

FOOD AND NUTRITION FOR SPECIFIC VURNERABLE GROUPS AND HEALTH CONDITION

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LEARNING OBJECTIVES



- Definition of foods for special dietary uses and medical purposes
- Food intended for medical purposes
- Food intended for infant and young children
- Food intended for a diabetic person
- Food for use in very low energy for weight reduction
- Formula foods intended for weight control

DEFINITION FOODS FOR SPECIAL DIETARY USES



1. CODEX STAN 146-1985



those foods which are
specially processed or formulated
to satisfy particular dietary requirements
which exist because of
a particular physical or physiological condition
and/or specific diseases and disorders
and which are presented as such

1. CODEX STAN 146-1985



The composition of these foodstuffs
must differ significantly from
the composition of
ordinary foods of
comparable nature,
if such ordinary foods exist

CODEx Alimentarius Commission



- Canned baby foods
- Formula foods for uses in weight control diets
- Formula foods for uses in very low energy diets for weight reduction
- Formulated supplementary foods for older infants and young children
- Guidelines on vitamin and mineral food supplements

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- Infant formula
- Labeling of and claims for prepackaged foods for special dietary use
- Labeling of and claims for foods for special medical purposes
- Nutrition labeling
- Processed cereal-based foods for infants and children
- Use of nutrition claims

2. USA :FDA-SECTION 411(C)(3) OF FEDERAL FOOD, DRUG, AND COSMETIC ACT



Supplying a special dietary need that exists by reason of a physical, physiological, pathological, or other condition, including but not limited to the condition of disease, convalescence, pregnancy, lactation, infancy, allergic hypersensitivity to food, underweight, overweight, or the need to control the intake of sodium

2. USA :FDA-SECTION 411(C)(3) OF FEDERAL FOOD, DRUG, AND COSMETIC ACT



Supplying a vitamin, mineral,
or other ingredient for use by man
to supplement his diet
by increasing the total dietary intake

2. USA :FDA-SECTION 411(C)(3) OF FEDERAL FOOD, DRUG, AND COSMETIC ACT



Supplying a special dietary need
by reason of being a food
for use as the sole item of the diet

3. JAPAN : FOOD FOR SPECIAL DIETARY USES (FOSDU)



- **There are five categories of FOSDU**
 - Medical foods for the ill
 - Formulas for pregnant or lactating women
 - Infant Formulas
 - Foods for the elderly with difficulty in masticating or swallowing
 - Foods for Specified Health Uses (FOSHU)

Medical foods for the ill



Single Food

- low-sodium foods
- low-calorie foods
- Low-protein foods
- no/low-protein and high
- Calorie foods
- high-protein foods
- allergen-removed foods
- lactose-free foods

Packed Meals

meals prepared for one serving, consisting of several foods

- sodium-reduced meals
- meals for diabetes
- meals for liver disease
- meals for adult obesity

FOODS FOR MEDICAL PURPOSES



1. CODEX STAN 180-1991



a category of foods
for special dietary uses
which are specially processed or formulated
and presented for
the dietary management of patients
and may be used only under medical supervision



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- Exclusive or partial feeding
 - Patients with **limited** of impaired capacity to take, digest, absorb or metabolize ordinary foodstuffs or certain nutrients contained there in



-
- Who have other special **medically-determined** nutrient requirements
 - Whose dietary management **can not be achieved** only by modification of the normal diet
 - By other foods for special dietary uses
 - By a combination of the two

Should be.....



- Based on sound medical and nutrition principles
- Have demonstrated, by scientific evidence, to be safe and beneficial
- The labels, should provide sufficient information on the nature and purpose of the food as well as detailed instructions and precautions for their use

FOOD INTENDED FOR INFANTS AND YOUNG CHILDREN



3. FOOD INTENDED FOR INFANTS AND YOUNG CHILDREN



The importance of ages 0-3 years



Brain growth and development

Control body temperature, blood pressure, heart rate, breathing

Accepts a flood of information from the various senses

Handles physical motion when walking, talking, standing, sitting

Think, dream, reason, and experience emotions

The importance of nutrition during ages period



- **Malnutrition, directly or indirectly**
 - 60% of the 10,9 million deaths among children under five
 - Two-thirds of these deaths, associated with inappropriate feeding practices, occur during the first year of life

The importance of nutrition during ages period



- Early malnutrition over first 3 years of life may have permanent effect on the brain including :
 - Reduced dendritic development
 - Reduced number of synapses
 - Reduced rate of myelination

Global Strategy for infant and young child feeding



- Based on the evidence of nutrition's significance in the early months and years of life, and the crucial role that appropriate feeding practices play in achieving optimal health outcomes
- Children have the right to adequate nutrition and access to safe and nutritious food, and both are essential for fulfilling their right to the highest attainable standard of health

Global Strategy for infant and young child feeding



- Exclusive breastfeeding is ideal nutrition and sufficient to support optimal growth and development for approximately the first 6 months after birth
- Except for a few medical conditions, and unrestricted exclusive breastfeeding results in ample milk production

Global Strategy for infant and young child feeding



- Infants weaned before 12 months of age should not receive cow`s milkfeeding, but should receive iron fortified infant formula
- Thereafter, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond

Infants feeding practice



[CODEX STAN 72-1981](#)

[CODEX STAN 156-1987](#)

[CODEX STAN 73-1991](#)

[CODEX STAN 74-1981](#)

Infants feeding practice



[CAC/RCP 21-1979](#)

[CAC/GL 08-1991](#)

[CAC/GL 10-1979](#)

Example of types of infant and young children formula



A. Standard formula for term infant

- Formula for starting up (0-6 month)
- Formula for follow up (6-36 month)

B. Standard formula for special medical purposes

- ***Formula for premature infants***
 - Fortified human milks
 - Premature infant formula
 - Premature discharged formula

Example of types of infant and young children formula



- ***Formula for cow-allergy***
 - Extensively hydrolyzed protein formulas
 - Amino acid based formula
- ***Formula for inborn errors of metabolism***
 - Phenylalanine free formula (PKU), branch-chain amino acids free formula (MSUD, MMA), etc
- ***Formula for gastrointestinal disorders***
 - Acid reflux: Thickened formulas
 - Lactose-free formulas: lactose intolerance

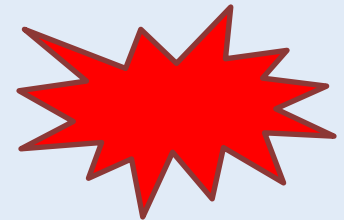
**INTENDED FOR
DIABETIC PERSON**



4. Intended For Diabetic Person



- American Diabetes Association
- British Diabetes Association
- Canadian Diabetes Association
- European Association for the study of diabetes
- India
- Japan
- South Africa
- American Heart Association
- National Cholesterol Education Panel



FOODS FOR USE IN VERY LOW ENERGY DIETS FOR WEIGHT REDUCTION



5. Foods For Use In Very Low Energy Diets For Weight Reduction



- [CODEX STAN 203-1995](#)

FORMULA FOODS INTENDED FOR WEIGHT CONTROL



6. Formula Foods Intended For Weight Control



- [CODEX STAN 181-1991](#)



Good Luck

Tugas 1



- **Tugas kelompok**
- Analisis produk (minimum 2 produk, lebih dari 3 lebih baik) berdasarkan codex untuk:
 - Follow up formula (2 kelompok)
 - Diabetic formula
 - Processed cereal-based foods for infants and children (2 kelompok)
 - For infant formula
 - Very low energy diets for weight reduction
 - Weight control

Tugas 2



- **Review journal**
 - Current and Proposed Definitions of “Potentially Hazardous Foods” (2 kelompok)
 - Analisis resiko keamanan pangan (Sakazaki) (2 kelompok)
 - The Application of Biotechnology to Nutrition (2 kelompok)
 - Functional foods (2 kelompok)