



# ADOLESCENCE PERIOD OF STORM and STRESS

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**The period of transition from childhood to adulthood is called Adolescence.**

**Period of rapid growth after infancy.**

**It usually lies between 13 - 19 years.**

- *Adolescence is a crucial period in a woman's life.*
- *Health and nutritional status during this phase is critical for the physical maturity, which in turn influences the health of the offspring.*
- *It is seen that the rate of low birth weight, prematurity and neonatal and infant mortality is high among children born to malnourished adolescent girls.*

✓ **Adolescents** constitute 21.2 per cent of the total population of India, where malnutrition is an important public health problem among children and adolescents.

✓ Adequacy of dietary intake in terms of calorie and protein are important in order to improve the chances of child survival and safe motherhood.

A composite image featuring a couple in a romantic embrace, kissing, set against a city skyline. A large, stylized dinosaur head, resembling a T-Rex, is superimposed on the left side of the image, with its head and neck framing the couple. The dinosaur's skin is textured with green and yellow scales. The background shows a clear blue sky with white clouds and modern city buildings.

# PHYSIOLOGICAL CHANGES

❖ **Nutritional needs high, emotional, intellectual and social changes in peculiar way**

❖ **Rate of growth increases. For girls 8-13, boys 10-15**

❖ **Sexual development starts.**

❖ **Boys gain more muscular tissues than girls.**



# PSYCHOLOGICAL CHANGES

**PSYCHOLOGICAL  
CHANGES**

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graph LR; A((PSYCHOLOGICAL CHANGES)) --> B[Can do anything to look better or improve appearance and performance is important for them.]; A --> C[They like to spend more time with friends as compared to family and peer opinions become most significant.];
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The diagram features a central blue oval labeled 'PSYCHOLOGICAL CHANGES'. Two yellow arrows originate from the right side of this oval. One arrow points to a yellow rounded rectangle containing the text 'Can do anything to look better or improve appearance and performance is important for them.' The other arrow points to a purple rounded rectangle containing the text 'They like to spend more time with friends as compared to family and peer opinions become most significant.' The background is dark blue with a grid of lighter blue squares, some of which contain binary code (0s and 1s).

Can do anything to look better or improve appearance and performance is important for them.

They like to spend more time with friends as compared to family and peer opinions become most significant.

# EATING PATTERNS..

Skip lunch more often than breakfast.

Derive their energy from snacks.

In nutrition boys are better than girls.

Girls may restrict food intake and this causes thinness.



*Girls label many foods as fattening. Comparatively better economic status girls, the intake fell short of requirement, which could be attributed to the concern for maintaining a slim look.*

*Consuming large quantities of soft drinks and salty kit- bits which reduce appetite are common.*

*Some teenagers begin to obtain a significant portion of their total calories in the form of alcohol.*





# ENERGY NEEDS:

**Both boys and girls have different energy needs.**

**It depends on the level of physical activity performed by them.**



# ENERGY NEEDS:



- Boys need more energy as compared to girls.
- Boys need 2500-2600cal/day

# ENERGY NEEDS:

Girls  
need  
**2060cal/  
day.**





# **ENERGY NEEDS: PROTEIN**



**12-14% of calories should be from protein. It helps in meeting energy requirement.**

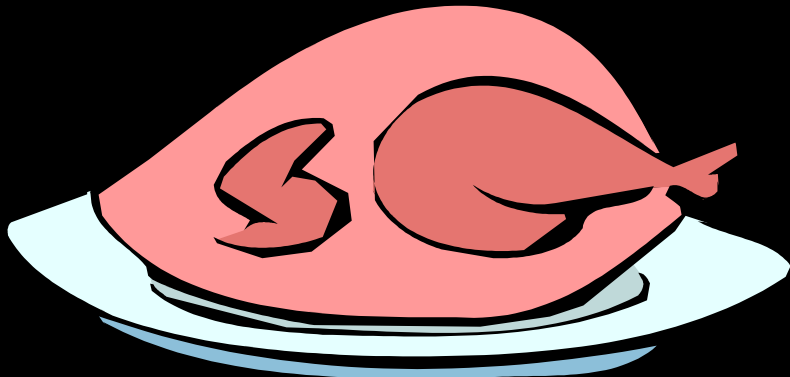
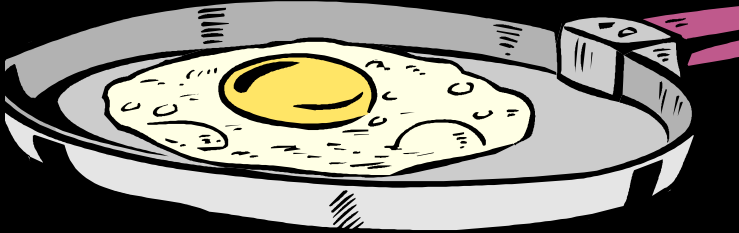
**It is needed for synthesis of new tissue or for tissue repair  
Intake should be 1gm/ kg  
body weight**



**Rich sources are milk and milk products, egg, meat organs, pulses.**



# ENERGY NEEDS: FAT



It helps in meeting energy

It is stored in body as fuel and used during fast. 15-25% should in the diet.

It is of 2 types - visible and invisible.

Visible fat is present in oil, butter, ghee etc.

# ENERGY NEEDS: CARBOHYDRATE



60-65% should be in daily menu.  
Include more fiber cereals



# ENERGY NEEDS: VITAMINS

These are essential nutrients required by the body.

They can be comprised into water soluble and fat soluble vitamins.



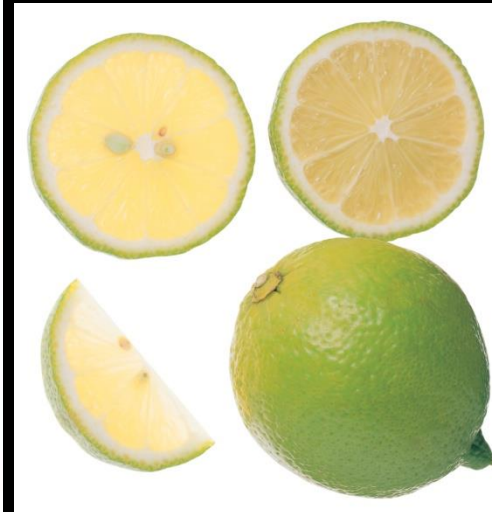
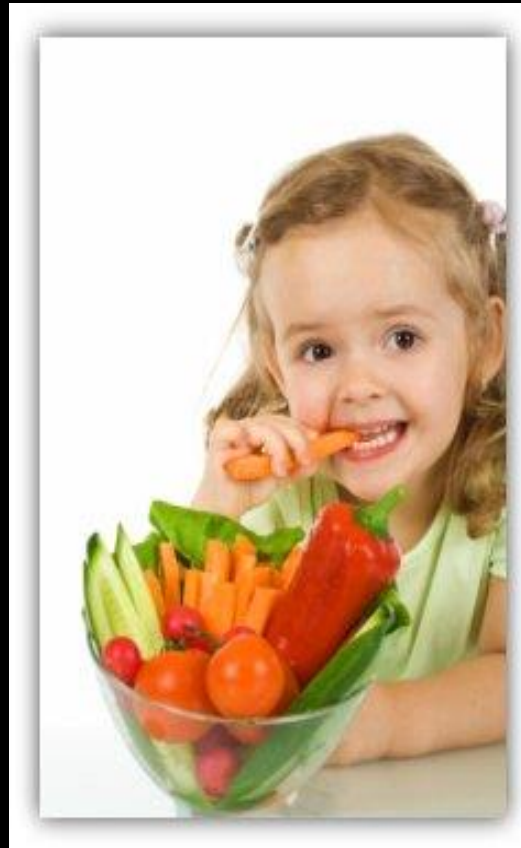
# ENERGY NEEDS: VITAMINS

## Water Soluble Vitamins- (B-Complex Vitamin, Vitamin C.)

The need increases with increase in energy requirement.

B-Complex Vitamin is present in whole cereal and pulses, fruits & vegetable.

Vitamin C is present in citrus fruits & fresh leafy vegetables





# ENERGY NEEDS: VITAMINS

## Fat Soluble Vitamin (Vitamin A,D,E,K)

Vitamin A is present in Green leafy vegetables like spinach and yellow or orange fruits like papaya, mango. It is needed for good vision.



Vitamin D, E, K also present in the above is needed for healthy bones, teeth & clotting of blood.



# ENERGY NEEDS: MINERALS

## Calcium



Calcium is a vital nutrient during high growth periods. Bone growth demands calcium. It helps in bone / skeletal formation

Rich sources are milk and milk products, green leafy vegetables, dry fruits.

Calcium Deficiency may cause osteoporosis later in their life.

# PHYSICAL ACTIVITY



**It helps in  
maintaining  
the structure  
and strength  
of bone  
throughout  
life.**

# NUTRITIONAL PROBLEMS

- Obesity
- Over eating
- Lack of exercise
- Family habit
- Emotional stress
- Hormonal imbalance



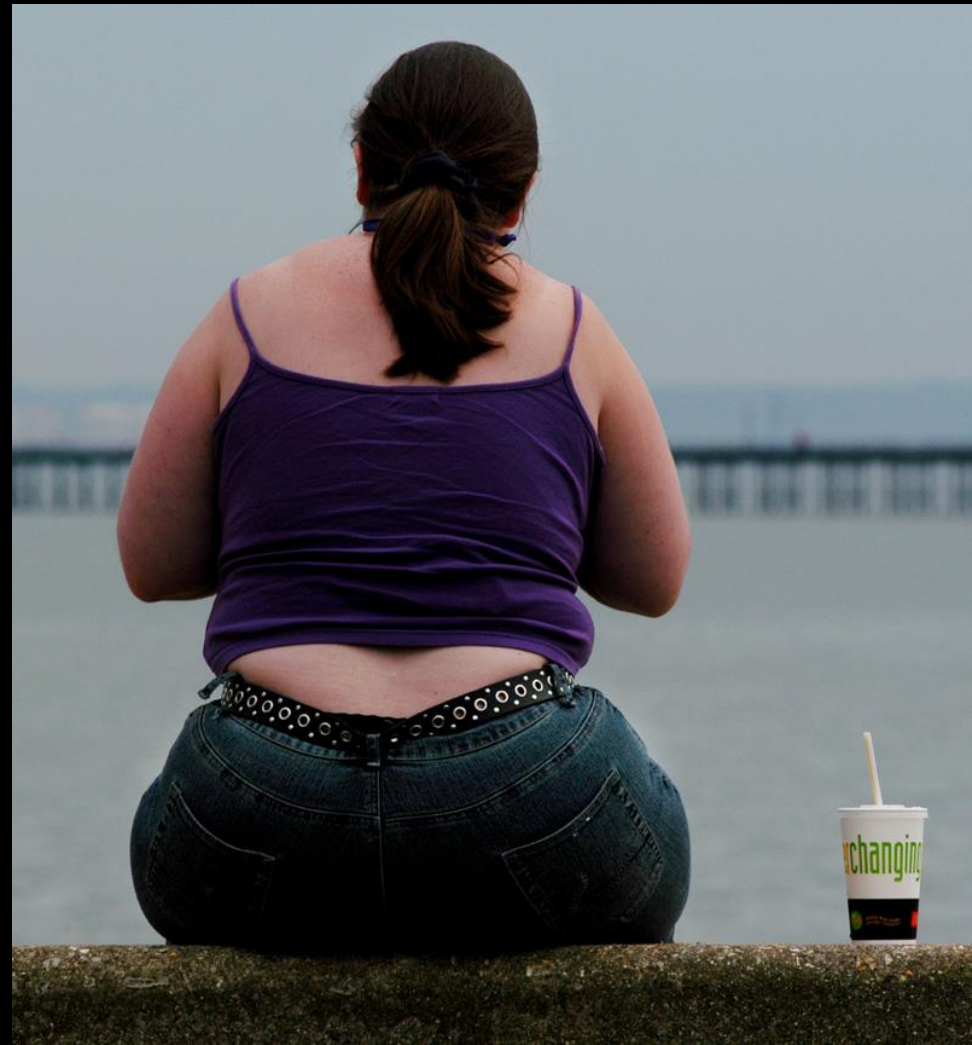


# NUTRITIONAL PROBLEMS

## 1. OBESITY

It is mainly due to lack of exercise, family habits, emotional stress and hormonal imbalance.

It may lead to high blood pressure.



# NUTRITIONAL PROBLEMS

## 2. Eating Disorders

### (a) Anorexia Nervosa

The adolescent is extremely thin but considers himself / herself as fat. They start skipping meals to loose weight. The common symptoms are nausea, vomiting and constipation.

### (b) Bulimia nervosa

First they overeat & then become guilty / worried about gaining weight. To remain thin they induce vomiting.

# NUTRITIONAL PROBLEMS

## WRONG FOOD HABITS

### 1. Irregular Meals and Snacking

Perceive themselves as too busy to worry about food, nutrition, meal planning or eating well.

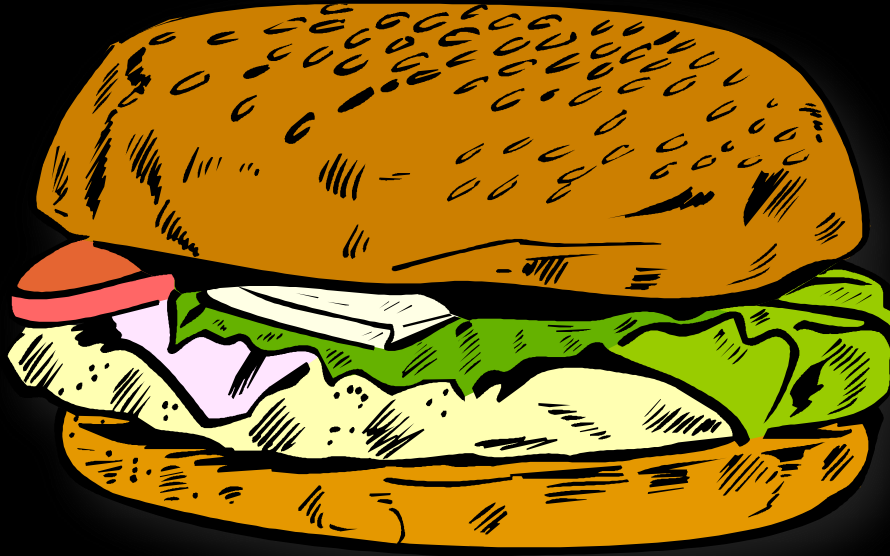
Form negative association with healthy foods and positive association with junk foods.



# NUTRITIONAL PROBLEMS

## WRONG FOOD HABITS

### 2. Fast Food and the Media



Eating fast foods is popular with busy and media influenced adolescents.

Fast foods include. Milkshakes, Burger, Junk foods and foods from vending machines, self-service restaurants, which mostly provide non-nutritious food.





# BALANCED DIET

**CARBOHYDRATE**

Vitamins

Protein

Fat

Fiber

Water

Energy

Mineral

In appropriate amount & proportion

# BALANCED DIET

IF TAKEN BALANCED MEALS REGULARLY,

Alertness  
Energetic  
Inquisitive  
Enthusiastic  
Happy Moods  
Normal Growth  
Optimistic Thinking  
More Concentration



# BALANCED DIET

IF TAKEN UNBALANCED, ERATIC MEALS FREQUENTLY,

Obesity

Delinquent

Aggressiveness

Poor Concentration

Destructive Behavior

Agitated Mood Swings

Pessimistic Criminal Tendency

Underweight Health Disorder

Hyperactive



# BALANCED DIET

## The Balance Of GOOD HEALTH





# BALANCED DIET

## FOOD HABITS

Having 3 proper meals and 2 small nutritional snack, at proper timing and with family is important.

One should include variety in food to ensure inclusion of all essential nutrients in all the meals.



# RECOMMENDED DAILY EATING GUIDE FOR ADOLESCENCE

**3-4 cups of toned / skimmed / double toned milk (i.e. Remove cream from milk) to ensure intake to protein, calcium and some vitamins.**



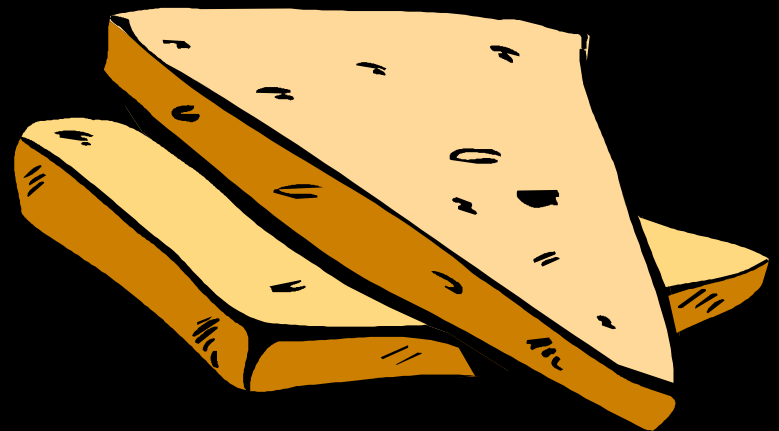
# RECOMMENDED DAILY EATING GUIDE FOR ADOLESCENCE

**5 or more servings of  
fresh frozen, dried, raw  
or cooked fruits and /or  
vegetables.  
Mostly yellow, orange or  
dark green.**



# RECOMMENDED DAILY EATING GUIDE FOR ADOLESCENCE

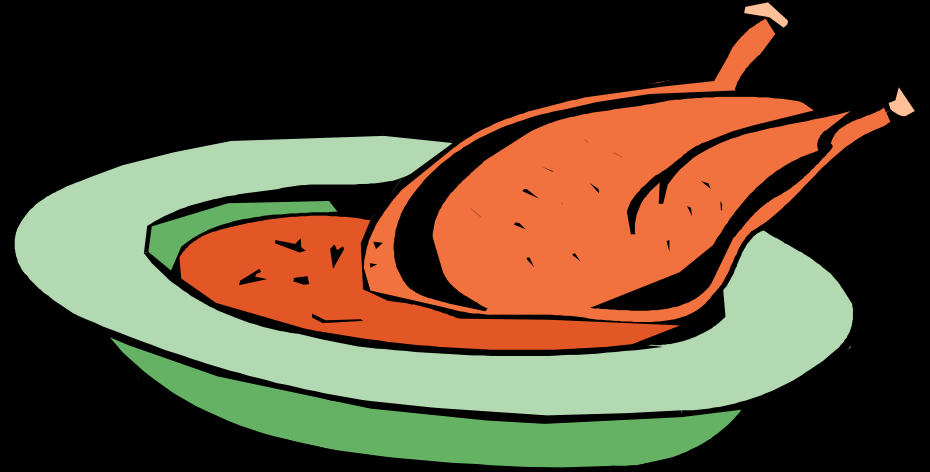
6-11 servings of grains, breads and cereals (preferably whole grains) to meet energy needs.





# RECOMMENDED DAILY EATING GUIDE FOR ADOLESCENCE

2 serving of  
pulses or lean  
meat.

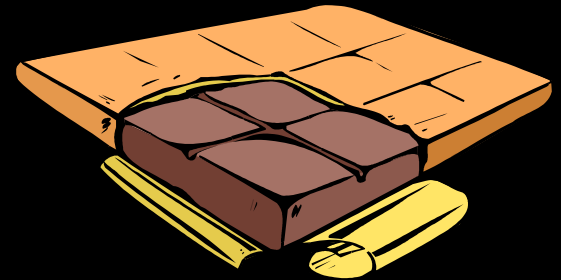


2–3 tsp (10–15  
gm) of oil, 2–3  
tsp (10–15 gm)  
of sugar.



# RECOMMENDED DAILY EATING GUIDE FOR ADOLESCENCE

**Small amount of fried food and sweet products like pakora, samosa, kachori, pastry, patty, candy, cookies or desserts.**



# DIETARY GUIDELINES

- A well balanced nutritious food should be taken to prevent obesity or under nutrition.
- Adolescent girl should take calcium rich food to increase bone density.
- Skipping of meals should be avoided. Avoid empty calorie foods.

# DIETARY GUIDELINES

Iron rich food should be included to taken to support growth spurt.

Include fruits and vegetable in diet to meet vitamins, minerals and fiber.

More homely vegetables and fruits should include in diet.

Intake lots of water, 8 to 10 glasses daily  
Table salt should be avoided.



# DIETARY GUIDELINES

Eating well balanced diet rather than watching calories especially when you are young and growing up.

Maintain adequate exercise.



# **DIETARY GUIDELINES**

**Develop good  
eating habits  
including a variety  
of healthy meals  
and keeping higher  
fatty foods to an  
occasional treat  
along with regular  
activity**

# DIETARY GUIDELINES

When you  
feel good you  
look good...  
So focus on  
health more  
than numbers



# **DIETARY GUIDELINES**



**Do not  
waist  
food**



# Typical Height and Weight Charts cm - kg

## Height and Weights for Teen Boys

Age Range	Height	Weight
12-13 years	145-155 cm	39-45 kg
14-15 years	158-165 cm	48-57 kg
16-17 years	168-175 cm	59-68 kg
18-20 years	170-175 cm	68-73 kg



# Typical Height and Weight Charts cm - kg

Height and Weights for Teen Girls		
Age Range	Height	Weight
12-13 years	150-158 cm	43-48 kg
14-15 years	158-160 cm	48-52 kg
16-17 years	160 cm	52-55 kg
18-20 years	160 cm	57-59 kg



# The New Food Pyramid

**The New Food Pyramid is a tool to educate people to eat a more balanced diet from a greater variety of food portions without counting calories.**

**The USDA has now expanded the four food groups to six groups and expanded the number of servings to meet the calorie needs of most people.**

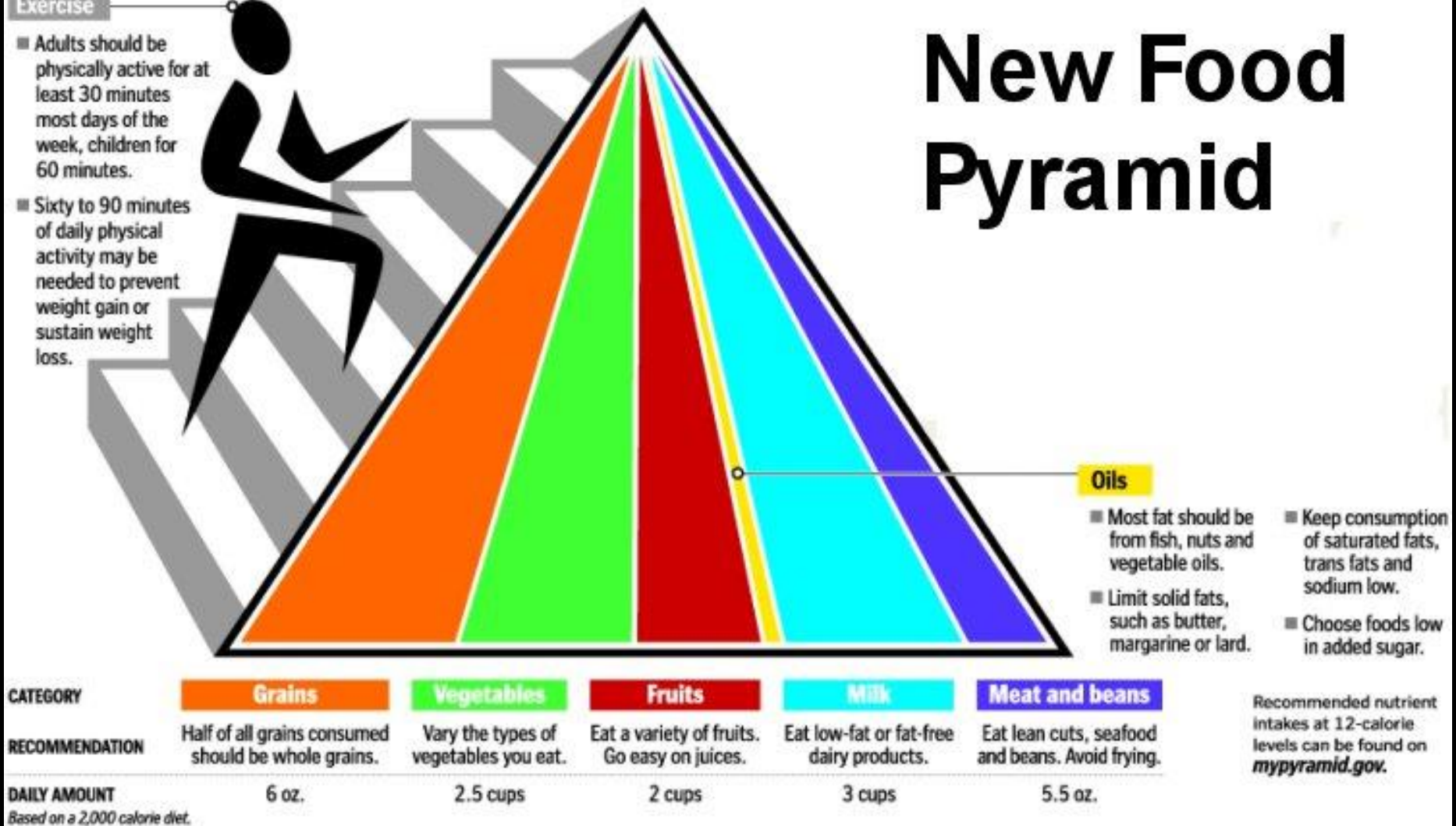
# The New Food Pyramid

## Exercise



- Adults should be physically active for at least 30 minutes most days of the week, children for 60 minutes.
- Sixty to 90 minutes of daily physical activity may be needed to prevent weight gain or sustain weight loss.

## New Food Pyramid





A person's silhouette is visible on the left side of the image, looking towards a bright sunset. The sun is low on the horizon, partially obscured by dark, silhouetted mountains. The sky is filled with soft, golden light from the setting sun, creating a warm and contemplative atmosphere. The overall scene suggests a moment of reflection or inspiration.

**If you eat wrongly  
no doctor can cure**

**If you eat rightly  
no doctor is needed**

**EAT WELL ... ENJOY LIFE**

*Thank You*  
*God Bless You*

