.1% of female non-nationals did not use milk.

| Question D24 What is the type of cheese that you usually eat in one day? | Nationality | | | | | | | |
|--|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |



| | | | | | | | | |
|---|-----|-------|-----|-------|------|-------|------|-------|
| creamy cheese (cassette, cream cheese, triangles) | 143 | 25.3% | 144 | 25.5% | 543 | 15.2% | 599 | 17.2% |
| Yellow cheese (cheddar, sliced) | 73 | 12.9% | 67 | 11.9% | 562 | 15.7% | 573 | 16.4% |
| White cheese | 283 | 50.0% | 258 | 45.8% | 1313 | 36.7% | 1321 | 37.9% |
| Low-fat cheese | 37 | 6.6% | 62 | 11.1% | 183 | 5.1% | 197 | 5.7% |
| I do not eat cheese | 29 | 5.1% | 26 | 4.7% | 910 | 25.5% | 749 | 21.5% |
| I do not know | 1 | 0.1% | 6 | 1.0% | 66 | 1.8% | 43 | 1.2% |

As can be seen from the table above, majority of the respondents used white cheese on daily basis. Around 50.0% of male nationals, 45.8% of female nationals, 36.7% of male non-nationals, and 37.9% of female non-nationals were reported to use white cheese. Only, 5.1% of male nationals, 4.7% of female nationals, 25.5% of male non-nationals, and 21.5% of female non-nationals stated that they usually do not eat cheese in a day.

| Question D25 What type of meat that you usually eat in one day? | Nationality | | | | | | | |
|--|-------------|------------|---------|------------|---------------|------------|---------|------------|
| | Nationals | | | | Non-Nationals | | | |
| | Gender | | | | Gender | | | |
| | Males | | Females | | Males | | Females | |
| | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| Red meat (goat, lamb, cow) | 180 | 31.7% | 128 | 22.6% | 831 | 23.2% | 626 | 18.0% |
| Fish and seafood | 189 | 33.4% | 168 | 29.8% | 842 | 23.6% | 816 | 23.4% |
| Poultry (chicken) | 193 | 34.0% | 249 | 44.2% | 1585 | 44.3% | 1711 | 49.1% |
| I do not eat meat | 3 | 0.5% | 11 | 1.9% | 259 | 7.2% | 284 | 8.1% |



| | | | | | | | | |
|---------------|---|------|---|------|----|------|----|------|
| I do not know | 2 | 0.4% | 8 | 1.5% | 60 | 1.7% | 45 | 1.3% |
|---------------|---|------|---|------|----|------|----|------|

As can be seen from the table above, majority of the respondents used poultry (chicken) to eat in a day. As evident from the statistics, 34.0% of male nationals, 44.2% of female nationals, 44.3% of male non-nationals, and 49.1% of female non-nationals were reported to use poultry (chicken) on daily basis. Only 0.5% of male nationals, 1.9% of female nationals, 7.2% of male non-nationals, 8.1% of female non-nationals did not consume meat at all.

Conclusion

Food consumption and nutrition have been presently known in the recent years to be unique and essential components in keeping an individual healthy. A healthy diet primarily helps to reduce the risk of developing chronic disease and deteriorating health. We collected information about food and the nutritional status of the UAE population in this report to identify at-risk populations and special needs populations. A food pyramid explained in a concise and simple manner that presents healthy nutrition habits is recommended in future that one should eat with regard to different types of food. With respect to other recommendations, low salt foods, low sugar, giving preference to fiber-rich products, choosing low fat, and drinking plenty of water throughout the day and more. Furthermore, it is essential to reduce the consumption of salt in the food. There is an association between disease and consumption of sodium (salt). Increase in the sodium consumption leads to a disease in itself, high blood pressure, and as such it also has severe consequences for other systems in the body. Hence, a national program for reducing salt intake by the population is recommended that includes several different activities with an aim of reaching an average intake of about less than 5-gram salt per day by the population also enclosing recommendations on how to reduce the salt/sodium consumption.



With respect to foods that contain fats, it is important to consume the one that comprise of poly and monounsaturated fats, mainly found in olive, corn sunflower, canola and flax seed oils. Fish consumption is also needed especially fat fish such as mackerel, salmon, herring, trout, sardines, and mullet which comprises of omega 3 unsaturated fatty acids which can act as a sufficient substitute for a meat dish.

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Appendices

<Country> (Site) STEPS Survey <year>

Fact Sheet

| Results for adults aged 18-69 years (incl. 95% CI) (adjust if necessary) | Both Sexes | Males | Females |
|--|-----------------------------|-----------------------------|-----------------------------|
| Step 1 Diet | | | |
| Mean number of days fruit consumed in a typical week | 5.4 (5.3-5.4) | 5.2 (5.1-5.3) | 5.5 (5.4-5.6) |
| Mean number of servings of fruit consumed on average per day | 1.6 (1.5-1.7) | 1.5 (1.5-1.6) | 1.7 (1.6-1.7) |
| Mean number of days vegetables consumed in a typical week | 5.8 (5.7-5.8) | 5.7 (5.6-5.8) | 5.9 (5.8-5.9) |
| Mean number of servings of vegetables consumed on average per day | 1.9 (1.8-2.0) | 1.9 (1.7-2.0) | 2.0 (1.9-2.1) |
| Percentage who ate less than 5 servings of fruit and/or vegetables on average per day | 82.8% (81.1-84.5) | 83.8% (81.7-85.9) | 81.8% (79.9-83.7) |
| Percentage who always or often add salt or salty sauce to their food before eating or as they are eating | 51.7% (49.3-54.1) | 47.7% (44.7-50.7) | 48.9% (46.2-51.6) |
| Percentage who always or often eat processed foods high in salt | 19.9% (18.2-21.5) | 20.3% (18.0-22.6) | 19.4% (17.4-21.4) |

* For complete definitions of insufficient physical activity, refer to the GPAQ Analysis Guide (<http://www.who.int/chp/steps/GPAQ/en/index.html>) or to the WHO Global recommendations on physical activity for health (http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/index.html)

<Country> (Site) STEPS Survey <year >

Fact Sheet

| Results for adults aged 18-69 years (incl. 95% CI) (adjust if necessary) | Both Sexes | Males | Females |
|--|---|--------------------------|--------------------------|
| Summary of combined risk factors | | | |
| <ul style="list-style-type: none"> current daily smokers less than 5 servings of fruits & vegetables per day insufficient physical activity | <ul style="list-style-type: none"> overweight (BMI \geq 25 kg/m²) raised BP (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised BP) | | |
| Percentage with none of the above risk factors | 1.5% (0.9-2.0) | 1.8% (0.9-2.6) | 1.1% (0.6-1.7) |



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| | | | |
|--|------------------------------------|------------------------------------|------------------------------------|
| Percentage with three or more of the above risk factors, aged 18 to 44 years | 49.5% (47.1-51.9) | 54.4% (50.9-58.0) | 45.1% (42.0-48.2) |
| Percentage with three or more of the above risk factors, aged 45 to 69 years | 61.7% (58.0-65.5) | 63.3% (58.2-68.4) | 59.3% (53.6-65.1) |
| Percentage with three or more of the above risk factors, aged 18 to 69 years | 52.5% (50.5-54.6) | 57.1% (54.2-60.0) | 47.9% (45.3-50.6) |

** A 10-year CVD risk of $\geq 30\%$ is defined according to age, sex, blood pressure, smoking status only current smokers, total cholesterol, and diabetes (previously diagnosed OR a fasting plasma glucose concentration >7.0 mmol/l (126 mg/dl).

**For additional information, please contact:
STEPS country focal point [name, email addresses]**