COVER STORY

- New study shows that why individuals put on weight as they grow older
- Lack of sleep Increases Junk food cravings
- Predicting personality with exercise

NUTRITION - IN FOCUS

- Vitamin B9 (FOLIC ACID)

DISEASE OF THE MONTH

- Osteoporosis
Obesity is an important problem that affects elderly population. Many individuals find difficulty in controlling weight as they get older. A latest study shows that why they gain weight easily as the age advances.

A study was done in Karolinska Institute at Sweden and it was published in nature medicine journal. In this study, 54 men and women were studied for a period of 13 years for change in their weight. They were assessed for amount of weight gain over a period of 13 years. The results showed that there was increase in weight. This is due to the decrease in the turnover of fat. This indicates that decrease in fat turnover is an important factor for the long-term development of overweight/obesity.

Elderly individuals need to be physically active and regular exercise. Elderly individuals are more prone to overweight and obesity because of decreased turnover of fat. Hence they need to be physically active. Regular exercise helps in decreasing the body weight.

Reference:
People with lack of sleep tend to feel hungry and eat sweet or fat foods, which causes increase in weight gain. A study was done to know the reason for increase in food cravings.

Lack of sleep causes food preferences by influencing the chemicals in the brain that regulate food intake that controls processes such as appetite. The sense of smell is also linked to eating pattern.

A study was conducted in United States of America; Researchers examined 42 individuals and were divided into 2 groups. First group individuals had normal sleep at night and other group were allowed to sleep for only 4 hours in the night. They were provided with standard breakfast, lunch and dinner, and additional snacks. Those individuals who slept for 4 hours in the night showed that there was craving for increased sugar and fat intake, after 4 weeks they were allowed to sleep normally, after which they did not have craving for increased sugar or fat intake.

Lack of sleep seems to change food preferences by influencing the levels of chemicals in the brain that regulate food intake. There is a breakdown in the communication among brain areas which receive food signals and decisions about food might change due to the change in chemical levels in brain.

Reduced sleep leads to increased food intake and weight gain. This relationship has been confirmed in studies demonstrating that sleep restriction increases the desire for foods with high in sugar and fat content.

Reference:

People with lack of sleep has increased craving for food, which is related to the changes in chemical levels in the brain. This results in increased intake of food with high sugar and fat content.
Individuals with plans to meet their exercise goals engage in more physical activity, including visits to the gym, compared to those who don't plan ahead.

A study was done to know the differences in behaviour in individuals with a plan to achieve goal (Planfulness) compared to others. 282 participants were studied over a period of 20 weeks. The participants were students, were asked to provide a written document of their plans to exercise. Patients who had clear plan in achieving goal (Planfullness) which was important for them, attended the gym regularly as compared to students who did not have clear goals in achievement.

Finally it was concluded that people who are successful with their goals, plan properly and never give up and work consistently to achieve goals.

NUTRITION- IN FOCUS
VITAMIN B9 (FOLIC ACID)

Vitamin B9 is a water-soluble B vitamin, which is important in formation of red blood cell, for healthy cell growth and function. Vitamin B9 is commonly known as Folic acid.

Source of Vitamin B9 (Folic acid)
Folic acid is naturally present in vegetables (especially dark green leafy vegetables), fruits, nuts, beans, peas, seafood, eggs, dairy products, meat and grains.

Benefits of Vitamin B9 (Folic acid)
- Decreased risk of birth defects
- Lowers risk of depression
- In the treatment of anemia (decreased oxygen carrying capacity in blood to tissues)

Signs and symptoms of Vitamin B9 (Folic acid)
Low levels of Vitamin B9 leads to Folic acid deficiency anemia. Symptoms are fatigue, lack of energy, Headaches, pale skin, not feeling hungry. In pregnant women folic acid deficiency results in birth defects.

Deficiency of Vitamin B9 (Folic acid): Reasons for folic acid deficiency is poor diet, consuming alcohol, problems with absorption of food.

Recommended Dietary intake of vitamin B9 (Folic acid)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Daily Requirement (mcg)</th>
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<tbody>
<tr>
<td>Infants 0-6 months</td>
<td>65 micrograms</td>
</tr>
<tr>
<td>Infants 7-12 months</td>
<td>80</td>
</tr>
<tr>
<td>Children 1-3 years old</td>
<td>150</td>
</tr>
<tr>
<td>Children 4-13 years old</td>
<td>300</td>
</tr>
<tr>
<td>Children over 14 and adults</td>
<td>400</td>
</tr>
<tr>
<td>Pregnant women and women who are trying to conceive</td>
<td>600</td>
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</tbody>
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DISEASE OF THE MONTH

UNDERSTANDING OSTEOPOROSIS

What is Osteoporosis?
Osteoporosis is a progressive bone disease that weakens the bones and increases the risk of fractures. It is a “silent disease,” because bone loss occurs without symptoms.

Risk Factors
- Women and post-menopausal women
- Men with significant smoking history
- Family history
- Inactive lifestyle
- Getting older
- Low testosterone levels (men)
- Alcohol
- Smoking
- Thin and/or small frame
- Calcium and vitamin D deficiency
- Corticosteroids and anti-seizure medications
- Medical conditions that weaken calcium absorption

Diagnosis
Bone densitometry (DEXA) X-ray:
- Detects osteoporosis before a fracture occurs
- Predicts chances of fracturing in the future
- Determines rate of bone loss
- Monitors the effects of treatment

Treatment
Follow your doctor’s recommendations.
- Take calcium and vitamin D supplements.
- Eat dairy and dark leafy and green vegetables.
- Take prescribed medications.

Prevention
- Walk or jog regularly.
- Eat dairy products and dark leafy and green vegetables daily.
- Limit alcohol intake.
- Stop smoking.
- Take calcium and vitamin D supplements.
JUST FOR FUN

Dimag Ki Batti Jalao

1. What leads to craving of junk food?
2. Disease which increases risk of fracture -------------------?
3. First two letters of my name denote to a male, the first three denotes to a female, the first four to a great man and the whole word is a great woman. What is my name?