

WHO Surveillance Activities: fruit and vegetable intake

Dr Ruth Bonita (and CCS team)

Director, Surveillance, NMH



WHO STEPwise Approach to Surveillance of NCD Risk Factors



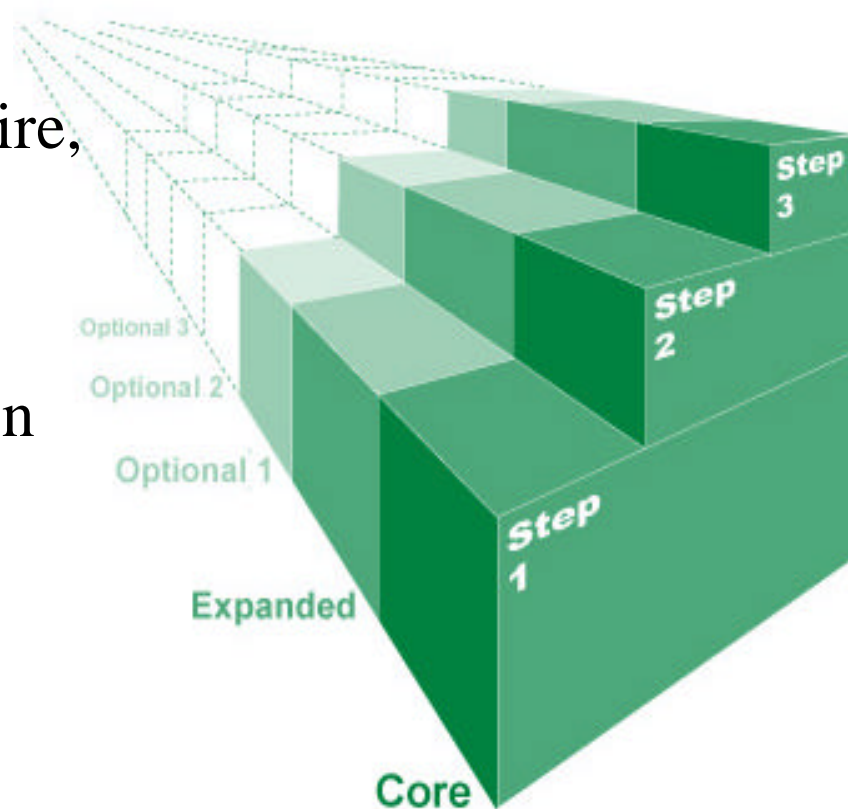
STEPS Concept

The framework is the distinction between the different levels of risk-factor assessment:

- information by questionnaire,
- physical measurements,
- blood samples;

and the three modules involved in describing each risk factor:

- core,
- expanded core and
- optional.



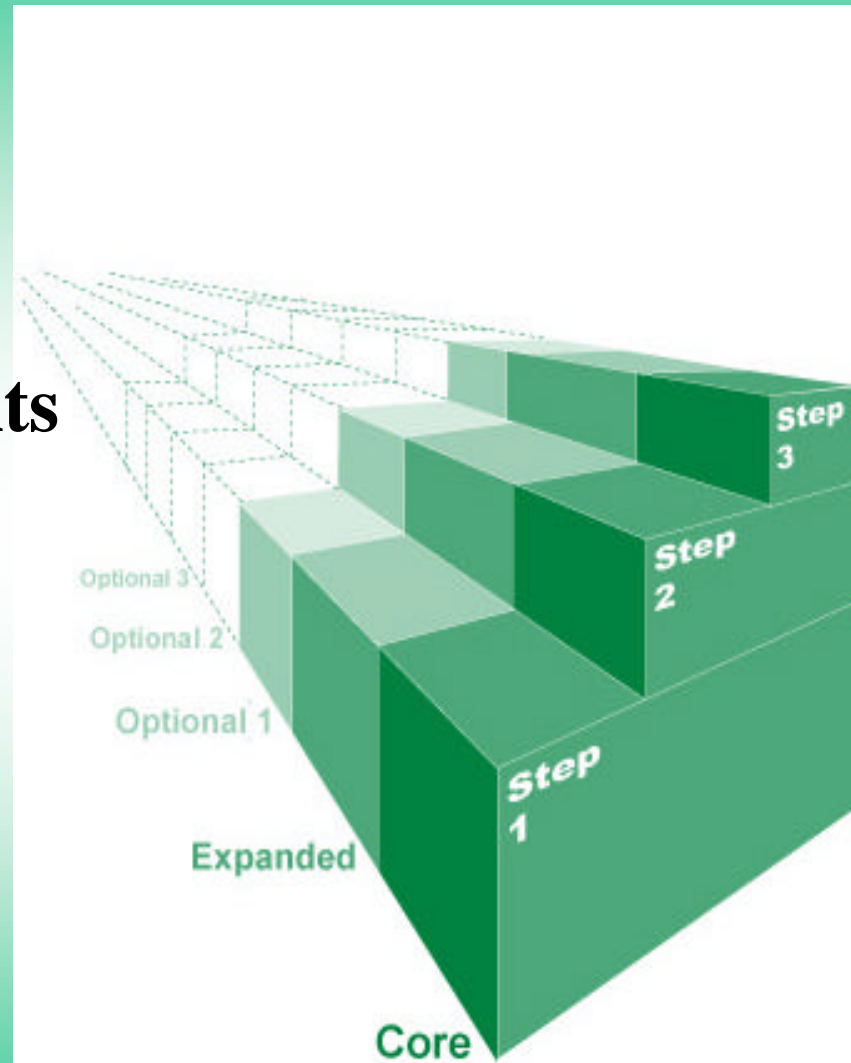
The WHO STEPS Framework

Different levels of assessment

- Behaviours
- Physical measurements
- Blood samples

Three modules per risk factor:

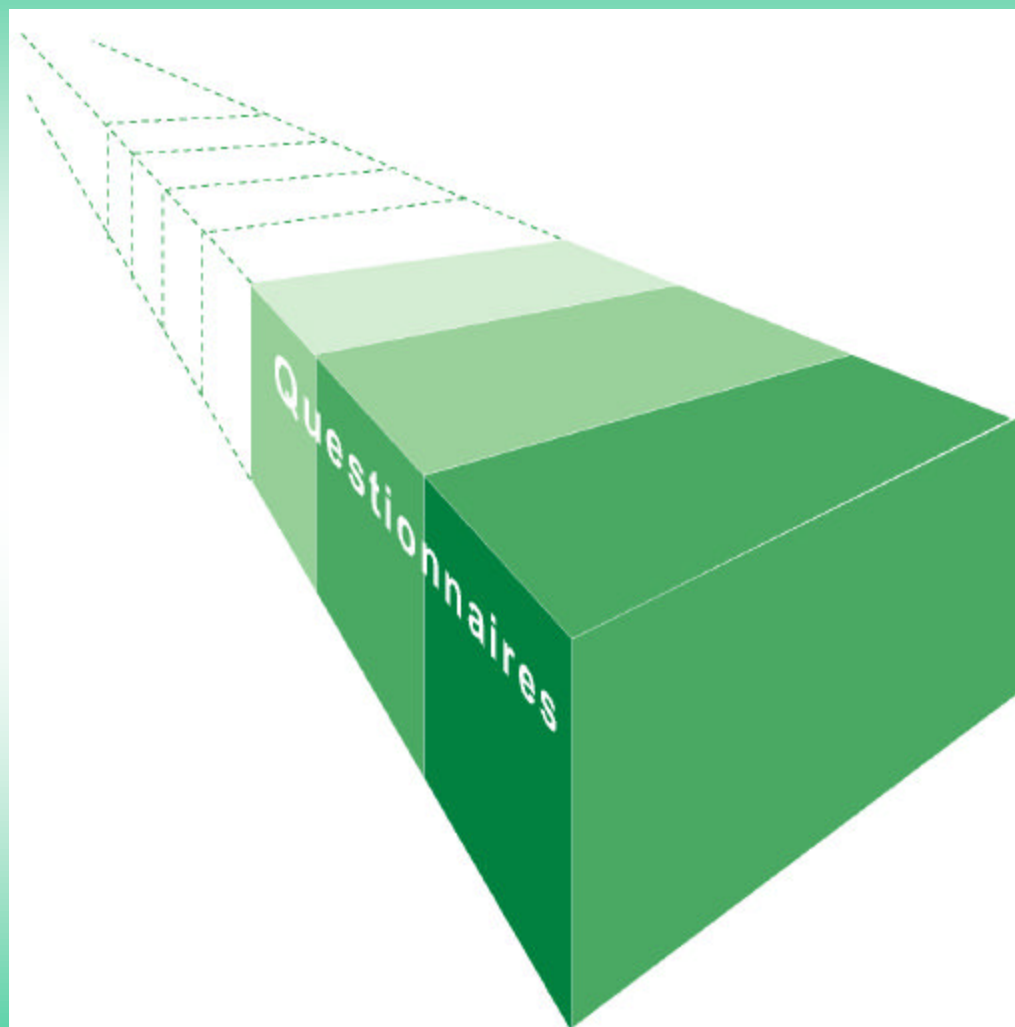
- core
- expanded core and
- optional.



The WHO STEPS – Step 1 Core

By self report:

- **Socioeconomic**
- **Tobacco Use**
- **Physical Inactivity**
- **Nutrition**
- **Alcohol Use**



Fruit and Vegetable intake captured by STEPS

CORE Diet (Section D)			
The next questions ask about the fruits and vegetables that you usually eat. I have a nutrition card here that shows you some examples of local fruits and vegetables. Each picture represents the size of a serving. As you answer these questions please think of a typical week in the last year.			
D 1a	In a typical week, on how many days do you eat fruit ? <i>USE SHOWCARD</i>	Number of days	<input type="checkbox"/> <input type="checkbox"/>
D 1b	How many servings of fruit do you eat on one of those days? <i>USE SHOWCARD</i>	Number of servings	<input type="checkbox"/> <input type="checkbox"/>
D 2a	In a typical week, on how many days do you eat vegetables ? <i>USE SHOWCARD</i>	Number of days	<input type="checkbox"/> <input type="checkbox"/>
D 2b	How many servings of vegetables do you eat on one of those days? <i>USE SHOWCARD</i>	Number of servings	<input type="checkbox"/> <input type="checkbox"/>



Vision for the WHO Global NCD InfoBase

- 👁️ country level risk factor data, stratified by age and sex, with complete source and survey information;
- 👁️ each record can be linked back to its source;
- 👁️ designed as a "one stop " resource for data needs.



The Tool: NCD InfoBase

- ✂ A data base that displays country-level prevalence data for NCD risk factors in one place:
 - Includes comprehensive information on data sources and survey methodology;
 - Includes prevalence and/or mean values by age and sex with their associated level of uncertainty (confidence interval or standard deviation).



NCD InfoBase Specifics*

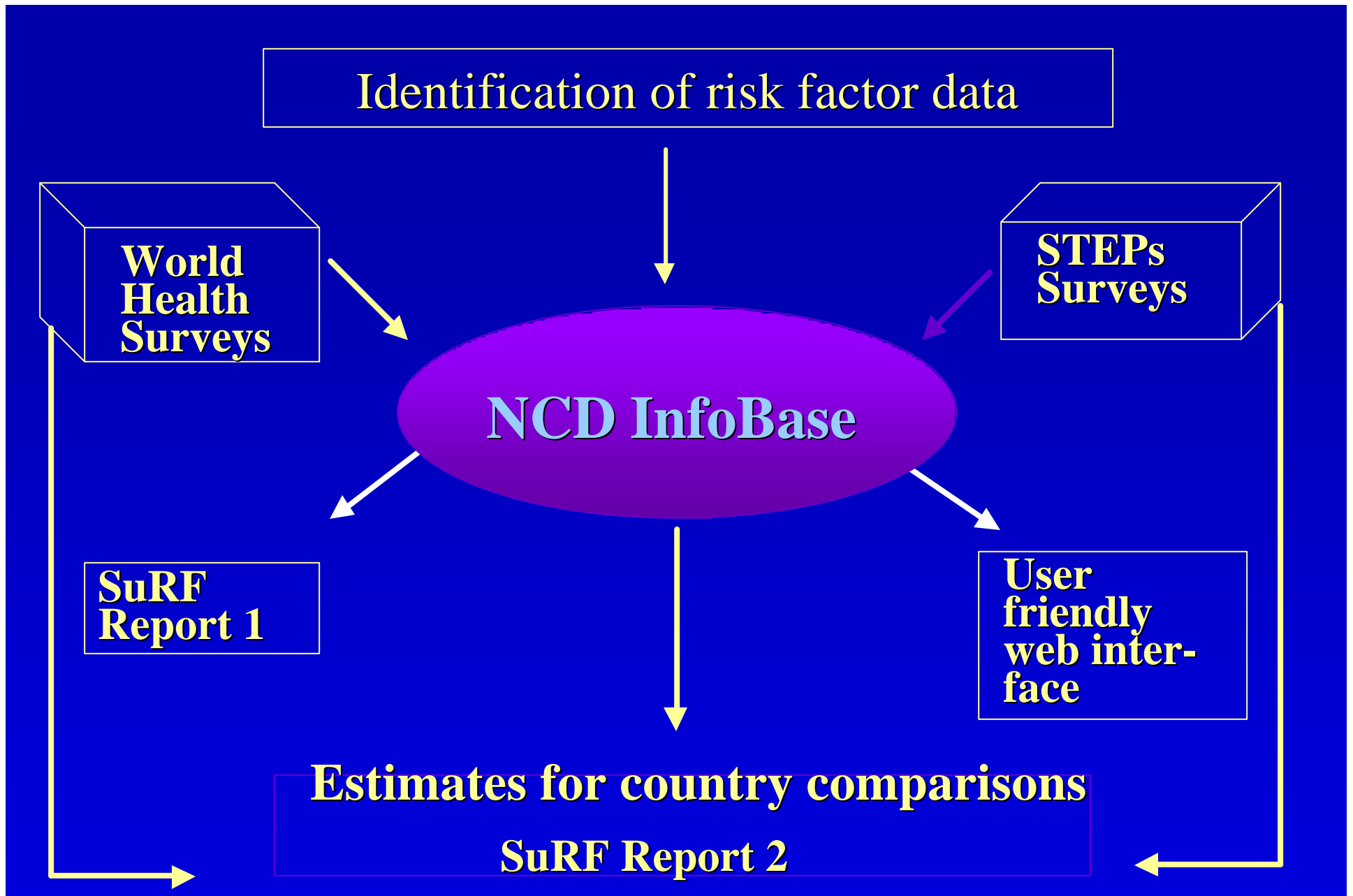
✎ Data from 166 Member States;

✎ Over 1400 sources;

✎ More than 48,000 data points.

* As of 30 April 2003





Entry into the NCD InfoBase

NCD Infobase



Risk Factor Data Entry

Best Survey RF Record

Diabetes Data Entry

Best Survey Diabetes Record

Survey Entry

SuRF Report

Source Info

Survey Info



Recording key survey information

surveyformquery

Source	<input type="text"/>	Initial Sample Size	<input type="text"/>		
Survey	<input type="text"/>	Final Sample Size	<input type="text"/>		
Interview Method	<input type="text"/>	Response Rate	<input type="text"/>		
General Setting	<input type="text"/>	Survey Year Start	<input type="text"/>	Start Month	<input type="text"/>
Sub/National	<input type="text"/>	Survey Year End	<input type="text"/>	End Month	<input type="text"/>
Geographic Area (if not national study)	<input type="text"/>	Notes	<input type="text"/>		
Subnational Geographic Area	<input type="text"/>	Contact	<input type="text"/>		
Notes Geographic Area	<input type="text"/>	Contact Address	<input type="text"/>		
Occupation	<input type="text"/>	Research Institution	<input type="text"/>		
Periodicity	<input type="text"/>	Sponsoring Institution	<input type="text"/>		
Data type	<input type="text"/>	Automatic Weight	<input type="text"/>		
Publishing	<input type="text"/>	Weight Text box:	<input type="text"/>		
Sample Method	<input type="text"/>	Automatic SampleSize	<input type="text"/>		
Study Design	<input type="text"/>	Notes to display on PDF	<input type="text"/>		
Rural/Urban	<input type="text"/>				
Subpopulation Group	<input type="text"/>				
Subpopulation Name	<input type="text"/>				

Record: 14 of 4504

Examples of current Fruit and Vegetable definitions

- Less than or equal to five fruit/vegetable servings per day;
- Never eats vegetables/or fruit;
- Never eats fresh fruit;
- Prevalence of daily fruit intake;
- Fruit/vegetable grams per day;
- Number of fruits eaten in one week.



WHO SuRF Report

WHO SuRF Report

Please select a region and a country

Region Name:

Country Name:

View Report

WHO SuRF Report

WHO SuRF Report

Please select a region and a country

Region Name:

Country Name:

View Report *Print Report*

Example

Japan

WESTERN PACIFIC REGION

	Males	Females
2002 Total Population	62,341,797	65,126,794
2020 Projected Population	61,668,980	65,059,020
2002 Average Life Expectancy (years)	77.9	84.7
Uncertainty Interval	77.5 - 78.2	84.5 - 84.9

Risk Factors

Tobacco use

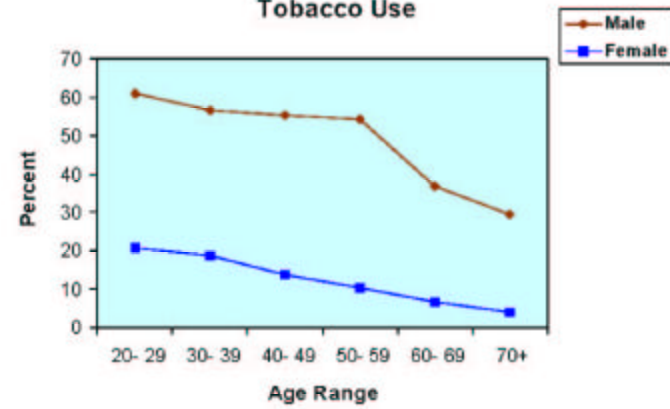
Sex	Age Groups	n	Prevalence (%)	95% CI
Definition used: Current daily smoker				
Male	20 - 29	337	60.8	
	30 - 39	394	66.6	
	40 - 49	463	69.1	
	50 - 59	597	64.1	
	60 - 69	656	37.0	
	≥ 70	490	29.4	
Female	20 - 29	2937	47.4	45.6-49.2
	30 - 39	407	20.9	
	40 - 49	590	18.8	
	50 - 59	655	13.8	
	60 - 69	844	10.4	
	≥ 70	725	6.6	
	≥ 20	668	4.0	
	≥ 20	3889	11.5	10.6-12.5
Survey Year:	2000			
Survey Population:	National, both urban and rural populations			
Source:	Ministry of Health, Labour and Welfare, Kokumin eiyuu no Gengo, Hesse 72-nen Kokumin eiyuu chousakuho (Results of National Nutrition Survey, 2000), 20102			
Notes:				

Alcohol consumption

Sex	Age Groups	n	Prevalence (%)	95% CI
Definition used: >3 times per week and more than 500ml per occasion				
Male	20 - 29	338	4.4	
	30 - 39	394	9.6	
	40 - 49	464	8.4	
	50 - 59	597	10.6	
	60 - 69	656	7.2	
	≥ 70	489	3.7	
Female	20 - 29	2937	7.6	6.5-8.8
	30 - 39	407	1.5	
	40 - 49	589	0.8	
	50 - 59	653	0.9	
	60 - 69	844	0.7	
	≥ 70	725	0.8	
	≥ 20	687	0.3	
	≥ 20	3885	0.8	0.5-1.1
Survey Year:	2000			
Survey Population:	National, both urban and rural populations			
Source:	Ministry of Health, Labour and Welfare, Kokumin eiyuu no Gengo, Hesse 72-nen Kokumin eiyuu chousakuho (Results of National Nutrition Survey, 2000), 20102			
Notes:				

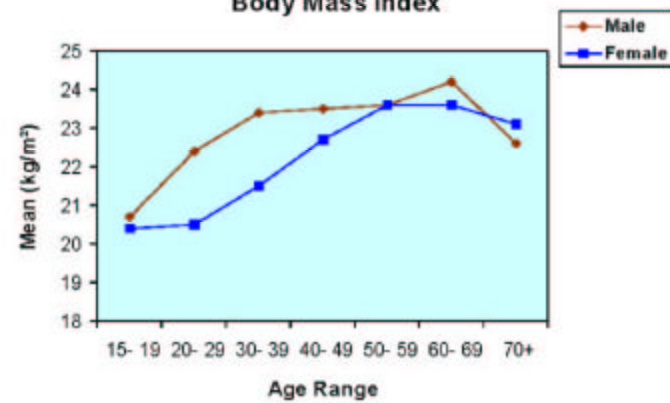


Tobacco Use



Definition: Current daily smoker
Survey Population: National, both urban and rural populations
Source: Ministry of Health, Labour and Welfare. Kokumin-eyou no Genjo: Heisei 12-nen Kokumin-eyou chosa kekka. (Results of National Nutrition Survey, 2000), 2002.

Body Mass Index



Definition: kg/m²
Survey Population: National, both urban and rural populations
Source: Ministry of Health, Labour and Welfare. Kokumin-eyou no Genjo: Heisei 12-nen Kokumin-eyou chosa kekka. (Results of National Nutrition Survey, 2000), 2002.

