

# The WHO Fruit and Vegetable survey - definitions and recommended intakes

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# Objectives of the survey

- Similarities and differences in definitions of fruits and vegetables around the world
- Qualitative information on general fruit and vegetable consumption
- Existing dietary recommendations
- Promotional programmes & activities



# Questions were asked about

- Definitions of vegetables and fruits
- General consumption and main ways of preparation
- Recommended intake of F&V (portions, grams - including definition of "portion")
- Promotional programmes



# Fruit and Vegetable survey\*

- 18 African countries - 8 responses
- 7 Eastern Mediterranean countries - 2 responses
- 38 countries from Europe - 33 responses
- 9 countries in the Americas - 6 responses, plus 3 Caribbean Islands & 3 Central American countries
- 6 South East Asian countries - 2 responses
- 35 Western Pacific countries - 23 responses



# Definition of Vegetables - AFR

## Ghana:

Parts of special and culturally specific plants eaten raw, cooked, dried or any suitable form for the promotion of good health. Usually used in soups and sauces as an accompaniment for the main staples.

Cassava, yam, sweet potato and plantain are not classified as vegetables but as staples.



# Definition of Vegetables - AMR

## Guatemala:

A vegetable is characterised by a high content of water, cellulose, minerals and vitamins. They are the parts of the plant for human consumption – root, tuber, leaf, flower. Normally they are eaten for lunch or dinner as salads, mostly cooked.

## Chile:

... the population of lower socio-economic status, refers to parsley, basil and other leafy spices that are used to give flavour to the dish.



# Definition of Vegetables - EMR

## Lebanon:

Are a rich source of vitamins and minerals. They are refreshing and consumed raw during breakfast, cooked or as a salad at lunch/dinner.



# Definition of Vegetables - EUR

## Italy:

All green and coloured edible plants and leaving out dry beans, peas and cereals.

## Latvia:

... the definition includes the principle “local products for local consumption”.

## Turkey:

Edible parts of plant food. Cheap and healthy.





# Definition of Vegetables - SEAR

## Thailand:

The leafy plants usually green in colour and eaten with rice or with the main dishes.

Vegetables are seldom eaten alone. Roots and tubers if consumed with meals they are vegetable but if they are cooked to be a dessert then they are not vegetable.



# Definition of Vegetables - WPR

Northern Mariana Islands:

Vegetables provide vitamins and minerals needed to help fight and prevent diseases. There are two types of vegetables:

- 1) starchy vegetables and
- 2) green and yellow vegetables.

Republic of Korea:

Most edible leafy plants are called vegetables and beans / seaweed are not included.



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# Definition of vegetables- summary

- From plant origin, various parts of the plants (leaves, stems, roots, bulbs)
- Eaten cook or raw, with main meals
- Definition according to colour and taste
- Nutritional value (minerals, vitamins, fibre)
- Good for health
- “Difficult vegetables” (starchy, beans)



# Definition of Fruits

Cambodia:

Fruits are foods from a plant source.

Fruits are usually consumed after meal or as snacks (not necessary with meal).

Fruits are usually consumed raw, but are sometimes cooked. Most fruits taste sweet, but some fruits taste sour or bitter.



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# Definition of Fruits

Lebanon:

Are a rich source of vitamins, mineral salts and dietary fiber. They are rather sweet, refreshing and consumed raw after a meal.

Estonia:

Fruits and berries: fresh, frozen, purées, canned or cooked, fresh juice (not including juice made from concentrate) and dried. Does not include jams prepared with lots of sugar.



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# Definition of fruits - summary

More homogeneous than definition of vegetables:

- plant source, fleshy part around seeds
- sweet taste
- snack or dessert
- usually eaten raw



# Dietary guidelines include recommendations on fruits and vegetables in ...

- AFRO: 2 countries (of 7)
- AMRO: 3 countries (out of 12)
- EMRO: -
- EURO: 27 countries (of 33)
- SEARO: 1 country (of 2)
- WPRO: 15 countries (of 23)



# Example recommendations

- Ghana: v: >1 portion; f: 2-4 portions
- Panama: v: 2 portions; f: 2 portions
- France, Luxembourg, Germany, Island, Italy, Poland, Norway, New Zealand, Cook Islands, Western Samoa: > 5 portions
- Thailand: 500 g
- China: v: 400-500g; f:100-200g





# What is 1 portion ?

- 1 piece of fruit or 1 slice of a big fruit
- 1/2 or 1 cup of cut fruit / vegetables
- Ghana: to individual's fill without over- or under-eating
- Slovenia, Switzerland: one handful

New Zealand:  
cooked vegetable 50-80g  
salad 60g  
fresh fruit 130g

Chile:  
cooked vegetable 100g  
salad 50g  
fresh fruit 100-150g



# Summary

- Definitions of vegetables have common elements, but differ regarding starchy tubers, dry pulses and corn
- Definitions of fruits are similar around the world
- Many countries include f&v in dietary recommendations;
- Recommendations vary - most common: **5 (or more) portions** - definition of “portion” varies



# For the meeting to consider...

- Can a global definition for fruits and for vegetables be made ?
- Can overall recommendations on portion size(s) be made ?
- If not - where is more research needed ?

