



# BALANCED DIET

LESSON 1

# *Steps to loss weight through healthy diet*

know your diet

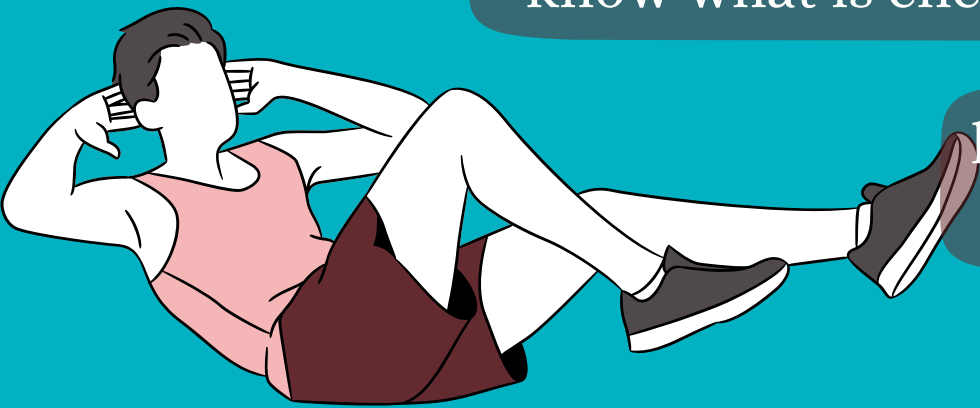
know your body weight

Calculate calorie intake or energy intake

Calculate calorie expenditure or energy used

know what is energy balance

know how to loss weight through  
energy balancee





# FOOD YOU EAT

FOOD IS ANY NUTRITIOUS  
SUBSTANCE THAT WE EAT  
AND ABSORB IN ORDER TO  
MAINTAIN LIFE AND GROWTH

THIS NUTRITIOUS SUBSTANCE  
CONTAINS PROTEIN,  
CARBOHYDRATES, FAT, VITAMINS  
AND MINERALS USED IN THE BODY  
TO SUSTAIN GROWTH AND VITAL  
PROCESSES AND TO FURNISH  
ENERGY.







# *How healthy is* **YOUR FOOD?**

Healthy food is food that give you all the nutrients you need to stay healthy, feel and have plenty of energy

Healthy food also means fresh and minimally processed

It protects you against many chronic diseases such as heart disease, diabetes and cancer.





# BALANCED DIET & FOOD PYRAMID

- **A diet that contains a proper proportion of carbohydrate, fat, protein, vitamins, mineral and water necessary to maintain good health, is a balanced diet.**
- **We can refer to food pyramid or basic five food groups to plan our balanced diet. Different people with different physical activity and gender and different age of their life require different meal plan.**

# FOOD PYRAMID





# FOOD PYRAMID



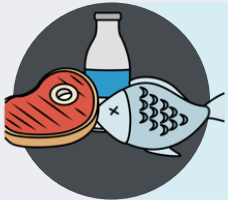
Oranges, strawberry, banana,  
spinach, mustard, cabbage, broccoli

*vitamin  
mineral*



Rice, bread, potato, bean, oat

*carbohydrate*



Beef, lamb, chicken, fish, lobster, egg,  
milk, yogurt

*protein*



Butter, margarine, cooking oil, ghee

*fat*



Milk, watermelon, lettuce

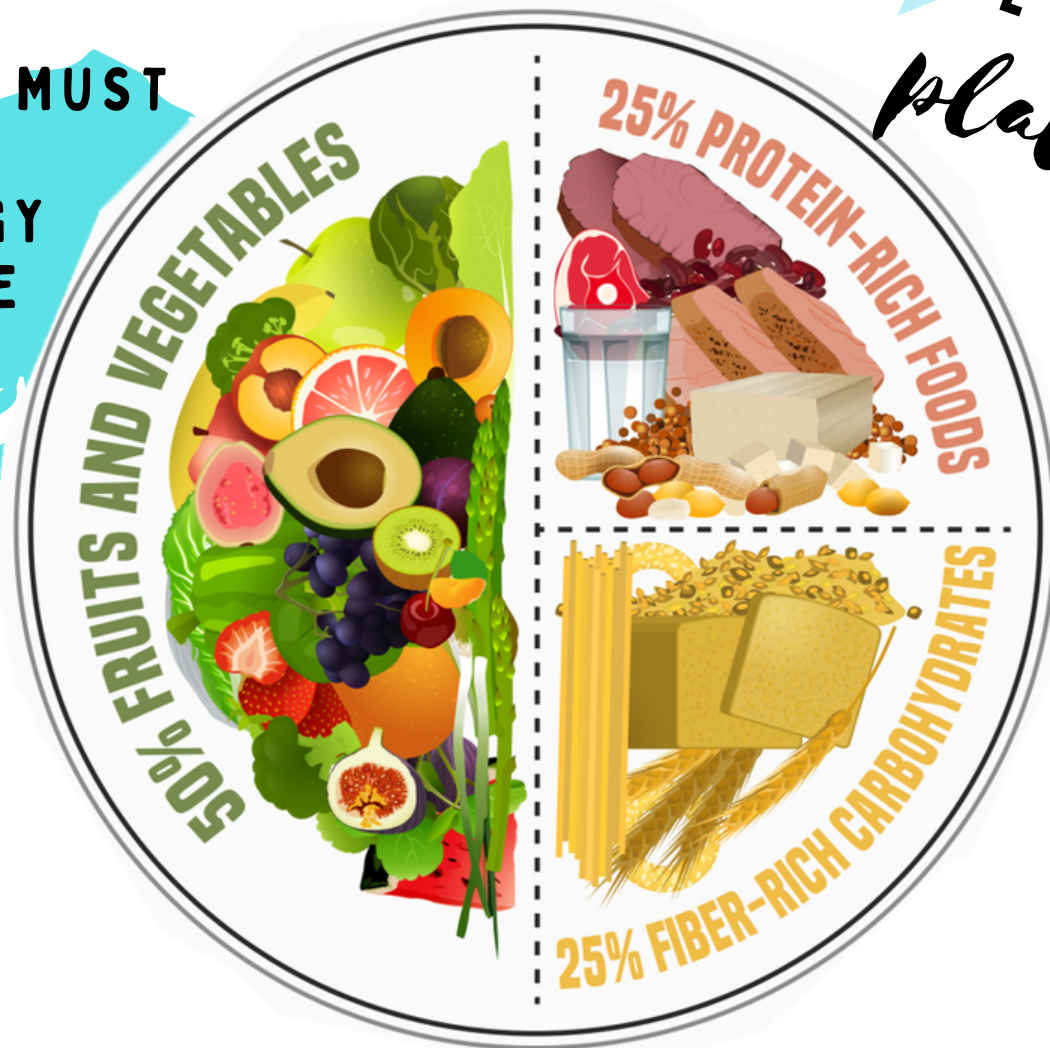
*water*

# *plan* **YOUR DIET**

**CALORIE INTAKE MUST  
LOWER  
THAN ENERGY  
EXPENDIURE**

**DIET MUST INCLUDE  
ALL FOOD GROUP**

**RATE YOUR  
*plate***





# *How diet* **INFLUNCE BODY WEIGHT ?**

**A CERTAIN NUTRIENT  
CONTAINS CALORIES (ENERGY)  
SUCH AS CARBOHYDRATES,  
PROTEIN AND FAT.**

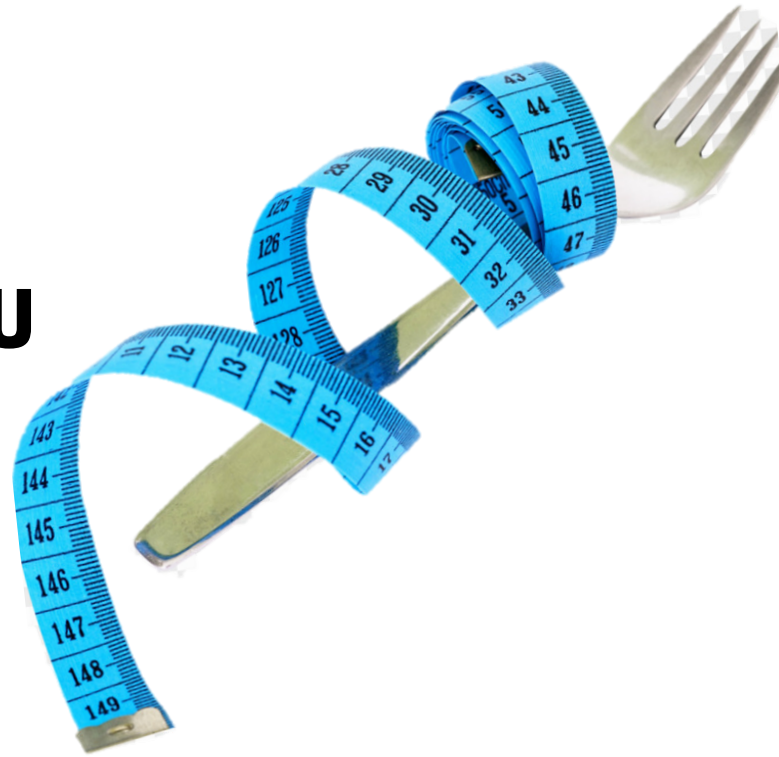
**THE AMOUNT OF  
CALORIES WE CONSUME  
HAS A DIRECT IMPACT  
ON OUR WEIGHT.**



# *How diet* **INFLUNCE BODY WEIGHT ?**

**CONSUME THE SAME NUMBER  
OF CALORIES OUR BODY  
BURNS, OUR WEIGHT STAYS  
STABLE.**

**CONSUME MORE THAN  
OUR BODY BURNS,  
WEIGHT GOES UP. IF YOU  
CONSUME LESS, YOUR  
WEIGHT GOES DOWN.**







# WHAT IS A CALORIE?

AMOUNT OF ENERGY PROVIDED  
BY THE FOOD

CARBOHYDRATE: 1 GRAM = 4 CALORIES

PROTEIN: 1 GRAM = 4 CALORIES

FAT: 1 GRAM = 9 CALORIES

MINERAL, VITAMIN, WATER = 0 CALORIE



# How to calculate calories

## CARBS

# grams carbs you ate  
x 4 calories per gram

## PROTEIN

# grams protein you ate  
x 4 calories per gram

## FAT

# grams fat you ate x 9  
calories per gram



# Example of DIET PLAN

Dragon fruit, 246.36g (1 s)  
(P=3.94g, F=0.37g,  
C=25.99g, Fib=2.7g)

Papaya, 158.9g (1 s)  
(P=2.38g, F=0.16g,  
C=11.28g, Fib=0.8g)

Cucumber salad, 100 g (1 s)  
(P=0.5g, F=0.1g, C=6.4g,  
Fib=0.6g)

Tuna cooked in coconut milk,  
51.7g (1 s)  
(P=8.12g, F=1.81g, C=3.15g,  
Fib=0.0g)

Hard boiled egg, 55.45g (1 s)  
(P=2.81g, F=2.06g, C=0.09g,  
Fib=0.4g)

Nasi dagang, 57g (1 s)  
(P=1.86g, F=1.08g,  
C=21.83g, Fib=0.5g)

Tea, 240 ml (1 s)  
(P=0.0g, F=0.0g, C=0.71g,  
Fib=0.0g)

# BREAKFAST





# ENERGY FROM BREAKFAST

## DRAGON FRUIT (1 Serving)

PROTEIN:  $3.94\text{g} \times 4 \text{ kcal} = 15.76 \text{ kcal}$

FAT:  $0.37\text{g} \times 9 \text{ kcal} = 3.33 \text{ kcal}$

CARBO :  $25.99\text{g} \times 4 \text{ kcal} = 104.00 \text{ kcal}$

**TOTAL ENERGY : 123.05 kcal**

## TEA (1 Serving)

PROTEIN:  $0.00\text{g} \times 4 \text{ kcal} = 0.00 \text{ kcal}$

FAT:  $0.00\text{g} \times 9 \text{ kcal} = 0.00\text{kcal}$

CARBO :  $0.71\text{g} \times 4 \text{ kcal} = 2.84 \text{ kcal}$

**TOTAL ENERGY : 2.84 kcal**

## PAPAYA (2 Serving)

PROTEIN:  $2 \times 2.38\text{g} \times 4 \text{ kcal} = 19.04 \text{ kcal}$

FAT:  $2 \times 0.16\text{g} \times 9 \text{ kcal} = 2.88 \text{ kcal}$

CARBO :  $2 \times 11.28\text{g} \times 4 \text{ kcal} = 90.24 \text{ kcal}$

**TOTAL ENERGY : 112.16 kcal**

## CUCUMBER SALAD (1 Serving)

PROTEIN:  $0.50\text{g} \times 4 \text{ kcal} = 2.00 \text{ kcal}$

FAT:  $0.10\text{g} \times 9 \text{ kcal} = 0.90 \text{ kcal}$

CARBO :  $6.40\text{g} \times 4 \text{ kcal} = 25.60 \text{ kcal}$

**TOTAL ENERGY : 28.50 kcal**





# ENERGY FROM BREAKFAST

## TUNA COOKED IN COCONUT MILK (1 Serving)

PROTEIN:  $8.12\text{g} \times 4 \text{ kcal} = 32.48 \text{ kcal}$

FAT:  $1.81\text{g} \times 9 \text{ kcal} = 16.29 \text{ kcal}$

CARBO :  $3.15\text{g} \times 4 \text{ kcal} = 12.6 \text{ kcal}$

**TOTAL ENERGY : 61.37 kcal**



**TOTAL ENERGY :  
462.54 kcal**

## HARD BOIL EGG (1 Serving)

PROTEIN:  $2.81\text{g} \times 4 \text{ kcal} = 11.24 \text{ kcal}$

FAT:  $2.06\text{g} \times 9 \text{ kcal} = 18.54 \text{ kcal}$

CARBO :  $0.09\text{g} \times 4 \text{ kcal} = 0.36 \text{ kcal}$

**TOTAL ENERGY : 30.14 kcal**

## NASI DAGANG (1 Serving)

PROTEIN:  $1.86\text{g} \times 4 \text{ kcal} = 7.44 \text{ kcal}$

FAT:  $1.08\text{g} \times 9 \text{ kcal} = 9.72 \text{ kcal}$

CARBO :  $21.83\text{g} \times 4 \text{ kcal} = 87.32 \text{ kcal}$

**TOTAL ENERGY : 104.48 kcal**





# Example of DIET PLAN

Mix vegetable soup,  
286.83g (1 s)  
(P=9.1g, F=1.8g, C=37.0g,  
Fib=8.5g)

Tropical fruit salad,  
246.36g (1 s)  
(P=2.2g, F=1.6g, C=36.7g,  
Fib=5.4g)

Fried chicken, 93.6g (1 s)  
(P=15.54g, F=14.88g,  
C=18.72g, Fib=0.0g)

Cooked white rice, 158g (1 s)  
(P=4.3g, F=0.4g, C=44.5g,  
Fib=0.6g)

Plain water, 100ml (1 s)  
(P=0.0g, F=0.0g, C=0.0g,  
Fib=0.0g)



# ENERGY FROM LUNCH

## MIX VEGE SOUP (1 Serving)

PROTEIN:  $9.1\text{g} \times 4 \text{ kcal} = 36.4 \text{ kcal}$

FAT:  $1.8 \times 9 \text{ kcal} = 16.2 \text{ kcal}$

CARBO :  $37\text{g} \times 4 \text{ kcal} = 148.00 \text{ kcal}$

**TOTAL ENERGY : 200.6 kcal**

## TROPICAL FRUIT SALAD (1 Serving)

PROTEIN:  $2.2\text{g} \times 4 \text{ kcal} = 8.8\text{kcal}$

FAT:  $1.6\text{g} \times 9 \text{ kcal} = 14.4 \text{ kcal}$

CARBO :  $36.7\text{g} \times 4 \text{ kcal} = 146.8 \text{ kcal}$

**TOTAL ENERGY : 170.0 kcal**

## WATER (1 Serving)

PROTEIN:  $0.0\text{g} \times 4 \text{ kcal} = 0.0 \text{ kcal}$

FAT:  $0.0\text{g} \times 9 \text{ kcal} = 0.0 \text{ kcal}$

CARBO :  $0.0\text{g} \times 4 \text{ kcal} = 0.0 \text{ kcal}$

**TOTAL ENERGY : 0.0 kcal**





# ENERGY FROM LUNCH

## FRIED CHICKEN ( 1 Serving)

PROTEIN:  $15.54\text{g} \times 4 \text{ kcal} = 62.16 \text{ kcal}$

FAT:  $14.88 \times 9 \text{ kcal} = 133.9 \text{ kcal}$

CARBO :  $18.72\text{g} \times 4 \text{ kcal} = 74.88 \text{ kcal}$

**TOTAL ENERGY : 541.92 kcal**

## COOCKED WHITE RICE (1 Serving)

PROTEIN:  $4.3\text{g} \times 4 \text{ kcal} = 17.2 \text{ kcal}$

FAT:  $0.48\text{g} \times 9 \text{ kcal} = 3.6 \text{ kcal}$

CARBO :  $44.5\text{g} \times 4 \text{ kcal} = 178.0 \text{ kcal}$

**TOTAL ENERGY : 104.48 kcal**



**TOTAL ENERGY :  
1111.32 kcal**





# Example of DIET PLAN

Spinach, 200g (1 s)  
(P=6.92g, F=4.82g,  
C=27.84g, Fib=1.8g)

Fruit salad, 255g (1 s)  
(P=0.9g, F=0.2g, C=20.0g,  
Fib=2.9g)

Grill fish, 25g (1 s)  
(P=7.0g, F=2.0g, C=0.0g, Fib=0.0g)

Cooked white rice, 158g (1 s)  
(P=4.3g, F=0.4g, C=44.5g,  
Fib=0.6g)

Hot chocolate, 100ml (1 s)  
(P=4.34g, F=14.88g,  
C=69.89g, Fib=0.0g)

## DINNER



# ENERGY FROM DINNER

## SPINACH (1 Serving)

PROTEIN:  $6.92\text{g} \times 4 \text{ kcal} = 27.68\text{kcal}$

FAT:  $4.82\text{g} \times 9 \text{ kcal} = 43.38 \text{ kcal}$

CARBO :  $27.84\text{g} \times 4 \text{ kcal} = 111.36 \text{ kcal}$

**TOTAL ENERGY : 182.42 kcal**

## FRUIT SALAD (1 Serving)

PROTEIN:  $0.9\text{g} \times 4 \text{ kcal} = 3.6\text{kcal}$

FAT:  $0.2\text{g} \times 9 \text{ kcal} = 1.8 \text{ kcal}$

CARBO :  $20.0\text{g} \times 4 \text{ kcal} = 80.0 \text{ kcal}$

**TOTAL ENERGY : 85.4 kcal**

## HOT CHOCLATE (1 Serving)

PROTEIN:  $4.34\text{g} \times 4 \text{ kcal} = 17.36 \text{ kcal}$

FAT:  $24.88\text{g} \times 9 \text{ kcal} = 233.92 \text{ kcal}$

CARBO :  $69.89\text{g} \times 4 \text{ kcal} = 279.56 \text{ kcal}$

**TOTAL ENERGY : 530.84 kcal**





# ENERGY FROM DINNER

## FRIED CHICKEN ( 1 Serving)

PROTEIN:  $7.0\text{g} \times 4 \text{ kcal} = 28.0 \text{ kcal}$

FAT:  $2.0 \times 9 \text{ kcal} = 18.0 \text{ kcal}$

CARBO :  $0.0\text{g} \times 4 \text{ kcal} = 0.0 \text{ kcal}$

**TOTAL ENERGY : 46.0 kcal**

## COOCKED WHITE RICE (1 Serving)

PROTEIN:  $4.3\text{g} \times 4 \text{ kcal} = 17.2 \text{ kcal}$

FAT:  $0.48\text{g} \times 9 \text{ kcal} = 3.6 \text{ kcal}$

CARBO :  $44.5\text{g} \times 4 \text{ kcal} = 178.0 \text{ kcal}$

**TOTAL ENERGY : 104.48 kcal**



**TOTAL ENERGY :  
949.14 kcal**





# TOTAL DAILY CALORIE INTAKE (TDCI)

2523 kcal



**462.54 KCAL + 1111.32 KCAL + 949.14 KCAL**