

DIETARY CONSUMPTION EVALUATION

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DIETARY CONSUMPTION

- represents the amount of consumed food and beverages and their kind
- we can measure it quantitatively or qualitatively
- we can monitor it in individuals or in specific groups (in families)



NUTRIENTS

- **Macronutrients** - proteins, fats, carbohydrates, (alcohol)
- **Micronutrients** - vitamins, minerals
- **Seminutrients** – fiber, phytochemicals
- **Non-nutritional components of the diet** - probiotics

METHODS USED FOR DIETARY CONSUMPTION (DC) EVALUATION

1) METHODS FOR EVALUATION OF GLOBAL DC

- **Household Inventory**

- usually for one week or month (food in the start and in the end)
- food in pantry, fridge, cellar - amount and kind of food
- strengths: exact, combine nutritional and economic data
- weaknesses: does not reflect individual's consumption

- **Household accounting method**

- usually for one week or month
- how much money we spend for food and beverages
- strengths: exact
- weaknesses: only economic data, does not reflect individual's consumption



- **Household record method**

- usually for one week
- quantitative and qualitative
- retrospective or prospective
- strengths: we can record 1 week of all people in group
- weaknesses: only nutritional data, not exact



2) Methods for evaluation of individual DC

METHODS

PROSPECTIVE

Precise weight record

Estimated record

Method of Double Portions

RETROSPECTIVE

24h Recall

Food frequency method

Dietary history method

PROSPECTIVE METHODS



- **Precise weight record (3 days, 7 days)**
 - we weigh the food before consumption and write it on the paper
 - strengths: more exact than recall, memory is not important
 - weaknesses: requires people's compliance, literacy, responsibility, stable living conditions...
- **Estimated record**
 - we use Photo book, 3D models, brochure with food pictures
 - strengths: more exact than recall, memory is not important
 - weaknesses: requires people's compliance, literacy, responsibility, stable living conditions...
- **Method of Double Portions**
 - the two identical portions of meal
 - strengths: exact, allows detailed chemical analysis
 - weaknesses: very difficult, long time, high level of compliance, stable living conditions, is expensive, causes inconvenience



RETROSPECTIVE METHODS

! Interview is very important for these methods !

• 24h Recall

- the most used method, interview + questionnaire
- quantitative method
- estimated (Photo book, 3D models, brochure with food pictures)
- atypical day is not good for evaluation, describe only the typical day
- use neutral non suggestive questions
- 3 specific questions: what did you eat and drink ?(bread,butter,tea)
 - what kind ... ? (white bread, fresh butter, black tea)
 - what was the amount of food ?(40,10grams,200 ml)
- strengths: easy, quick, cheap, useful in large samples
- weaknesses: less representative, depends on good memory, requires kitchen/serving literacy, not possible in children < 7 years and in very old people (demented people, Alzheimer)

- **Food frequency method (How often did you eat last week...?)**

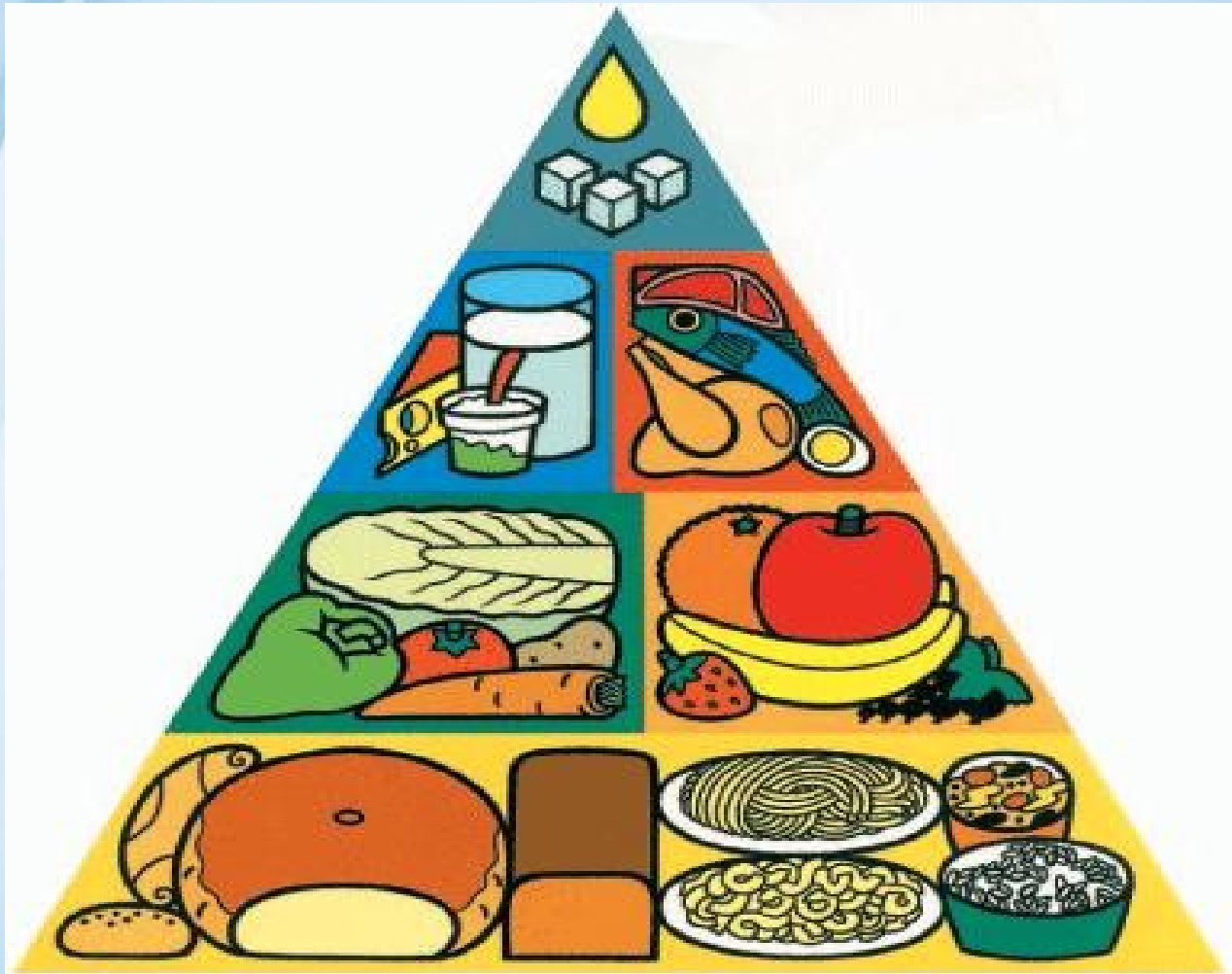
- quantitative and qualitative method, interview + questionnaire
- strengths: covers long period, not influenced by short term changes, we can monitor the content of some nutrients
- weaknesses: reflects more people's desire than reality, less exact, not possible in children < 7 years, and in very old people (demented people, Alzheimer)

- **Dietary history method**

- very necessary is interview
- use this method after usual medical anamnesis
- we usually ask people about some period - mainly last 6-12 months
- usual topics are: dietary consumption, food you like or dislike, groups of food you eat, amount of usual portions, food combinations.....
- strengths: covers long period, cheap, easy
- weaknesses: less exact, not possible in children < 14 years and in very old people (demented people, Alzheimer)

FOOD PYRAMIDE

quantitative and qualitative method used after record or recall methods



NUTRITIONAL SCORE **(by World Health Organisation)**

- sometimes we use it after the 24 - hour recall
- very quick method
- each answer is one point
- the maximum is 10 points
- for more details look at the sheet (recall and pyramid)

The background of the slide is a blue-tinted photograph of a sailboat on the water. The sailboat is positioned on the left side of the frame, with its mast and sails visible. The water is a light blue color, and the sky is a slightly darker blue. The overall image has a soft, hazy quality.

Thank you for your attention