## Appendixes

## Appendix I: Food frequency questionnaire in English

This questionnaire will be used for research and working on my diploma thesis in Czech Republic about analyzing the nutrition in Senegal. Filling it will take you about 10 minutes.
Think about your diet over the past three months, please select the responses that best describe how often you eat each type of food and how much of it you eat at a time. Select only the most often frequency and serving size per row.

Over the past month, how often did you eat the following?

| the following? | $\underset{\sim}{2}$ | $\stackrel{\text { - }}{ }$ | $\stackrel{-}{+}$ | $\stackrel{+}{+}$ | $\stackrel{+}{-}$ | べ | ¢ | relative to the folowing? |  | $\stackrel{\sim}{\sim}$ | $\stackrel{-}{-}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fruit (mangoes, apples, oranges etc.) |  |  |  |  |  |  |  | $1 / 2$ cup raw fruit, $1 / 2$ mango or large orange |  |  |  |
| Vegetables (carrot, salad etc.) |  |  |  |  |  |  |  | $1 / 2$ cup cooked or raw, 1 carrot |  |  |  |
| Tubers <br> cassava etc.) (potato, |  |  |  |  |  |  |  | 1 small potato |  |  |  |
| Chicken (fried chicken, in soup, grilled etc.) |  |  |  |  |  |  |  | $100 \mathrm{~g}, 1 / 2$ large breast, 1 small breast, 2 drumsticks |  |  |  |
| Turkey (fried turkey, in soup, grilled etc.) |  |  |  |  |  |  |  | $100 \mathrm{~g}, 6-8$ very thin slices, 1-3 thick slices |  |  |  |
| Fish (tuna, tilapia, sardines etc.) |  |  |  |  |  |  |  | $100 \mathrm{~g}, 1$ can of tuna or sardines |  |  |  |
| $\begin{aligned} & \text { Seafood (shrimps, } \\ & \text { mussels etc.) } \end{aligned}$ |  |  |  |  |  |  |  | 100g, 10 medium shrimps |  |  |  |
| Beef (Steak, minced meat, jambon etc.) |  |  |  |  |  |  |  | 100 g , a piece about the size of your palm |  |  |  |
| Pork (steak, soup, ham etc.) |  |  |  |  |  |  |  | 100 g , a piece about the size of your palm |  |  |  |
| Other meat (lamb, duck, venison etc.) |  |  |  |  |  |  |  | 100 g , a piece about the size of your palm |  |  |  |
| Nuts (peanuts, cashew nuts, almonds etc.) |  |  |  |  |  |  |  | $1 / 4$ cup, 1 handful, 25 peanuts or 2 tablespoons of peanut butter |  |  |  |
| Beans (niébé, peas, etc.) |  |  |  |  |  |  |  | $1 / 2$ cup of cooked beans, 2 handfuls of beans |  |  |  |
| Dairy (milk, cheese, yoghurt etc.) |  |  |  |  |  |  |  | 1 glass of milk, 1 cup of yoghurt, 3 slices of cheese |  |  |  |
| Eggs (omelet, in salad, baked etc.) |  |  |  |  |  |  |  | 1 egg, $1 / 4$ cup omelet |  |  |  |
| Grains (bread, rice, pasta etc.) |  |  |  |  |  |  |  | 1 slice of bread, $1 / 2$ cup of rice or pasta |  |  |  |
| Sweets (candies, cookies, cakes etc.) |  |  |  |  |  |  |  | 1 slice of cake, 2 cookies |  |  |  |
| Soft drinks (water, juice, coca-cola, etc.) |  |  |  |  |  |  |  | 1 can of soda (350 ml) |  |  |  |
| Coffee and tea (ataya, Touba coffee etc.) |  |  |  |  |  |  |  | 1 small cup of Touba coffee, $3 / 4$ cup of coffee, 1 glass of ataya |  |  |  |

1. Your gender?
a) Male
b) Female
2. Your age?
a) under 20
b) 20-29
c) $30-39$
d) $40-49$
e) over 50
3. Your weight (in kilograms) :
4. Your height (in meters) :
5. How many meals do you eat per day?
a) less than 1 per day
b) 2 per day
c) 3 per day
d) 4 per day
e) more than 5 per day
6. How do you usually prepare your food? Please circle it.

| frying | boiling |
| :--- | :--- |
| sauteing | roasting |
| grilling | steaming |

7. What type of drinks do you prefer?
a) water
b) soft drinks
c) tea
d) lemonade
e) other
8. Which type of oil do you often use? You can choose more answers.

| soya | peanut |
| :--- | :--- |
| coconut | corn |
| sunflower | macadamia |
| olive | linen |
| palm | rapeseed |
| sesame | mustard |

Other and which one:
9. How many glasses ( 250 ml ) of liquids (water, soft drinks, tea,..) you drink per day?
a) 2
b) 4
c) 6
d) 8
e) 10 or more
10. How often do you drink alcohol?
a) never
b) once a month or less
c) 2 to 4 times a month
d) 2-3 times a week
e) 4 or more times a week
11. What type of alcoholic beverages do you prefer?
a) beer
b) wine
c) spirits with more than $15 \%$ alcohol
d) do not drink
12. How many km do you walk per day?
a) Less than 1 km
b) $1-4 \mathrm{~km}$
c) $4-6 \mathrm{~km}$
d) more than 6 km
13. Do you smoke?
a) Yes, regularly
b) Yes, sometimes
c) $\mathrm{No} / \mathrm{Never}$
14. Did you or your close relative ever suffer from one or more diseases listed down below? Please circle it.

Diabetes mellitus I
Diabetes mellitus II
Ischemic heart disease
Lower respiratory infections
Hypertensive heart diseases
Kidney diseases
Cirrhosis

Stroke
Chronic obstructive pulmonary disease
Cancer
Tuberculosis
Lactose intolerance
Celiac disease
Crohn's disease/Ulcerative colitis

None of above

Thank you for your time, which you spent with the questionnaire. Your opinion is very important for my research.

Appendix 2: Table of selected foods with code from USDA database and values

| Food group | Selected food | Energy (Kcal) | Protein (g) | Carbohydrates (g) | Lipids (g) | Fiber (g) | Sugar (g) | Calcium (mg) | Iron (mg) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fruit | Mango (9176) (100g) | 60 | 0.82 | 15 | 0.38 | 1.6 | 13.7 | 11 | 0.16 |
| Vegetables | Carrot (73101010) (100g) | 41 | 0.93 | 9.58 | 0.24 | 2.8 | 4.74 | 33 | 0.3 |
| Tubers | Potato (11352) (100g) | 77 | 2.05 | 17.5 | 0.09 | 2.1 | 0.82 | 12 | 0.81 |
| Chicken | Chicken (5006) (100g) | 215 | 18.6 | 0 | 15.1 | 0 | 0 | 11 | 0.9 |
| Turkey | Turkey (5165) (100g) | 144 | 21.6 | 0.14 | 5.64 | 0 | 0.07 | 11 | 0.86 |
| Fish | Yaboy (Sardinella aurita) (1098981) (100g) | 208 | 24.6 | 0 | 11.4 | 0 | 0 | 382 | 2.92 |
| Seafood | Shrimps (15270) (100g) | 85 | 20.1 | 0 | 0.51 | 0 | 0 | 64 | 0.52 |
| Beef | Beef (23461) (100g) | 177 | 20.6 | 0 | 10.6 | 0 | 0 | 5 | 1.84 |
| Pork | Pork (10218) (100g) | 120 | 20.6 | 0 | 3.53 | 0 | 0 | 6 | 0.97 |
| Other meat | Goat (17168) (100g) | 109 | 20.6 | 0 | 2.31 | 0 | 0 | 13 | 2.83 |
| Nuts | Peanuts (16087) (100g) | 567 | 25.8 | 16.1 | 49.2 | 8.5 | 4.72 | 92 | 4.58 |
| Beans | Cowpeas (16060) (100g) | 343 | 23.8 | 59.6 | 2.07 | 10.7 | 3 | 85 | 9.95 |
| Dairy | Whole milk (1211) (244g) | 149 | 7.69 | 11.7 | 7.98 | 0 | 12.3 | 276 | 0.73 |
| Eggs | Eggs (1123) (44g) | 62.9 | 5.54 | 0.317 | 4.18 | 0 | 0.163 | 24.6 | 0.77 |
| Grains | Bread (18064) (100g) | 274 | 10.7 | 47.5 | 4.53 | 4 | 5.73 | 125 | 3.6 |
| Sweets | Milk biscuits (53241500) (100g) | 464 | 5.35 | 67.3 | 19.6 | 1.3 | 27.3 | 35 | 2.24 |
| Soft drinks | Orange juice (61210000) (248g) | 119 | 1.69 | 28.3 | 0.298 | 0.744 | 20.6 | 139 | 0.322 |
| Coffee and tea | Coffee (92101000) (240g) | 2.4 | 0.288 | 0 | 0.048 | 0 | 0 | 4.8 | 0.024 |


| Food group | Selected food | Magnesium (mg) | Sodium (mg) | Zinc (mg) | Vitamin A ( $\mu \mathrm{g}$ ) | Vitamin C (mg) | Vitamin D ( $\mu \mathrm{g}$ ) | Vitamin E (mg) | Cholesterol (mg) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fruit | Mango (9176) (100g) | 10 | 1 | 0.09 | 54 | 36.4 | 0 | 0.9 | 0 |
| Vegetables | Carrot (73101010) (100g) | 12 | 69 | 0.24 | 835 | 5.9 | 0 | 0.66 | 0 |
| Tubers | Potato (11352) (100g) | 23 | 6 | 0.3 | 0 | 19.7 | 0 | 0.01 | 0 |
| Chicken | Chicken (5006) (100g) | 20 | 70 | 1.31 | 41 | 1.6 | 0.2 | 0.3 | 75 |
| Turkey | Turkey (5165) (100g) | 25 | 112 | 1.78 | 17 | 0 | 0.3 | 0.09 | 72 |
| Fish | Yaboy (Sardinella aurita) (1098981) (100g) | 39 | 307 | 1.31 | 32 | 0 | 4.8 | 2.04 | 142 |
| Seafood | Shrimps (15270) (100g) | 35 | 119 | 1.34 | 90 | 0 | 0.1 | 0 | 161 |
| Beef | Beef (23461) (100g) | 19 | 49 | 5.22 | 10 | 0 | 0 | 0.49 | 58 |
| Pork | Pork (10218) (100g) | 27 | 52 | 1.87 | 0 | 0 | 0.3 | 0.22 | 65 |
| Other meat | Goat (17168) (100g) | 0 | 82 | 4 | 0 | 0 | 0 | 0.34 | 57 |
| Nuts | Peanuts (16087) (100g) | 168 | 18 | 3.27 | 0 | 0 | 0 | 8.33 | 0 |
| Beans | Cowpeas (16060) (100g) | 333 | 58 | 6.11 | 2 | 1.5 | 0 | 0.22 | 0 |
| Dairy | Whole milk (1211) (244g) | 24.4 | 105 | 0.903 | 112 | 0 | 0.244 | 0.171 | 24.4 |
| Eggs | Eggs (1123) (44g) | 5.28 | 62.5 | 0.568 | 70.4 | 0 | 36.1 | 0.462 | 164 |
| Grains | Bread (18064) (100g) | 41 | 473 | 1.04 | 0 | 0 | 0 | 0.19 | 0 |
| Sweets | Milk biscuits (53241500) (100g) | 13 | 385 | 0.43 | 7 | 0 | 0 | 3.07 | 12 |
| Soft drinks | Orange juice (61210000) (248g) | 27.3 | 4.96 | 0.174 | 4.96 | 83.3 | 0.992 | 0.496 | 0 |
| Coffee and tea | Coffee (92101000) (240g) | 7.2 | 4.8 | 0.048 | 0 | 0 | 0 | 0.024 | 0 |

Appendix 3: Graphic representation of selected nutrients in food groups





