



Dietetics Introduction

Death causes: 1/3 have to do with dietetic factors

Health parameters

genetic,
biology

lifestyle

environment

Spain nutrition: ↓grains ↓fruits&veggies ↓legumes,
↑processed meat ↑sugar ↑salt 9,9g/day

Deficit Zn, Vit.B9, Vit.D, Overweight 39%, Obese 22%,
childhood obesity, poor knowledge about nutrition

Definitions

Dietetics: science that studies how to provide each person or group with the food necessary for optimal

Feeding: voluntary action of eating and choosing the food to put in the mouth

Nutrition: involuntary process by which our body can digest, absorb and take advantage of the nutrients

Gastronomy: art of cooking food for nutrition and palatability

Diet: etymology "hygiene of life". Dietary method or regime

Food & Nutrients

Food: basic human need that contains nutrients, non-nutritious substances and that is included in the diet to live a good life

Nutrient: minimal functional unit used by cells in metabolism and derived from food (energetic, plastic and regulatory function)

Nutrition laws

1. Adequate quantity
2. Quality
3. Harmony (%macros)
4. Adequacy (person)

History

Homer, Plato and Hippocrates → diet indispensable for good life

19th century Dietetics evolves → integrates knowledge from other sciences

Goal: to plan a personalised diet, tailored to the needs and characteristics of the recipient



Dietary Guidelines

Quantitative

Qualitative

Dietary reference intakes

population groups by age and sex

Nutritional goals

population level

Nutritional requirements

quantities of nutrients needed by an **individual** to avoid disease and maintain health

Recommended intakes

quantities optimal for the majority of healthy people

RI = Average requirement + 2x standard deviation

Established by organisations
EFSA, FNB

FNB	EFSA
EAR: estimated average requirement	AR: average requirement
RDA: recommended daily allowance	PRI: population reference intakes
AI: adequate intakes	RI: recommended intakes
UL: tolerable upper intake level	UL: tolerable upper intake level

nutrient based guidelines to the whole population

SENC and AESAN (NAOS)

Nutrition, Physical Activity and Obesity Prevention

NAOS

Salt: WHO 5g/d → 80% population higher → AESAN 6g/d
Fat: 30-35%(10%sat.) → higher on total and sat. good with unsat.
Sugars: <10%calories → lower to prevent overconsumption of calories
Fibre: EFSA 24g/d → goal of 20-25g/d in ♀ and 25-30g/d in ♂

Dietary Guidelines

Why? because they are the optimal implementation of the nutrient requirements for humans

How?

1. find health-diet problems

2. find responsible nutrients involved

3. translate mismatches into food

4. stage guides, drawings and graphs

5. validate & evaluate the impact

they translate the quantitative nutrient recommendations into foods

May food be your medicine

Microbial theory of disease

Funk's vitamin theory.

Framingham 7 countries study

Development of the first guide in USA

+ physical activity. no guidelines for children, pregnant women, adolescents and older adults.

Spanish Dietary Guidelines

Base: Physical activity 60 min, 10k steps, emotional balance, energetic balance, healthy cooking techniques, 2.5 L water

2nd level: grains, fruits & veggies, olive oil, dairy, legumes, nuts, white meat, fish and eggs

3rd level: red & processed meat, salt <6g, sugar (industrial pastries, sweets, ice cream...),

Changes

added <u>healthy habits</u> at the bottom
"occasional" becomes "optional"
<u>alcohol</u> removed from daily
added nutritional <u>supplementation</u>

