Cauvery College for Women (Autonomous)

Nationally Accredited (III Cycle) with 'A' Grade by NAAC

Annamalai Nagar, Tiruchirappalli-18.

Name of the Faculty : **T.R. REVATHI**

Mobile Number : 9500603972

Designation : Assistant Professor

Department : Food Service Management and Dietetics.

Programme : B.Sc Nutrition and Dietetics.

Batch : 2016-2017 Onwards

Semester : IV

Course Title : **Nutrition Through Life Cycle**

Course code : **16SCCND4**

Unit : I

Topic covered : a .Basic Principles of Meal Planning.


Meal
PLANNING

MEAL PLANNING

- **Meal planning** means **planning** diets which will provide all nutrients in required amounts and proportions i.e. adequate nutrition. ...
- **Meal planning** determines the adequacy of the diet, the kinds of foods purchased, its quality and cost, the way it is stored, prepared and served.

BASIC PRINCIPLES OF MEAL PLANNING :

- A good diet promotes positive change and helps you incorporate sensible eating into your daily lifestyle. When designing a practical eating regimen, diet planners often recommend the ABCDMV method -- the six basic principles of **adequacy**, **balance**, **calorie control**, density, **moderation** and **variety**.

BENEFITS OF MEAL PLANNING

- LEARN PORTION CONTROL. Planning your own meals will allow you to see how much you're actually eating. ...
- EAT HEALTHY. When you're hungry and your blood sugar drops, you're more inclined to eat whatever you can get the fastest. ...
- SAVE TIME. ...
- SAVE MONEY. ...
- AVOID WASTING FOOD.

Recommended dietary allowances

RDA is defined as the nutrients present in the diet which satisfy the daily requirement of nearly all individuals in a population.

Recommended dietary allowances

This implies addition of safety factor amount to the estimated requirement to cover

- Variation among individuals
- Losses during cooking
- Lack of precision in estimated requirement

Recommended Dietary Allowances = Requirements + Safety factor

Age	11 – 14	15 – 18	19 – 24	25 – 50	+ 51	Pregnant	Lactating (First 6 months)	Lactating (Second 6 months)
Calories (kCal)	2200	2200	2200	2200	1900	+300	+500	+500
Protein (g)	46	44	46	50	50	60	65	62
Vitamin A (ug)	800	800	800	800	800	800	1300	1200
Vitamin D (ug)	10	10	10	5	5	10	10	10
Vitamin E(mg)	8	8	8	8	8	10	12	11
Vitamin K (ug)	45	55	60	60	60	65	65	65
Vitamin C (mg)	50	60	60	60	60	70	95	90
Thiamin (mg)	1.1	1.1	1.1	1.1	1	1.5	1.6	1.6
Riboflavin (mg)	1.3	1.3	1.3	1.3	1.2	1.6	1.8	1.7
Niacin (mg)	15	15 – 18	15	15	13	17	20	20
Vitamin B6 (ug)	1.4	1.5	1.6	1.6	1.6	2.2	2.1	2.1
Folate (ug)	150	180	180	180	180	400	280	260
Vitamin B12 (mg)	2.0	2.0	2.0	2.0	2.0	2.2	2.6	2.6
Calcium (mg)	1200	1200	1200	800	800	1200	1200	1200
Phosphorous (mg)	1200	1200	1200	800	800	1200	1200	1200
Magnesium (mg)	280	300	280	280	280	320	355	340
Iron (mg)	15	15	15	15	10	30	15	15
Zinc (ug)	12	12	12	12	12	15	19	16
Iodine (ug)	150	150	150	150	150	175	200	200
Selenium (ug)	45	50	55	55	55	65	75	75

Factors that effects RDA

RDA of an individual depends on many factors like:

1. Age
2. Sex
3. Physical work
    1. Sedentary
    2. Moderate
    3. Hard (Heavy)
4. Physiological stress
    1. Pregnancy
    2. Lactation

Factors that effects RDA

For all the nutrients (except energy) estimates of allowances are arrived at by determining the average. Taking mean requirement of nutrients and adding to it twice the standard deviation of the mean.

$$\text{Requirement} = \text{Mean} \pm 2SD$$

The value will meet more than 97.5% of the population which is composed of individuals with a satisfactory normal distribution of requirements.

ICMR's Reference men

Scientists have prescribed RDA for adults, depending on the level of activity of individual.

1. Sedentary workers: Those who sit and do work using brain and hands.

- Ex: teachers; clerks, typists, officers

ICMR's Reference men

2. Moderate workers: Works vigorously for a few hours using many parts of the body like hands, feet and muscles.

- Ex: postman; mali; maid servant; housewife doing all household work.

3. Heavy workers: Use different parts of body for several hours.

- Ex: rickshaw pullers; coolies; workers in mines; sports persons, masons etc.

ICMR's Reference Woman

1. between 20-39 years of age
2. healthy and weighs 50kg.
3. may be engaged 8 hours in general household work or in light industry or in any other moderately active work.
4. 8 hours in bed
5. spends 4-6 hours sitting or moving around in light activity
6. 2 hours walking or active recreation or household chores.

THREE FACTORS AFFECTING THE NUTRITIONAL NEEDS :

- Biological **factors** include **age**, gender, growth, disease states, and genetic makeup. Among the nonbiological **factors**, socio-economic status is the most important. Poverty is one **of** the major socio-economic causes **of** variation in **nutrient intake**, and it also impacts **nutrient requirements**.

Factors affecting nutrient requirements

- Genetics and gender.
- Dietary energy concentration.
- Environmental temperature.
- Health status.
- Stocking density.
- Feeding strategy and degree of competition for feed.
- Variability of nutrient content and availability in ingredients.


Thank you