Risk Factors (Health Determinants):
Consumption of Fruits and Vegetables Module

Rationale

The Consumption of fruits and vegetables module constitutes part of a broader module comprising several health determinants including Height and weight, Tobacco use, Alcohol use, Physical Activity, and Hypertension.   The module aims to measure an aspect of behaviour or lifestyle that can have a positive impact on individual health, and ultimately that of the population.   The measurement of such health determinants is necessary for evaluating the success of programmes and policies to raise awareness of health in the general population.

Experience and evidence

Experience
- Study on Global Ageing and Adult Health (SAGE) measured…
- EHIS measures…
- DHS / MICS…?
- Other…?

Note: salt intake is an additional indicator that is in the NCD action plan and could be measured in urine

Evidence
- The consumption of fruit excludes fruit juice in the European Health Community Indicator (EHCI)[1]
- Frequency vs quantity: At least once a day in EHCI, 5 servings or 400 grams in GRL
- Age of target population : 18+ in GRL, 15+ in EHCI
- The indicators are age-standardized, which standard population is used for age standardization?
- Should consumption of fruits and vegetables be measured together in one indicator (as in GRL), or separately as in EHI?

Core modules

Main indicator

1) The Global Reference List (GRL), draft for partner review (12 August 2014) proposes one core indicator:
- **Low consumption of fruit and vegetables among adults**

It is defined as: Proportion of adults (18 years and over) who eat less than five servings of fruit and/or vegetables (400 grams) on average per day (age standardized)

Numerator: Number of adults who consume less than 5 servings per day
Denominator: Number of adults age 18+

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[1] http://ec.europa.eu/health/indicators/echi/list/index_en.htm

2) The European Commission's Eurostat Database monitors two separate indicators, one for consumptions of fruits and the other for vegetables:
http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database:

- Consumption of fruits by sex, age and educational attainment level (% of people age 15+)
- Consumption of vegetables by sex, age and educational attainment level (% of people age 15+)

The indicator is not monitored in the 'Health Indicators Warehouse' of the National Center for Health Statistics. http://www.healthindicators.gov/Indicators/Selection.

Additional indicators
?

Examples of modules

1) European Health Interview Survey (EHIS)
The EHIS wave 2 consists of three modules: health status (9), health care use (5), and health determinants (7). The modules respond to policy needs set out by DG SANCO, in the European Core Health Indicators (ECHI).

European Health Interview Survey (EHIS wave 2), methodological manual http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-13-018/EN/KS-RA-13-018-EN.PDF

European Health Determinants Module (EHDM)
Minimum European Health Module – Chronic disease

FV	Consumption of fruit and vegetables		
FV	**Consumption of fruit and vegetables**		
Introduction FV	Next questions concern the consumption of fruits and vegetables.		
FV1	How often do you eat fruits, excluding juice made from concentrate? 1. Once or more a day 2. 4 to 6 times a week 3. 1 to 3 times a week 4. Less than once a week 5. Never INTERVIEWER clarification: Only juices squeezed from fresh fruit are included. Juices prepared from concentrate or processed fruits, or juices artificially sweetened are excluded.		
Filter	**If FV1 = 1 THEN GO TO FV2.** **Otherwise go to FV3.**		
FV2	How many portions of fruit, of any sort, do you eat each day? Number of portions: ⌞⌞⌟⌟		
FV3	How often do you eat vegetables or salad, excluding potatoes and juice made from concentrate? 1. Once or more a day 2. 4 to 6 times a week 3. 1 to 3 times a week 4. Less than once a week 5. Never INTERVIEWER clarification: Soups (warm and cold) as well as juices squeezed from fresh vegetables are included. Juices prepared from concentrate or processed vegetables, or artificially sweetened are excluded.		
Filter	**If FV3 = 1 THEN GO TO FV4.** **Otherwise GO TO next sub-module.**		
FV4	How many portions of vegetables or salad do you eat each day? Number of portions: ⌞⌞⌟⌟		

Source: EHIS Wave 2 model questionnaire
http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-13-018/EN/KS-RA-13-018-EN.PDF

Note : detailed guidelines for each question are given in the EHIS Methodological manual

Showcards are recommended to show respondent during a face-to-face interview:
- Examples of fruits and standard portions

- Examples of vegetables and standard portions

2) Study on Global Ageing and Adult Health (SAGE)

NUTRITION
Studies have shown that nutrition and life-style are very important health factors. I want to ask you a few questions about your diet. I am going to ask you about the fruit and vegetables you usually eat.
(Show Nutrition card to respondent -- see Appendix A3000C)

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WHO Study on Global Ageing and Adult Health (SAGE)
INDIVIDUAL Questionnaire A

Q3012	How many servings of fruit* do you eat on a typical day? * Banana, mango, apple, orange, papaya, tangerine, grapefruit, peach, pear (country-specific)	☐☐ SERVINGS -8 DON'T KNOW	
Q3013	How many servings of vegetables* do you eat on a typical day? * Tomato, cauliflower, potato, cucumber, peas, corn lettuce, squash, bean (country-specific)	☐☐ SERVINGS -8 DON'T KNOW	
Q3014	In the last 12 months, how often did you ever eat less than you felt you should because there wasn't enough food?	1 Every month 2 Almost every month 3 Some months, but not every month 4 Only in 1 or 2 months 5 Never	
Q3015	In the last 12 months, were you ever hungry, but didn't eat because you couldn't afford enough food?	1 Every month 2 Almost every month 3 Some months, but not every month	

Source : Study on Global Ageing and Adult Health (SAGE) Wave 1 Individual Questionnaire
http://www.who.int/healthinfo/systems/GenericIndividualQ.pdf?ua=1

3) DHS?

4) MICS?

5) Other?

Core Module

A review of the modules that have been/are employed should guide us to arrive at the proposed core module. Note that there seems to be a lot of discussion and consensus around the EHIS module.

Indicator definitions