

# **DIETARY GUIDELINES FOR CARBOHYDRATES IN MEXICO**

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# **MEXICAN DIETARY GUIDELINES**

- **Mexico's Health Authorities established revised dietary guidelines which consider the local circumstances, resources and problems**
- **Guidelines built on the bases of**
  - **Mexican Dietary Reference Values (DRV) 2005**
  - **the NOM-043-SSA2-2005 Regulation of population-dietary-guidance (DG)**
- **Concerns. Child PEM. Iron deficiency anemia and increasing prevalence and precocity of the epidemics of obesity and co-morbidities**

# DRV

- **Workshop ~ 50 experts ← 17 National Health Institutions + Secretary of Health + National Academy of Medicine 2003-2005**
- **Use of DRV and DG in:**
  - **PLANNING (Food supply systems. Intake goals for populations)**
  - **EVALUATION OF DIETS (Adequacy index)**  
**Nutrition research and programs, institutional feeding, new products development, labeling regulation, nutrition education**
- **TERMS USED IN MÉXICO**
  - **RNP *Mean nutrient requirement***
  - **IDR (RNP + 2 sd) *Daily Recommended Intake (RDA)***
  - **IDS *Daily suggested intake (AI)***
  - **LSC *Upper intake limit (UL)***

## LOCAL DIFFERENCES IN

- **Genetic composition. Polymorphisms**
- **Demographic profile of the population**
- **Composition of local diets, availability of foods and bioavailability of nutrients**
- **Eating patterns. Traditions**
- **SE conditions**
- **General health status. Type, frequency and severity of malnutrition or adiposity in the population**
- **Body weight and composition. Height. Rate of growth**
  
- **Physical activity**
- **Birth weight. Mother's milk volumes**
- **Biological environment (flora, pathogens)**

# IDS (AI) FOR CHO

- **Total CHO**

0-6 months 60 g (from human milk)

7-12 months 95 g

Thereafter 130 g

Pregnancy last third 175 g

Lactation 210 g

These are *minimum recommendations*

- **Fiber**

IDS (AI) 12-15 g/1000 kcal 30-35 g adults

- **LSC (UL) sucrose no >10 %**

# ACCEPTABLE ENERGY SOURCES DISTRIBUTION RANGE

(% of Dietary Energy Value)

- **Protein 12-15 %** (vegetal/animal 2/3)
- **Fat 25-30 %** (SFA < 7, MUFA 12-14, PUFA 6-7). n-6/n-3 4/1, no added trans
- **CHO: 55-63 %**  
[starches 45-53 %, sucrose ~10 %]  
LSC (UL) sucrose no >10 % of requirement
- **Low GI and GL of diet**

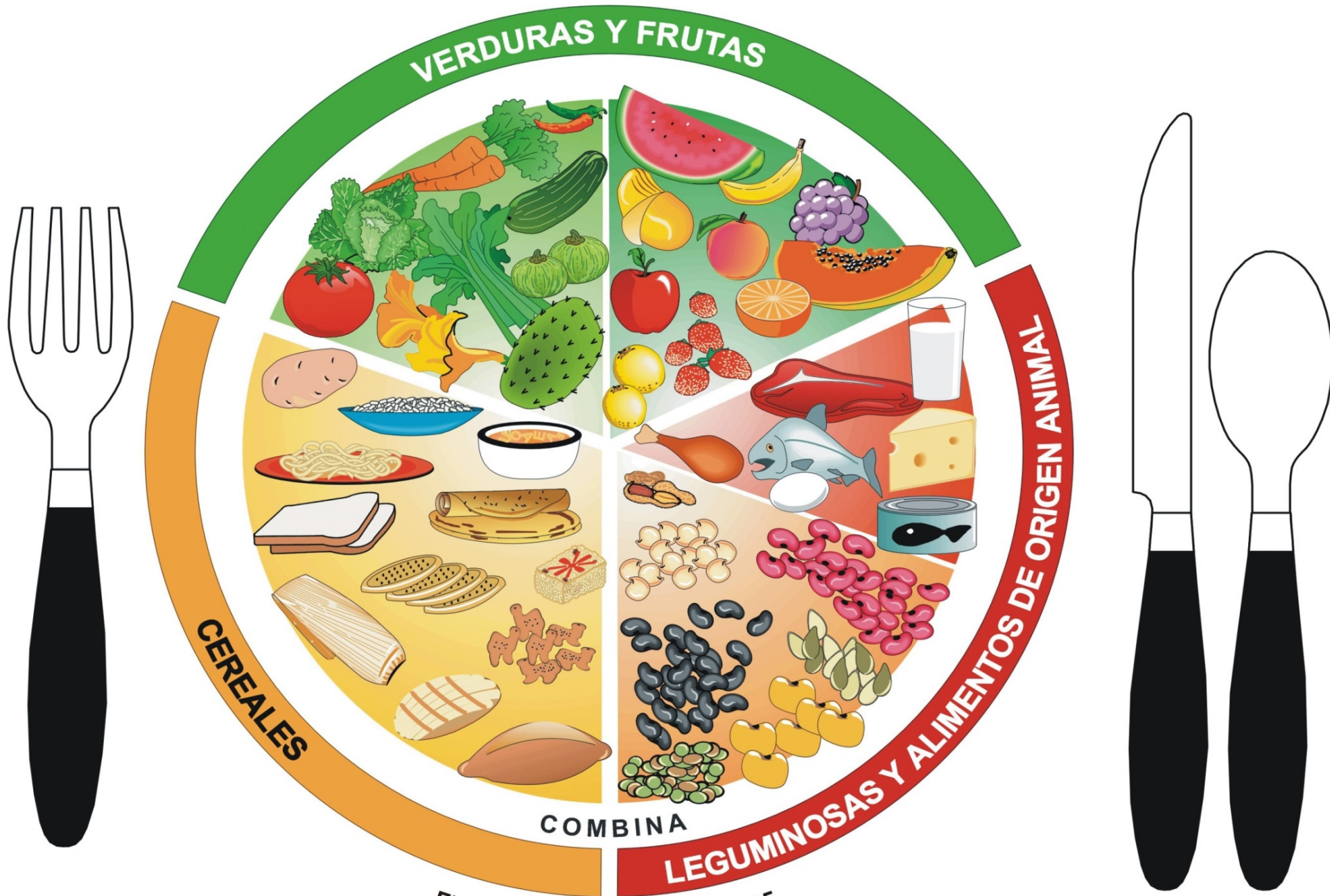
- **CHO energy and non-energy sources**
- **Special needs for CNS and platelets estimated to be covered by 130g/day in adults**
- **Overnight fasting Gluconeogenesis**
- **Sweet beverages and satiety**
- **Sucrose & caries, obesity, CVD, Hypertension, dislipidemia, tumors.**

# NOM-043-SSA2-2005

- **Similar to Health and Education Act**
- **Instrument for regulation of dietary guidance to population**
- **Food-based and centered on diet as the unit of feeding**
- **Food groups Avoid quantitative and hierarchical connotations**
- **Combination and variation**
- **Selection, conservation and appropriate and hygienic preparation of dishes**
- **Image: El plato del bien comer (The plate of well eating)**



# El Plato del Bien Comer



FUENTE: NOM-043-SSA2-2005

# DIETARY GUIDELINES

- **Three complementary food groups. Substitution within each group; allows variation**
- **Underline complementary combinations, variation of foods from each meal to next and moderation (in total quantity as well as in sugar, fat and salt consumption)**
- **Numerous recommendations on food selection and preparation in designing a healthy diet**
- **Stress on the value of nixtamal products, legume seeds (common beans) and fresh vegetables and fruit. Stress on Mesoamerican/Mexican traditional diet**
- **In Mexico pasta soup (part of cereal group) is a common dish. Attractive, culturally valuable, inexpensive and ecologically sustainable.**

# RELATION BETWEEN ESPECIFIC FOODS AND OBESITY AND COMORBIDITIES

- **Adipose tissue accumulation -and fat toxicity- is a physiological response to excess energy i.e. intake > requirement**
- **Energy intake should be = to requirements.**
- **Composition of intake doesn't seem to be relevant. No theoretical basis and no data to suggest it does**
- **However, energy density, GI and GL are important considerations. Sucrose in beverages**

**Thank you**