



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, fell and have plenty of energy



Healthy food also means fresh and minimally processed

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

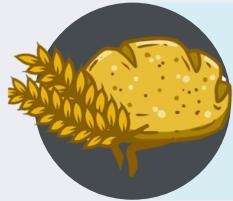


FOOD PYRAMID



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

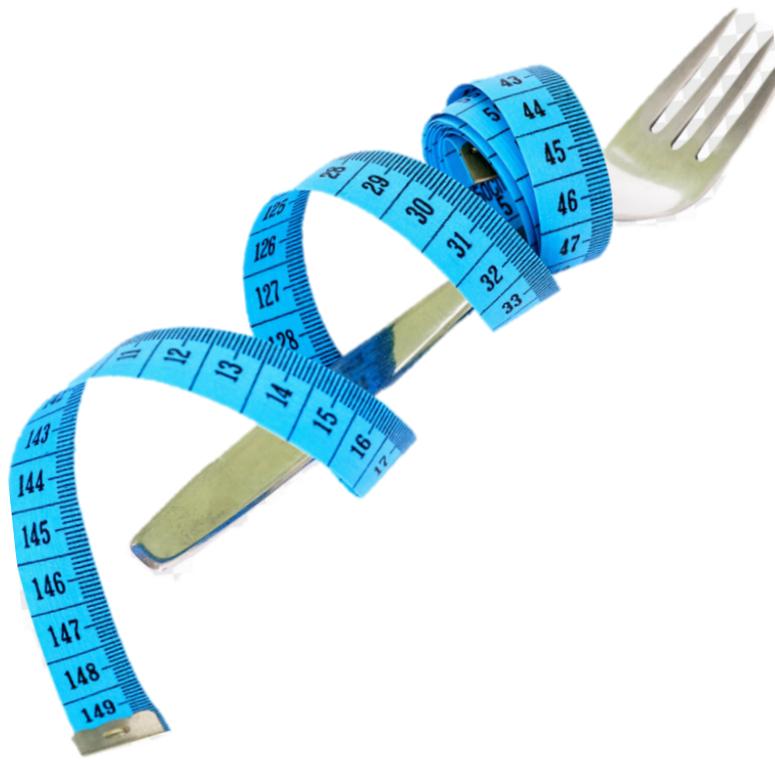
RATE YOUR
plate



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

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

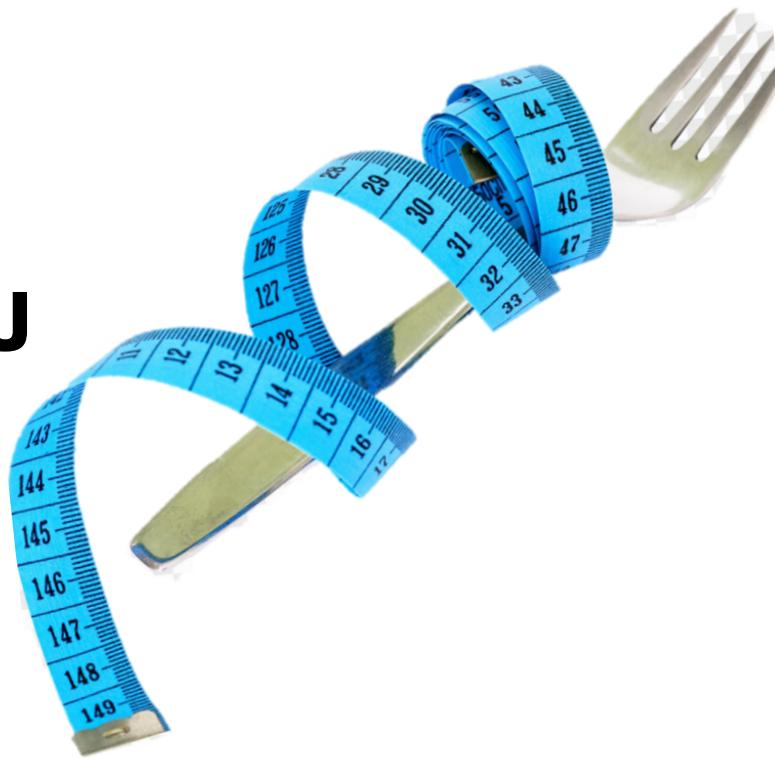
**THE AMOUNT OF
CALORIES WE CONSUME
HAS A DIRECT IMPACT
ON OUR WEIGHT.**



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: 1GRAM= 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: 3.94gx4 kcal = 15.76 kcal

FAT: 0.37gx9 kcal = 3.33 kcal

CARBO : 25.99gx 4 kcal= 104.00 kcal

TOTAL ENERGY : 123.05 kcal

TEA (1 Serving)

PROTEIN: 0.00gx4 kcal= 0.00 kcal

FAT: 0.00g x9 kcal = 0.00kcal

CARBO : 0.71gx4 kcal=2.84 kcal

TOTAL ENERGY : 2.84 kcal

PAPAYA (2 Serving)

PROTEIN: 2x2.38gx4 kcal= 19.04 kcal

FAT: 2x0.16gx9 kcal = 2.88 kcal

CARBO : 2x11.28gx4 kcal= 90.24 kcal

TOTAL ENERGY : 112.16 kcal

CUCUMBER SALAD (1 Serving)

PROTEIN: 0.50gx4 kcal= 2.00 kcal

FAT: 0.10gx9 kcal = 0.90 kcal

CARBO : 6.40gx4 kcal= 25.60 kcal

TOTAL ENERGY : 28.50 kcal



ENERGY FROM BREAKFAST

TUNA COOKED IN COCONUT MILK (1 Serving)

PROTEIN: 8.12gx4 kcal = 32.48 kcal

FAT: 1.81gx9 kcal = 16.29 kcal

CARBO : 3.15g x4 kcal = 12.6 kcal

TOTAL ENERGY : 61.37 kcal



**TOTAL ENERGY :
462.54 kcal**

HARD BOIL EGG (1 Serving)

PROTEIN: 2.81gx4 kcal = 11.24 kcal

FAT: 2.06g x9 kcal = 18.54 kcal

CARBO : 0.09gx4 kcal = 0.36 kcal

TOTAL ENERGY : 30.14 kcal

NASI DAGANG (1 Serving)

PROTEIN: 1.86gx4 kcal = 7.44 kcal

FAT: 1.08gx9 kcal = 9.72 kcal

CARBO : 21.83g x4 kcal = 87.32 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)



LUNCH



ENERGY FROM LUNCH

MIX VEGE SOUP (1 Serving)

PROTEIN: 9.1gx4 kcal = 36.4 kcal

FAT: 1.8x9 kcal = 16.2 kcal

CARBO : 37gx 4 kcal = 148.00 kcal

TOTAL ENERGY : 200.6 kcal

TROPICAL FRUIT SALAD (1 Serving)

PROTEIN: 2.2gx4 kcal = 8.8kcal

FAT: 1.6gx9 kcal = 14.4 kcal

CARBO : 36.7gx4 kcal = 146.8 kcal

TOTAL ENERGY : 170.0 kcal

WATER (1 Serving)

PROTEIN: 0.0gx4 kcal = 0.0 kcal

FAT: 0.0g x9 kcal = 0.0 kcal

CARBO : 0.0gx4 kcal = 0.0 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 CHOCOLATE (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