

# Chapter 2

## Routine Diets

# General Diet (Regular Diet): No Modifications Needed

## ❑ Considerations in regular diet planning:

- Variety.
- Color.
- Pleasing texture, and flavor.

❖ Follow dietary guidelines & my plate.

# General Diet

## Daily Recommended Amounts

Food group	Amount/day
Milk	2 - 3 c/day
Starches (Grains)	3 - 10 oz./day
Vegetables	1 - 4 c/day
Fruits	1 - 2.5 c/day
Meats and Beans	2 - 7 oz./day=
Oils/Fats	3 - 11 tsp Use sparingly; make most of your choices from oils and nuts rather than animal fats
Fluids	6 - 8 c/day Water and other fluids such as tea, coffee, soups, lemonade, etc.
Sweets and Desserts	Use sparingly They are considered extras (discretionary calories)

# Dietary planning for Pregnant and Lactating Women

- ❑ Some increase in amounts of protein, vitamins and minerals.
- ❑ Special attention to Fe<sup>++</sup>, Folate, Zn, Ca<sup>++</sup>, and
- ❑ Consume 600 mcg/day of synthetic folate (fortified foods or supplements) in addition to dietary folate (According to the general dietary guidelines).
- ❑ Protein requirement
  - Pregnancy: 1.1 g/kg/day,
  - Lactation: 1.2 g/kg/day (first 6 months),  
1.1 g/kg/day (second 6 months).

# Diet Principles during Pregnancy

- ❑ Weight gain during pregnancy:
  - 11-16 kg for normal weight women.
  - 13-18 kg for under-weight women.
  - 7-11 kg for over-weight women.
  - 5-9 kg for obese women.
  - 11-25 for twins pregnancy.
  
- ❑ Consume less than < 2 c caffeine containing drinks even though the harmful effects of caffeine are not fully understood.
  
- ❑ Avoid alcohol (abstain).

# Diet Principles during Pregnancy

## ☐ Morning sickness or indigestion:

- Take liquids between meals.
- Consume dry meals.
- Consume smaller more frequent meals.
- Eat toast, crackers, dry cereals.
- Avoid spicy foods.
- Avoid high fat foods.

❖ If there is nausea: eat whatever is appetizing.

# Recommended Daily Amounts

Food Group	Pregnancy	Lactation
Milk (dairy products)	3 c/day	3 c/day
Grains	6 – 8 (oz.)/	6 – 10 (oz.)/day
Vegetable	2.5 - 3 c/day	2.5 - 3.5 c/day
Fruits	1.5 - 2 c/day	1.5 - 2.5 c/day
Protein Foods	5 - 7 oz./day	5.5 – 7 oz./day
Oils/Fats	5 - 7 tsp/day	5 – 8 tsp/day
Fluids	8 - 10 c/day or more	10 - 12 c/day or more

# Recommendations for vegetable subgroups/week

Vegetable subgroup	Pregnancy	Lactation
Dark green: (leafy or non-leafy)	3 c/week	3 c/week
Deep yellow/orange	2 c/week	2 - 2.5 c/week
Legumes	3 c/week	3 - 3.5 c/week
Starchy vegetables (Potatoes, corn, peas)	3 - 6 c /week	3 - 7 c/week
Others	6.5 - 7c/week	6.5 - 8.5 c/week



# Infant Feeding

## 0-1 year old

- ❑ IF no modification is needed, then recommendations are:
  - Breast feeding is optimal:
    - Exclusively breast feed for the first 6 month.
  - Iron fortified baby formula (if not breast fed).
  - All infants feed when hungry.

# Infant Feeding

## Hunger Cues

- ❑ Rooting (searching: such as turning head to find the nipple).
- ❑ Mouth opening.
- ❑ Lip licking.
- ❑ Placing hands on mouth.
- ❑ Motor activity.
- ❖ Breast fed infants eat more often because breast milk is more easily digested than formula milk.

# Infant Feeding

## ☐ Fluoride supplements:

- Not recommended before 6 months.
- 6 months -3 years:
  - Only if drinking water has less than  $< 0.3$  ppm (0.3 mg fluoride /liter of water).

# Breast Feeding

## ❑ Early weeks:

- 8-12 feedings/24 hours.
- (10-15 minutes per breast).

## ❖ American Academy of Pediatrics recommends:

- 200 IU (5 mcg) of oral vitamin D drops daily especially if baby's and/or mother's exposure to sunlight is deficient.
  - Starting in the 1<sup>st</sup> 2 months until vitamin D fortified milk consumption reaches 500 ml/day.

# Bottle Fed Babies

- Give iron fortified baby formulas.
- No Fluoride supplementation is needed if formula is prepared with fluoridated water.
  - Bottled water is not a good source of fluoride.
  - Tap water is better in that sense.
- Do not heat formula in the microwave because of uneven heating which might cause burns.

# Complimentary Feeding

❑ After 4-6 months

- Continue breast feeding, or give iron fortified baby formula up to 1 year.
- ❖ Cows milk or goats milk or any other milk should not be given before 12 months.

# Complimentary Feeding

## ❑ Introduce solid foods

- Possible
  - Between 4-6 months or when infant's weight is doubled.

## ❑ Signs of readiness for eating solid foods:

- Sitting alone or with minimal support.
- Reaching to grasp spoon.
- Moving food from front of the mouth to the back to swallow.

# Complimentary Feeding

- Start with single grain cereals fortified with iron.
- Order of other foods is not important.
- Introduce 1 single new ingredient or food at a time to help detect food intolerances or allergies.
- Give new food for several days before starting another.
- No salt or sugar should be added to solid foods.



# Complimentary Feeding

- Give fresh food items, if not available, give frozen.
- Canned foods are usually heavy in salt and/or sugar.
- Proceed from pureed or mashed then to soft chunks.
- After 12 months: solid foods are the primary source of nourishment for the baby even if he/she is still nursing (breast or bottle).
  - To protect baby's teeth, there should be no frequent nursing, nurse only in place of snack.

# Complimentary Feeding

- Give small frequent feedings.
- Let baby decide when he is full.

## ☐ Cues for satiety:

- Refuses to open mouth.
- Turns head away to refuse food.
- Spits.

# Complimentary Feeding

## ❑ Safety concerns:

- Honey: not before 2 years because of fear of botulism infection.
- Water in pipes for more than 6 hours can contain lead.
- Peanuts, olives, carrot slices can block air passage.

# Feeding Children

## 1-8 years old

- ❑ Food should be nourishing and pleasing:
  - Varied.
  - Colorful.
  - Flavorful.
  
- ❑ Meal time should be enjoyable:
  - Children pass through phases of likes and dislikes.
  
- ❑ Give small portions, let them ask for more if they want to.
  
- ❑ Avoid nagging, forcing, and bribing because these behaviors might exacerbate the problem.

# Feeding Children

## 1-8 years old

- ❑ Include nutritious snacks because child's stomach is still small, and meals might not give enough nourishment.
- ❑ Do not limit fats and cholesterol for up to 2 years.
- ❑ Decrease fats and cholesterol for the 2-5 year olds.
- ❑ According to Dietary Guidelines, fat should provide:
  - 30-40% of total Kcal of children 2-3 years old.
  - 25-35% of total Kcal 4-18 year old children.

# Feeding Children

## 1-8 years old

- ☐ During sickness, food intake decreases (loss of appetite).
- ☐ Excessive amounts of milk      decrease consumption of other foods.
- ☐ Meat should be tender: bite size, ground.
- ☐ Give crisp finger foods: they like that.
- ☐ They do not like highly spiced foods.

# Feeding Children 1-8 years old

## ❑ Weight management:

- Dieting is not recommended for such young children because it can be harmful for them:
  - Physically and psychologically.
- Encourage physical activity instead.

# Feeding Children 1-8 years old

## ☐ Safety concerns:

- Choking:
  - Try to remove seeds, skins, and small bones.
  - Do not give risky foods before 4 years old.
  - Ask child to sit down while eating to avoid choking.
  - Supervise while eating.



# Feeding Children 1-8 years old

## ❑ Serving size for children

- Should be small:
  - Around 1/2 the serving size for adults.
    - ✓ e.g. 1/2c milk per meal instead of 1 c or 1 oz. of meat instead of 2 or 3 given to adults and so on.

# Daily Recommended Amounts

## Children 1-8 years

Food group	1 year old	2-3 years old	4-8 years old
Vegetables (all types)	~ ½ c	¾ c	1 c (Females) 1.5 c (Males)
Fruits	1 c	1 c	1.5 c
Grains	2 oz.	3 oz.	4 oz F 5 oz M
Dairy products	2 c	2 c	2 c
Protein foods: meats and beans	1.5 oz.	2 oz.	3 oz F 4 oz M
Oils/fats Use sparingly; Make most of your choices from oils and nuts rather than animal fats	3-4 tsp/day	3-4 tsp/day	3-4 tsp/day
Fluids: Water and other fluids such as fruit juices, soups, lemonade, etc.	5.5 - 7 c/day	5.5 - 7 c/day	5.5 - 7 c/day
Sweets and Desserts	use sparingly	use sparingly	use sparingly

# Diet for the Elderly

## ❑ Definition of Elderly:

- Most developed world countries have accepted the chronological age of 65 years as a definition of 'elderly' or older person.
- While this definition is somewhat arbitrary, it is many times associated with the age at which one can begin to receive pension benefits.
- At the moment, there is no United Nations standard numerical criterion, but the UN agreed cutoff is 60+ years to refer to the older population.

# Diet for the Elderly

- Use the general diet as much as possible.
- If modification is necessary, the least restrictive is more acceptable because minor changes may meet the needs.
- Drug therapy with minor food restrictions might be better accepted.
- Weight management with mild changes like 1% milk and its products, limiting cheeses, reducing portion size of desserts etc.
- Use individualized diets, recommend variety from all food groups.
- Respect ethnic or cultural influences, take them into consideration.

# Nutrient Needs of the Elderly

❑ Energy needs for healthy elderly decreases because:

- Lean body mass decreases.
- BMR decreases.

❖ During infection or stress energy needs may increase.

❖ Encourage physical activity whenever possible.

# Nutrient Needs of the Elderly

## ❑ Protein

- Should be 0.8 g/kg of body weight, just like adults;
- Some research suggest it should be higher like 1-1.25 g/kg

## ❑ Fat

- Intake should not be more than 25-35% of total calorie intake.

## ❑ CHO

- Intake should be 45-65% of total calorie intake.

- ❖ Complex CHOs are recommended, enriched grains and 100% whole wheat or other whole grains.

# Nutrient Needs of the Elderly

## ☐ Ca++ intake : DRI

- Males:
  - 51-70 is 1000 mg/day.
  - 70 and older 1200mg/day.
- Females:
  - 51 and over should be 1200 mg/day.

## ☐ Vitamin D: DRI

- Adults and up to 70 years old 15 mcg/day.
- Above 70 years 20 mcg/day.

❖ Elderly maybe less tolerant to milk, so fermented milk products and dessert puddings may be more tolerated.

# Nutrient Needs of the Elderly

## ❑ Folate:

- 400 mcg just like adults.

## ❑ B6

- Adults = 1.3 mg.
- $\geq 51$  years =
  - Males 1.7 mg.
  - Females 1.5 mg.

## ❑ B12

- ( 2.4 mcg like adults)
  - Should be ensured through either fortified foods or supplements because:
    - Food intake maybe less.
    - Age-related increase in food bound malabsorption.



# Nutrient Needs of the Elderly

- ❑ Encourage intake of iron rich foods with vitamin C foods.
  
- ❑ Fluid intake should be encouraged if there is no medical restrictions:
  - Fluid intake should be:
    - 30 ml/kg/day.
    - Minimum of 1500 ml/day or at least 6 c/day.

# Elderly might have some problems such as:

❑ Chewing or swallowing difficulties may need:

- Adjustments in food consistency.
- Meats: chopped, ground or pureed.
- Adding gravy or sauces increases food moisture and this may help in swallowing.

# Elderly might have some problems such as:

- ❑ Taste impairment is common among the elderly:
  - Steamed, sautéed or stir fried foods enhance the flavors.
- ❑ Dry mouth:
  - Sweet and tart foods may stimulate saliva production.
- ❑ Difficulty holding the fork and knife:
  - May need more finger foods to give them more independence.

# Elderly might have some problems such as:

## ☐ Decreased Appetite:

- Serve food at regular meal time (just like everybody else) to improve food intake.
- Pleasant environment may stimulate the appetite especially for those living in long term care facilities.
- Give a bedtime snack.
- Length of time between dinner and breakfast should not exceed 14 hours.

# End of Chapter