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IMPORTANT INFORMATION

You must be aware that CBSE has announced syllabus for academic year 2017-18 on 31st March, 2017. Changes are shown in a comparative chart below and the complete syllabus is shown in the following:

PHYSICAL EDUCATION – XII CURRICULUM 2016-17 CHANGES AND DELETIONS	
<ol style="list-style-type: none"> Unit II: Adventure Sports and Leadership Training Unit III: Sports and Nutrition <ul style="list-style-type: none"> Eating Disorders–Anorexia Nervosa and Bulimia. Unit IV: Posture <ul style="list-style-type: none"> Effects of Diet on Performance Unit V: Children and Sports <ul style="list-style-type: none"> Factors affecting Motor Development Physical and Physiological Benefits of Exercise on Children Unit VI: Women and Sports <ul style="list-style-type: none"> Ideology Unit VII: Test and Measurement in Sports <ul style="list-style-type: none"> Measurement of Flexibility–Sit and Reach Test Unit IX: Sports Medicine <ul style="list-style-type: none"> Impact of Surface and Environment on Athletes Unit X: Biomechanics and Sports <ul style="list-style-type: none"> Mechanical Analysis of Walking and Running. 	<ul style="list-style-type: none"> Asthma: Procedure, Benefits and contraindications for Sukhasana, Cha Gomukhasana, Parvatasana, Bhujangha Paschimotanasana, Matsyasana Hypertension: Tadasana, Vajrasana, Pawanmuktasana, Ardha Cha Bhujangasana, Shavasana Back Pain: Tadasana, Ardhamatsyendra Vekrasana, Shalabhasana, Bhujangasana
<p>PHYSICAL EDUCATION – XII CURRICULUM 2017-18 CHANGES AND NEW TOPICS</p> <ol style="list-style-type: none"> Unit II: Sports and Nutrition <ul style="list-style-type: none"> Food supplement for children Unit III: Yoga and Life Style <ul style="list-style-type: none"> Asanas as preventive measures Obesity: Procedure, Benefits and contraindications for Vajrasana, Pada Hastasana, Tikonasana, Ardhamatsyendrasana Diabetes: Procedure, Benefits and contraindications for Bhujangasana, Paschimotanasana, Pawanmuktasana, Ardha matsyendrasana Unit V: Children and Sports <ul style="list-style-type: none"> Motor Development and Factors Affecting Growth and Development Exercise Guidelines at Different Stages of Growth and Development Advantages and Disadvantages of Training Unit V: Children and Sports <ul style="list-style-type: none"> Concept and Advantages of Correct Posture Causes of Bad Posture Common Postural Deformities– Knock Flat Foot, Round Shoulders, Lordosis, Kyphosis, Bow-Legs and Scoliosis Corrective Measures for Postural Deformities Unit VI: Women and Sports <ul style="list-style-type: none"> Female Athletes Triad (Eating Disorder, Amenorrhea, Osteoporosis) Unit VII: Test and Measurement in Sports <ul style="list-style-type: none"> Computation of Fat Percentage 	<ol style="list-style-type: none"> Unit IV: Physical Education and Sports Differently-abled <ul style="list-style-type: none"> Concept of Disability and Disorder Types of Disability, its Causes and (Cognitive Disability, Intellectual Disability, Physical Disability) Types of Disorder, its Cause and (ADHD, SPD, ASD, ODD, OCD) Disability Etiquettes Advantages of Physical Activities for Differently-abled Strategies to make Physical Activities Accessible for Children with Special Needs Unit V: Children and Sports <ul style="list-style-type: none"> Motor Development and Factors Affecting Growth and Development Exercise Guidelines at Different Stages of Growth and Development Advantages and Disadvantages of Training Unit V: Children and Sports <ul style="list-style-type: none"> Concept and Advantages of Correct Posture Causes of Bad Posture Common Postural Deformities– Knock Flat Foot, Round Shoulders, Lordosis, Kyphosis, Bow-Legs and Scoliosis Corrective Measures for Postural Deformities Unit VI: Women and Sports <ul style="list-style-type: none"> Female Athletes Triad (Eating Disorder, Amenorrhea, Osteoporosis) Unit VII: Test and Measurement in Sports <ul style="list-style-type: none"> Computation of Fat Percentage

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THEORY

Max. Marks

<ul style="list-style-type: none"> • General Motor Fitness-Barrow three-item general motor ability (Standing Broad Jump, Zig-Zag Run, Medicine Ball Put-For Boys: 03 Kg & For Girls:01 Kg) • Computation of Fitness Index: Duration of the Exercise in Seconds x 100 • 5.5 x Pulse count of 1-1.5 Min after Exercise <p>7. Unit IX: Sports Medicine</p> <ul style="list-style-type: none"> • First Aid-Aims & Objectives <p>8. Unit X: Kinesiology, Biomechanics and Sports</p> <ul style="list-style-type: none"> • Newton's Laws of Motion and their Application in Sports • Aerodynamics Principles 	<ul style="list-style-type: none"> • Introduction to Axes and Planes • Types of Movements (Flexion, Extension, Abduction & Adduction) • Major Muscles Involved in Running, Jumping and Throwing. <p>9. Unit XI: Psychology and Sports</p> <ul style="list-style-type: none"> • Sheldon and Jung's Classification and Big Five Theory. • Meaning, Concept and Types of Aggressions in Sports <p>10. Unit XII: Training in Sports</p> <ul style="list-style-type: none"> • Circuit Training and High Altitude Training: Introduction and its Impact
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Unit-I : Planning in Sports

- Meaning and Objectives of Planning
- Various Committees and its Responsibilities (pre, during and post)
- Tournament – Knock-Out, League Or Round Robin and Combination
- Procedure to Draw Fixtures – Knock-Out (Bye and Seeding) and League (Staircase Cycle)
- Intramural and Extramural – Meaning, Objectives and its Significance
- Specific Sports Programme (Sports Day, Health Run, Run for Fun, Run for Specific Cause and Run for Unity)

Unit-II : Sports and Nutrition

- Balanced Diet and Nutrition: Macro and Micro Nutrients
- Nutritive and Non-Nutritive Components of Diet
- Eating for Weight Control – A Healthy Weight, The Pitfalls of Dieting, Food Intolerance
- Food Myths
- Sports Nutrition and its Effect on Performance (Fluid and Meal Intake, Pre, During and Post Competition)
- Food Supplement for Children

Unit-III : Yoga and Lifestyle

- Asanas as Preventive Measures
- Obesity: Procedure, Benefits and Contraindications for Vajrasana, Pada Hasta Trikonasana, Ardh Matsyendrasana
- Diabetes: Procedure, Benefits and Contraindications for Bhujangasana, Paschimottasana Pawanuktasana, Ardh Matsyendrasana
- Asthma: Procedure, Benefits and Contraindications for Suktasana, Chakra Gomukhasana, Parvatasana, Bhujangasana, Paschimottasana, Matsyasana
- Hypertension: Tadasana, Vajrasana, Pawanuktasana, Ardh Chakrasana, Bhujangasana Shavasana
- Back Pain: Tadasana, Ardh Matsyendrasana, Vakrasana, Shalabhasana, Bhujangasana

Unit-IV : Physical Education and Sports for Differently-Abled

- Concept of Disability and Disorder
- Types of Disability, its Causes and Nature (Cognitive Disability, Intellectual Disability Physical Disability)
- Types of Disorder, its Cause and Nature (ADHD, SPD, ASD, ODD, OCD)
- Disability Etiquettes
- Advantage of Physical Activities for Children with Special Needs
- Strategies to Make Physical Activities accessible for Children with Special Need.

Unit-V : Children and Sports

- Motor Development and Factors Affecting it
- Exercise Guidelines at Different Stages of Growth and Development
- Advantages and Disadvantages of Weight Training
- Concept and Advantages of Correct Posture
- Causes of Bad Posture

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- Common Postural Deformities - Knock Knee; Flat Foot; Round Shoulders; Lordosis, Kyphosis, Bow Legs and Scolioses
- Corrective Measures for Postural Deformities

Unit-VI : Women and Sports

- Sports Participation of Women in India
- Special Consideration (Menarche and Menstrual Dysfunction)
- Female Athletes Triad (Osteoporosis, Amenorrhoea, Eating Disorders)
- Psychological Aspects of Women Athlete
- Sociological Aspects of Sports Participation

Unit-VII : Test and Measurement in Sports

- Computation of Fat Percentage -
Slaughter - Lohman Children Skinfold Formula:
Triceps and Calf Skinfold (Male 6 to 17 yrs - % body fat = $(0.735 \times \text{sum of skinfold}) + 1.0$
(Female 6 to 17 yrs - % body fat = $(0.610 \times \text{sum of skinfold}) + 5.0$)
- Measurement of Muscular Strength - Kraus Weber Test
- Motor Fitness Test - AAHPER
- General Motor Fitness - Barrow three-item general motor ability (Standing Broad Jump, Zig-Zag Run, Medicine Ball Put - For Boys: 03 Kg and For Girls: 01 Kg)
- Measurement of Cardio Vascular Fitness - Harvard Step Test/Rockport Test
- Computation of Fitness Index: Duration of the Exercise in Seconds $\times 100$
5.5 \times Pulse count of 1-1.5 Min after Exercise
- Rikli and Jones-Senior Citizen Fitness Test
- 1. Chair Stand Test for Lower Body Strength
- 2. Arm Curl Test for Upper Body Strength
- 3. Chair Sit and Reach Test for Lower Body Flexibility
- 4. Back Scratch Test for Upper Body Flexibility
- 5. Eight Foot Up and Go Test for Agility
- 6. Six Minute Walk Test for Aerobic Endurance

Unit-VIII : Physiology and Sports

- Gender Differences in Physical and Physiological Parameters.
- Physiological Factor Determining Component of Physical Fitness
- Effect of Exercise on Cardio Vascular System
- Effect of Exercise on Respiratory System
- Effect of Exercise on Muscular System
- Physiological Changes due to Ageing
- Role of Physical Activity Maintaining Functional Fitness in Aged Population

Unit-IX : Sports Medicine

- Concept, Aims and Scope of Sports Medicine
- Sports injuries: Classification, Causes and Prevention
- First Aid - Aims and Objectives
- Management of Injuries:
Soft Tissue Injuries: (Abrasion, Contusion, Laceration, Incision, Sprain and Strain)
Bone and Joint Injuries: (Dislocation, Fractures: Stress Fracture, Green Stick, Comminuted, Transverse Oblique and Impacted)

Unit-X : Kinesiology, Biomechanics and Sports

- Projectile and Factors Affecting Projectile Trajectory
- Newton's Laws of Motion and their Application in Sports
- Aerodynamics Principles

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- Friction and Sports
- Introduction to Axes and Planes
- Types of Movements (Flexion, Extension, Abduction and Adduction)
- Major Muscles involved in Running, Jumping and Throwing

Unit-XI : Psychology and Sports

- Understanding Stress and Coping Strategies (Problem Focused and Emotional Focused)
- Personality, its Definition and Types - Trait and Type (Sheldon and Jung's Classification and Big Five Theory)
- Motivation, its Type and Techniques
- Self-esteem and Body Image
- Psychological Benefits of Exercise
- Meaning, Concept and Types of Aggressions in Sports

Unit-XII : Training in Sports

- Strength - Definition, Types and Methods of Improving Strength - Isometric, Isokinetic
- Endurance - Definition, Types and Methods to Develop Endurance - Continuous Training, Interval Training and Fartlek Training
- Speed - Definition, Types and Methods to Develop Speed - Acceleration Run and Plyometric Training
- Flexibility - Definition, Types and Methods to Improve Flexibility
- Coordinative Abilities - Definition and Types
- Circuit Training and High Altitude Training: Introduction and its Impact

PRACTICAL

01. Physical Fitness - AAHPER
02. Skills of any one Team Game of choice from the given list*
03. Viva
04. Record File**

Max. Marks

-10 N

-10 N

-05 N

-05 N

* Athletics, Basketball, Football, Handball, Hockey, Kho Kho, Rifle Shooting, U-18 Basketball (Differently-abled Children) and Volleyball

** Record File shall include:

Practical-1 : Modified AAHPER administration for all items.

Practical-2 : Conduct Barrow 3 Item Test on 10 students.

Practical-3 : Procedure for Asanas, Benefits and Contra-indication for any two Asanas and lifestyle disease.

Practical-4 : Procedure for administering Senior Citizen Fitness Test for 5 elderly fitness members.

Practical-5 : Any one game of your choice out of the list above. Labelled diagram of rules and equipment Rules, Terminologies and Skills).

Note:

1. It is suggested that Unit No. III and VII may be taught by following the Principle of Learning by Doing.
2. Content is designed to complete the syllabus between 120-140 period.

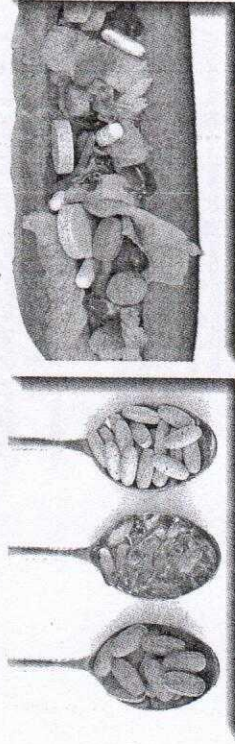
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2 Sports and Nutrition

Read this new topic after Article 3.6 on page 89 of the main book.

• FOOD SUPPLEMENT FOR CHILDREN

Nowadays most of the parents remain under stress and tension thinking about their children's unhealthy lifestyle. We are well aware of the fact that fast foods have become the favourite foods of majority of the children. On the other hand, highly nutritious foods rarely find place in the list of favourite foods of children. This trend may lead to the growth and development problems. The main reason being lack of proper nutrition. Parents have found a solution to this problem in the form of food supplements. So, it is essential for all of us to know about food supplements.



Food Supplements

Meaning of Food Supplement: Food supplement means a nutrient that is added to your diet to nourish your body as you are not taking this nutrient in adequate amounts in your regular diet. Food supplements generally include vitamins, minerals, fibre, fatty acids or amino acids, among other substances. These supplements may be in the form of a tablet or powder which can be added to water or milk for consumption.

Need of Food Supplements for Children: There is no doubt about the fact that food supplements play a vital role in proper growth and development of children. Though, it is not essential to consume food supplements but then this becomes necessary when there is a lack of adequate nutritious diet. In fact, it can be said that food supplements are unnecessary if a child takes a balanced diet regularly. Moreover, there are various food supplements which have no practical effect. For example, food supplement like omega-3 fatty acid has been shown to be of no benefit for healthy children. It means that if a child

takes a balanced or nutritious diet regularly, there will not be any extra benefit for him/her in taking a food supplement. Even some food supplements may prove to be harmful. A research study indicates that individuals who consumed vitamin E supplement had a higher risk of prostate cancer than individuals who did not consume vitamin E. Similarly, calcium supplement too has been found to put individuals at a greater risk of heart attacks. In addition, food supplements may not contain all the nutrients that a child needs.

Precautions While Taking Food Supplements

For good growth and development in children, there are a wide range of food supplements. The markets are flooded with various types of food supplements for children. These supplements provide essential nutrients that the body requires. These food supplements may act as a boon to children who are not taking balanced or healthy diet. However, before taking such food supplements, you should take the following precautions:

1. First, ensure that there is a lack of essential nutrient in a child's diet. Consult a doctor whether the child needs to take food supplements or not.
2. Before buying a supplement, ensure that it is free from preservatives, and contains no fillers or any added sugar.
3. Food supplements may be harmful if they are taken in excessive dosage, especially the minerals and fat-soluble vitamins which can get accumulated in the body. Some of the food supplements may cause harm due to their rapid absorption in the blood stream.
4. Don't pay heed to the words of salesmen or advertisements which claim that these supplements will improve the functioning of a child's brain.

After taking the previously mentioned precautions into consideration, food supplements may be taken by children for their proper growth and development. In fact, the secret of healthy children is healthy or balanced diet and exercise and not food supplements. Children who develop healthy eating habits in childhood are more likely to continue these habits throughout their life. So, it is better to encourage children to eat healthy food instead of taking food supplements. They should eat healthy and nutritious foods. If they eat such food, they will not require any food supplements. It should be kept in mind that food supplements cannot take the place of healthy as well as nutritious food.

Exercises

Very Short Answer Question Carrying 1 Mark (20 to 30 words)

1. What do you mean by food supplement?

Short Answer Questions Carrying 3 Marks (80 to 90 words)

2. Elucidate the need of food supplements for children.
3. Discuss the precautions for taking food supplements.

Long Answer Questions Carrying 5 Marks (150 to 200 words)

4. What do you mean by food supplement? Describe the precautions for taking food supplements.

3

Yoga and Lifestyle

Read this as new chapter.

Indeed, it is an astonishing fact that a yogic tradition which is more than five thousand years old has recently become a very popular way of life. Presently, people consider yoga is a significant means to achieve a healthy as well as a positive lifestyle. In fact, the power of yoga lies in its simplicity, flexibility and diversity. As a matter of fact, yoga is improving our flexibility, lowers our stress level and increases our confidence and contributes to a healthier lifestyle on the whole. There are various lifestyle diseases such as obesity, diabetes, asthma, hypertension, back pain, migraine and depression which are prevented and treated up to some extent with the help of certain yogic practices.

3.1 ASANAS AS PREVENTIVE MEASURES

According to Patanjali, *asana* means, "*sthiram sukham asanam*" i.e., "that position is comfortable and steady". In Brahmanopanishad, "To sit in a comfortable posture or posture for everlasting period is called asana". Asana is that state of the body which the body may be positioned easily. As a matter of fact, the ability to sit comfortably for an extended period of time in any position is called asana. In asanas, body is in various positions in such a way that the activities of organs and glands of body become more efficient and eventually the health of mind and body is improved.

In fact, asana is such a means through which physical and mental development is achieved. Prevention of diseases and delay in ageing are the desired effects that can be achieved through yogic practices.

There are different types of asanas such as meditative asanas, relaxative asanas, corrective asanas to name a few. Regular practice of the above-mentioned asanas significantly affects various systems or organs of our body. Asanas can be used as preventive measures because they provide the following physiological benefits, which ultimately help us in avoiding various lifestyle diseases such as diabetes, obesity and cardiovascular diseases.

Benefits of Asanas for Prevention of Diseases

(a) **Bones and Joints Become Strong:** As a result of performing asanas regularly, bones, cartilages and ligaments become strong. Along with this, the height of children is enhanced. The joints are able to bear more pressure. Asanas also enhance the flexibility.

of joints. The flexibility of spine is also enhanced. Postural deformities can also be prevented and corrected. Arthritis is also cured by performing asanas. Due to spinal injuries, problems like back pain, sciatica and cervical pain develop. These problems are greatly controlled by performing asanas.

Muscles Become Strong: By performing asanas regularly, muscles of the body become strong. The efficiency of muscles increases. Fat does not accumulate in the body. In fact, the appearance of the body enhances. The size of muscles also increases.

Circulation of Blood Becomes Normal: As a result of practising asanas regularly, the stroke volume as well as cardiac output increase because cardiac muscles start working more strongly and efficiently. Blood circulation becomes proper and blood pressure normalises and stabilises. The level of blood cholesterol reduces. By performing asanas, the lactic acid and acid phosphate are excreted from muscles quickly and easily which reduces fatigue.

Respiratory Organs Become Efficient: By doing asanas regularly, the respiratory organs become efficient. The vital air capacity increases up to 6000 cc. The size of the lungs and chest also enhances. As a result of doing asanas, the will power becomes firm. Various diseases such as cough, asthma and cancer of trachea can be prevented.

Efficiency of Digestive System Increases: By performing asanas regularly, all the organs of digestive system of our body begin to work effectively. The absorption of food becomes efficient. The storage of bile in gall bladder in concentrated form is enhanced. Appetite also increases. Stomach and intestines also strengthen. Constipation, indigestion and gas trouble reduce.

Nervous System Strengthens: As a result of regular practise of asanas, our nervous system strengthens. The working efficiency of synapse enhances. The neuro-muscular coordination increases. Activities of our body will be done expending less energy. The secretion of adrenalin remains good. The secretion of adrenalin depends on sympathetic nervous system. The reaction time also reduces. Mental power also improves. Memory improves and feeling of disappointment reduces. Regular practise of asanas reduces anxiety and stress. It also reduces sleep disturbances.

Glandular Activity is Stimulated and Regulated Properly: By doing asanas regularly, the glandular activity is stimulated and regulated properly. Glands start producing hormones in sufficient quantity which are collected and kept so that they may be utilised at the time of dire need. The demand of insulin reduces. Indeed, regular practise of asanas improve diabetes management. Asanas help in maintaining a balanced development of our body.

Efficiency of Excretory System Enhances: Regular practise of asanas enhances the efficiency of all the excretory organs. As a result, the waste products such as lactic acid, acid phosphate, urea, uric acid, sulphates, etc., are excreted quickly and properly which in turn help in delaying fatigue.

Immune System is Strengthened: By carrying out regular practise of asanas, our immune system is strengthened. We, as a result, become less prone to various communicable diseases.

In conclusion, it can be said that regular practise of asanas is helpful in preventing various disease, especially the ones that are related to our lifestyle.

3.2 OBESITY: PROCEDURE, BENEFITS AND CONTRAINDICATIONS FOR VAJRASANA, PADA HASTASANA, TRIKONASANA, ARDHMAITSYENDRASANA

Meaning of Obesity

Nowadays, obesity has become an enormous as well as a fatal health problem. This problem is not only seen in India but is prevalent in the other countries also. Even in the United States of America, one out of three adults and one out of five children and teenagers are facing the problem of obesity. In India, we witness a similar situation. Most of the people, since childhood, fall prey to obesity in most of the countries of the world. In fact, "Obesity is that condition of the body in which the amount of fat increases to extreme levels." In other words, obesity can be defined as "the condition when an individual weighs 20 per cent more than the ideal weight." An adult with a BMI more than or equal to 30 than the ideal BMI is usually considered to be obese. In the case of obesity, the body weight of the individual is always more in comparison to height. Considering the number of health risks associated with obesity, it has been declared a disease. It has been observed that obese persons usually fall prey to diabetes, hypertension, cardiovascular diseases, cancer, arthritis, osteoarthritis, flat foot, respiratory problems, varicose veins, liver malfunction, etc.

Generally, the questions arise: What should be the ideal body weight of an individual? Who is obese and who is not? Different methods are used in various countries to know if an individual is obese. According to the first method, just by observing, it can be inferred whether he/she is obese or not. But this method cannot be considered a good method to determine if an individual is obese because the opinion about the shape of the body changes with the passage of time. For example, chubbiness used to be liked by people in yester years, whereas being slim and trim is appreciated nowadays everywhere. According to the second method, if an individual's body weight is more in proportion to his/her height (according to height and weight chart), the individual will be overweight or obese. But this method cannot be accepted as the best method. The third method is a more scientific method. In this method, the body fat percentage is calculated. If the body fat percentage of a person is more than the required levels, he/she will be considered obese. This is the most accurate method to determine obesity, but it is not easy to apply this method. In comparison to other methods, the weight and height chart is still preferred to determine obesity because it is easily available, cost-effective and easy to use. Another method to check obesity is using BMI (Body Mass Index). If you want to know your body mass index, then divide your body weight in kg by your height in metre square viz.

$$\text{Body Mass Index} = \frac{\text{Weight in kg}}{(\text{Height in m})^2} = \frac{\text{Weight in kg}}{\text{Height} \times \text{Height}}$$

The WHO Criteria for Overweight and Obesity by BMI

Category	BMI	Category	BMI
Underweight	< 18.5	Obesity Class I	30 - 34.9
Normal weight	18.5 - 24.9	Obesity Class II	35 - 39.9
Overweight	25 - 29.9	Obesity Class III	> 40

From the above table, one can know which category they belong to depending on BMI.

Prevention of Obesity

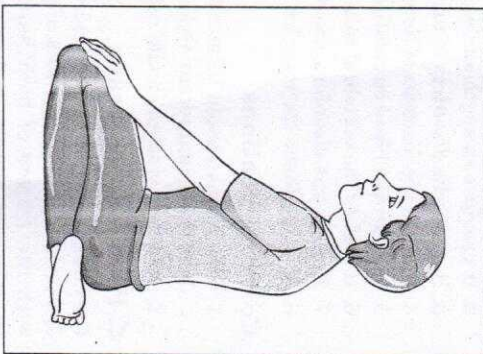
Obesity can be prevented as well as cured if the following asanas are performed regularly:

1. Vajrasana

Procedure: It is a meditative asana. Kneel down on the ground or floor with your knees, ankles and toes touching the ground. Your toes should be stretched backwards. Now place your palms of both your hands on the knees. The upper body should be straight. At this time, the breathing should be deep, even and slow. Then expand your chest and pull your abdominal portion inwards.

Benefits

1. It is helpful for concentration.
2. It is helpful in curing dysentery, back pain and chest diseases.
3. It enhances memory power.
4. It cures the problems related to menstruation.
5. It cures mental stress.
6. It strengthens the pelvic muscles.
7. It removes postural defects.
8. It prevents hernia and gives relief from piles.
9. It is the best meditation asana for people suffering from sciatica and sacral infections.
10. It helps in reducing hip fat.
11. It gives relief from constipation, acidity and increases digestive process.



Vajrasana

Contraindications

1. A person suffering from joint pain should not perform *vajrasana*.
2. The individuals who have any spinal column problem should not perform *vajrasana*.
3. The individuals who have some difficulty in movement should practise *vajrasana* with a lot of care.

2. Pada Hastasana

Procedure: Bend forward until the fingers or palms of the hands touch the floor on either side of the feet. Try to touch the knees with the forehead. Do not strain. Keep the knees straight. Exhale while bending forward. Try to contract the abdomen in the final position to expel the maximum amount of air from the lungs.

Benefits

1. Pada hastasana makes the body very flexible. It stretches the back and leg muscles.
2. It helps to eliminate excess belly fat.
3. It improves digestion and reduces constipation. It eliminates many stomach ailments.
4. It makes the spine flexible and tones the nerves.
5. It improves blood circulation.

Contraindications

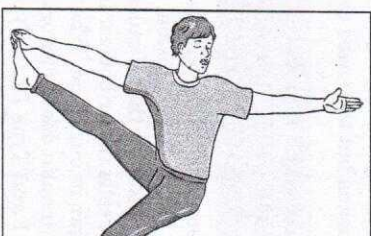
The individuals who have back pain should avoid this asana. At least, they should not bend forward fully. They can bend themselves only as far as comfortable.

3. Trikonasana

Procedure: First of all stand with your legs apart. Then raise the arms sideways up to the shoulder level. Bend the trunk sideways and raise the right hand upward. Touch the ground with left hand behind left foot. After some time, do the same asana with opposite arm in the same way.

Benefits

1. It strengthens the legs, knees, arms and chest.
2. It helps in improving digestion and stimulates all the abdominal organs.
3. It increases mental and physical equilibrium.
4. It reduces stress, anxiety, back pain and sciatica.
5. It helps in increasing height.
6. It helps in reducing obesity.
7. It enhances blood circulation.
8. It is also helpful in reducing excess fat around the waistline.



Trikonasana

Contraindications

1. If you are suffering from diarrhoea, low or high blood pressure, back injury or migraine, avoid the practice of *trikonasana*.
2. The individual having cervical spondylosis should not perform this asana.

Ardhmatseyendrasana

Procedure: The left heel is kept under the right thigh and the right leg is crossed over the left thigh. After that hold the right toe with left hand and turn your head and back to the right side. In this position move the trunk sideways. Then perform the same asana in the reverse position.

Benefits

It keeps gall bladder and the prostate gland healthy. It enhances the stretchability of back muscles. It alleviates digestive ailments.

It regulates the secretion of adrenaline and bile and thus is recommended in yogic management of diabetes.

It is also helpful in treating sinusitis, bronchitis, constipation, menstrual disorders, urinary tract disorders and cervical spondylitis.

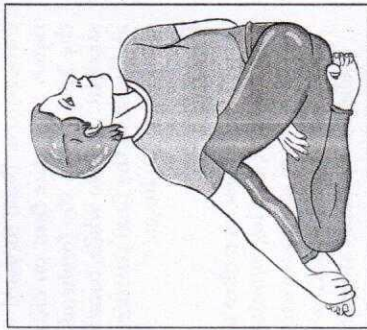
Contraindications

Women, who are two or three months pregnant should avoid practising this asana. The individuals, who suffer from peptic ulcer, hernia or hypothyroidism should practise this asana only under expert guidance.

The individuals who have the problem of sciatica or slipped disc may benefit from this asana but they need to take great care while doing this asana.

DIABETES: PROCEDURE, BENEFITS AND CONTRAINDICATIONS FOR BHUJANGASANA, PASCHIMOTTANASANA, PAWANMUKTASANA, ARDHMATSEYENDRASANA

Diabetes is really a very dangerous condition. If diabetes is not controlled, it can lead to failure, loss of vision, amputation of limbs and cardiovascular diseases. Diabetes is a disorder that it causes sugar to build up in our blood stream instead of being used by cells in our bodies. In fact, our body uses a hormone (insulin) to control the level of sugar in our blood. When our body does not produce sufficient amounts of insulin or insulin does not work properly, diabetes occurs. There are two types of diabetes—Type I and Type II. In Type I diabetes, the pancreatic gland does not produce insulin. In Type II diabetes, the pancreas does not produce sufficient amount of insulin hormone or the hormone is produced but it is not used properly by the body. There are frequent cases of Type II diabetes, whereas, the cases of Type I diabetes are rare. The feeling of tiredness, urge to urinate frequently, numbness in hands and feet, blurred vision, excessive weight gain, weight loss, unhealing wounds, etc., are common symptoms of diabetes. People with diabetes usually fall prey to diabetes.



Ardhmatseyendrasana

1. Bhujangasana

Procedure: In this asana, the shape of the body remains like a snake that is why it is called *bhujangasana*. In order to perform this asana, lie down on the belly on the ground. Keep your hands near the shoulders. Keep your legs close together. Now, straighten up your arms slowly, raise the chest. Your head should turn backwards. Keep this position for some time. Then get back to the former position. For good results, perform this asana 3 to 5 times.

Benefits

1. It alleviates obesity.
2. It provides strength and agility.
3. It cures the disorders of urinary bladder.
4. It cures the diseases of liver.
5. It improves blood circulation.
6. It makes the vertebral column flexible and thin.
7. It cures gas disorders, constipation and indigestion.
8. It strengthens the muscles of hands.

Contraindications

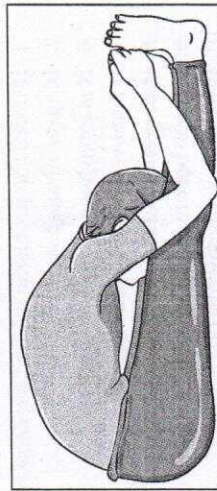
1. This asana should be avoided by individuals who suffer from hernia, back injuries, headaches and recent abdominal surgeries.
2. Pregnant women should not perform this asana.

2. Paschimottanasana

Procedure: Sit on the ground with legs forward. Then hold the toes of your feet with the fingers of both hands. Then breathe out slowly and try to touch the knees with your forehead. After that breathe in slowly, raise your head upwards and come to the prior position. Perform this asana at least 10 to 12 times.

Benefits

1. It takes care of gas trouble.
2. It prevents the early ossification of bones.
3. It is a good remedy for constipation.
4. It helps to overcome several menstrual disorders.
5. It gives relief in sciatica, backache and asthma.
6. It reduces obesity.



Paschimottanasana

7. It is helpful in treating abdominal diseases.
8. It is helpful in curing skin diseases.
9. Vertebra becomes flexible and healthy.

Contraindications

1. If you are suffering from enlarged liver or spleen or acute appendicitis, you should never do this asana.
2. Avoid practising this asana if you suffer from asthma or any respiratory diseases.
3. If you have any back or spinal problem, make sure that you perform this asana only under expert guidance.

3. Pawanmuktasana

Procedure: Lie down on your back on a plain surface. Keep your feet together and place your arms beside your body. Take a deep breath. When you exhale bring your knees towards your chest. At the same time press your thighs on your abdomen. Clasp your hands around your legs. Hold the asana when you breathe normally. Every time you inhale, ensure that you loosen the grip. Exhale and release the pose after you rock and roll from side to side about three times.

Benefits

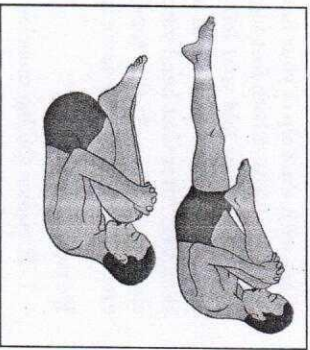
1. It eases the tension in lower back.
2. It enhances the blood circulation in pelvic area.
3. It stimulates the reproductive organs. It also helps to cure menstrual disorders.
4. It helps in reducing the fats of thighs, buttocks and abdominal area.
5. It strengthens the abdominal muscles. It also massages the intestines and organs of the digestive system which helps in releasing the gas and thus improves digestion.
6. It relieves constipation.

Contraindications

1. If you are suffering from heart problems, hyper acidity, high blood pressure, slip disc and hernia you should avoid practising this asana.
2. Pregnant women should avoid doing this asana.
3. If you have had an abdominal surgery recently you should avoid performing this asana.
4. Individuals suffering from piles should avoid this asana.

4. Ardhamatseyendrasana

Procedure: The left heel is kept under the right thigh and right leg is crossed over the left thigh. After that hold the right toe with left hand and turn your head and back to the right side. In this position move the trunk sideways. Then perform the same asana in the reverse position.



Pawanmuktasana

Benefits

1. It keeps gall bladder and the prostate gland healthy.
2. It enhances the stretchability of back muscles.
3. It alleviates digestive ailments.
4. It regulates the secretion of adrenaline and bile and thus is recommended in yogic management of diabetes.
5. It is also helpful in treating sinusitis, bronchitis, constipation, menstrual disorders, urinary tract disorders and cervical spondylitis.

Contraindications

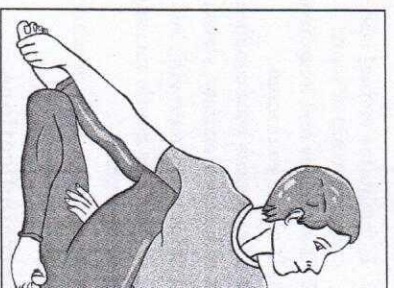
1. Women, who are two or three months pregnant should avoid practising this asana.
2. The individuals, who suffer from peptic ulcer, hernia or hypothyroidism should practise this asana only under expert guidance.
3. The individuals who have the problem of sciatica or slip disc may benefit from asana but they need to take great care while doing this asana.

3.4 ASTHMA: PROCEDURE, BENEFITS AND CONTRAINDICATIONS FOR SUKHASANA, CHAKRASANA, GOMUKHASANA, PARYATAS BHUJANGASANA, PASCHIMOTTANASANA, MATSYASANA

Asthma is a disease of lungs in which the airways become blocked or narrowed causing difficulty in breathing. In asthma, the airways also swell up and produce extra mucus usually triggers coughing, wheezing or whistling and shortness of breath. The cough usually occurs at night or early in the morning. The excessive amount of mucus in the passage further narrows the airways because it is sticky and thick. For some people, the passage is a minor nuisance, whereas for others it can be a major problem that can hinder daily activities and usually leads to a life threatening asthma attack. Asthma is a disease that it cannot be cured or treated but its symptoms can be controlled. Asthma may be allergic and non-allergic. Asthma may be due to genetic factor. There are substances that cause allergies (allergens) like irritants in the air including smoke from cigarettes, wood-fires, strong fumes, sprays, perfumes or scented soaps, etc., respiratory infections such as cold, flu, sore throat and sinus infections, exercising in cold air (exercise-induced asthma) and some medications such as beta blockers, aspirin, non-steroid anti-inflammatory drugs, etc.

1. Sukhasana

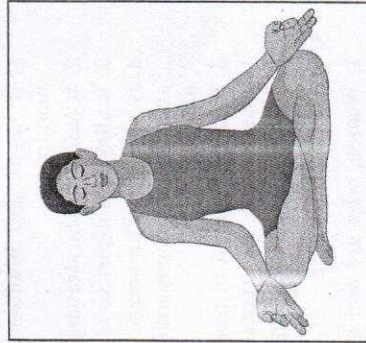
Procedure: Sit down with the legs straight in front of the body. After that bend the right leg and place the foot under the left thigh. Then bend the left leg and keep the foot under the right thigh. Place the hands on the knees. Chin should be in. Keep the head, neck and back straight, close the eyes. Relax your body.



Ardhamatseyendrasana

enefits

1. It facilitates mental and physical balance without causing strain or pain.
2. It stretches and lengthens spine.
3. It calms your mind.
4. It enhances your condition of peace.
5. It reduces anxiety, stress and mental fatigue.
6. It helps in improving body posture.
7. It provides gentle massage to knees, calf muscles and thighs.
8. It spreads a sense of calmness throughout your body and mind.



Sukhasana

Contraindications

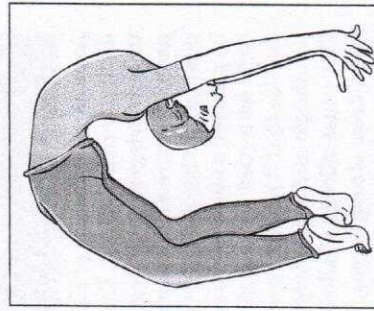
1. If your knees and hips are injured or inflamed, you should avoid practising this asana.
2. If you have a slip disc problem, you should take proper care while performing this asana.

Chakrasana

Procedure: In this asana, the figure of the body becomes a chakra, therefore, this asana is called *chakrasana*. At first, lie down on your back. Fix your hands firmly on the ground. Then raise the middle portion of your body upwards. Raise it as high as possible, so that your body is in a semi-circle position. Then keep your head downwards between your hands. In the beginning, keep this position for one minute and then after some days of practice, do it for 3 to 5 minutes.

enefits

1. It cures back pain.
2. It cures any pain in kidneys.
3. It is helpful in removing obesity.
4. It prevents the problem of hernia.
5. It stimulates pituitary and thyroid glands.
6. It cures infertility, asthma and osteoporosis.
7. It gives relief from stress and reduces depression.
8. The semi-circular position makes the dorsal side of the body to stretch making the chest to expand. Thus more fresh oxygen is made available.



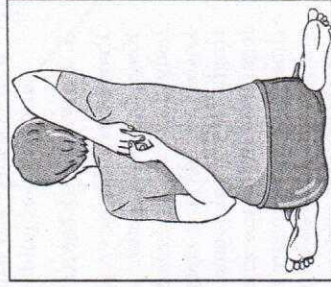
Chakrasana

Contraindications

1. If you suffer from headache or high blood pressure you should not perform this asana.
2. Don't perform this asana in case of shoulder impingement.
3. Do not perform this asana if you have tendonitis in the wrists.
4. Individuals who suffer from serious spinal column ailments such as cervical and lumbar spondylitis should avoid the practise of this asana.

3. Gomukhasana

Procedure: Sit down on the ground with legs stretched forward. Now fold the left leg at the knee and sit on the left foot. Fold the right leg and keep the right thigh on the left thigh with the help of your hands. Now lift your buttocks and bring the heels of both feet together so that they should touch each other. Now fold your left arm behind your back over the shoulder. Fold the right arm behind the back under the right shoulder. After that bend your fingers of both the hands and clasp each other. At this time your head and back should be erect. Then repeat the same in reverse position.



Gomukhasana

Benefits

1. It makes the leg muscles strong and elastic.
2. It helps in keeping the shoulder joints healthy, flexible and strong.
3. It improves the function of lungs.
4. The regular practice of this asana helps in the treatment of sciatica.
5. It improves the function of kidneys by stimulating it thus helps the individuals who suffer from diabetes.
6. It also reduces stress and anxiety.
7. It helps in treating sexual ailments.
8. It helps in staying tough and strong.

Contraindications

1. The individuals who suffer from shoulder, knee or back pain should avoid practising this asana.
2. Avoid this asana in case of any knee injury.
3. Avoid this asana in case of recent or chronic knee or hip injury or inflammation.

4. Parvatasana

Procedure: Sit in padmasana or lotus pose. Stretch your arms sideways and bring them over your head slowly. After that let your palms touch each other. Then stretch your hands well without bending your elbows. Keep your spine erect.

Benefits

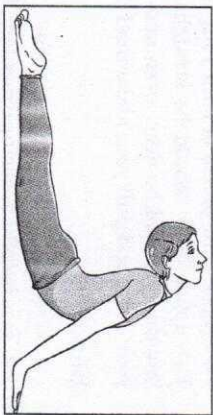
1. It helps in enhancing height.
2. It reduces the extra fat in the back and waist.
3. It tones the abdominal muscles and thus stimulates the organs of abdominal region.
4. It is extremely beneficial in case of asthma.
5. It helps in reducing back pain.
6. It improves the function of spinal cord.
7. It gives relief from tension in shoulder and back.

Contraindications

1. Avoid this asana in case of hip or back injury.
2. You should not practise this asana in case of shoulder injury.

5. Bhujangasana

Procedure: In this asana, the shape of the body remains like a snake that is why it is called *bhujangasana*. In order to perform this asana, lie down on the belly on the ground. Keep your hands near the shoulders. Keep your legs close together. Now, straighten up your arms slowly, raise the chest. Your head should be backwards. Keep this position for some time. Then come to the former position. For good results, perform this asana 3 to 5 times.



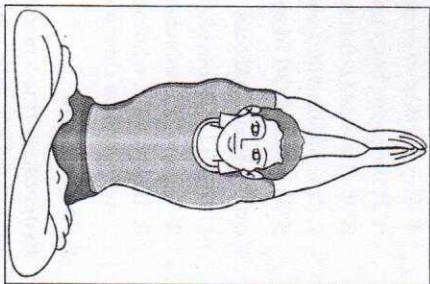
Bhujangasana

Benefits

1. It alleviates obesity.
2. It provides strength and agility.
3. It gives relief from disorders of the urinary bladder.
4. It cures the diseases of liver.
5. It improves blood circulation.
6. It makes the vertebral column flexible and thin.
7. It cures gas disorders, constipation and indigestion.
8. It strengthens the muscles of hands.

Contraindications

1. This asana should be avoided by people who suffer from hernia, back injuries, headaches and recent abdominal surgeries.
2. Pregnant women should not perform this asana.



Parvatasana

6. Paschimottanasana

Procedure: Sit on the ground with legs forward. Then hold the toes of your feet with the fingers of both hands. Then breathe out slowly and try to touch the knees with your forehead. After that breathe in slowly, raise your head upwards and come to the prior position. Perform this asana at least 10 to 12 times.

Benefits

1. It cures gas trouble.
2. It prevents the early ossification of bones.
3. It is a good remedy for constipation.
4. It helps to overcome several menstrual disorders.
5. It gives relief in sciatica, backache and asthma.
6. It reduces obesity.
7. It is helpful in all abdominal disorders.
8. It is helpful in removing skin diseases.
9. Vertebra becomes flexible and healthy.

Contraindications

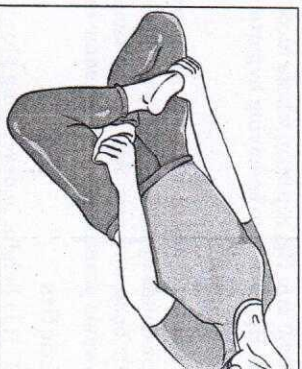
1. If you are suffering from enlarged liver or spleen or acute appendicitis, you should never do this asana.
2. Avoid practising this asana if you suffer from asthma or any respiratory disease.
3. If you have any back or spinal problem, make sure that you perform this asana under expert guidance.

7. Matsyasana

Procedure: For performing this asana, sit in padmasana. Then lie down in supine position and make an arch behind. Hold your toes with the fingers of your hands. Stay for some time in this position.

Benefits

1. It is helpful in curing back pain, knee pain and tonsillitis.
2. It also cures the defects of eyes.
3. Skin diseases can be cured, if we practise this asana regularly.



Matsyasana

1. This asana is helpful for the treatment of diabetes.
2. It helps in relieving tension in the neck and shoulders.
3. It provides relief from respiratory disorders by encouraging deep breathing.
4. It improves posture.
5. It is the best asana to get relief from asthma.

Contraindications

1. Avoid doing this asana if you have high or low blood pressure.
2. People suffering from migraine and insomnia should also refrain from performing this asana.
3. The individuals who have neck injury or lower back problems should not practise this asana.

5 HYPERTENSION: PROCEDURE, BENEFITS AND CONTRAINDICATIONS FOR TADASANA, VAJRASANA, PAWANMUKTASANA, ARDHA CHAKRASANA, BHUJANGASANA, SHAVASANA

Hypertension means increased blood pressure. It has become a worldwide health problem because a great number of people are facing the problem of hypertension throughout the world. Though it is a fact that blood pressure increases with the advancement of age. In teenagers, hypertension used to be considered a middle-age problem but nowadays, youngsters also suffer from this problem due to their faulty lifestyles.

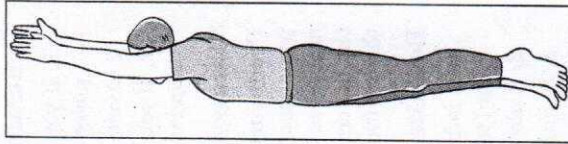
The main function of the heart is to supply pure blood to the various parts of the body through arteries. When the heart contracts, it pushes the blood through blood vessels and consequently the blood pressure increases in arteries. This pressure is known as systolic blood pressure. It is represented by the first number. The pressure between two heartbeats is called diastolic blood pressure. It is represented by the bottom or the second number. These two numbers of blood pressure are measured in mm Hg. Unit means millimeter of Mercury. The normal blood pressure of an adult is considered 120/80 mm Hg. A person whose blood pressure readings are beyond 140/90 mm Hg, is said to be having hypertension.

Tadasana

Procedure: Stand up in attention position. Lift your arms upwards. Stretch your hands upwards. Raise your heels, and come on your toes. Also pull up your body upwards. After some time breathe out slowly and come to the previous position. Repeat the same exercise 10/15 times.

Benefits

It is helpful in developing physical and mental balance. It reduces obesity. It cures constipation.



Tadasana

4. It cures digestive problems.
5. It improves body posture.
6. It alleviates sciatica.
7. It is an excellent asana for those who want to enhance their height.
8. It is beneficial in treating hypertension.

Contraindications

1. If you have low blood pressure you should not practise this asana.
2. In case of headaches or insomnia you should avoid the practise of this asana.
3. Individuals, who suffer from blood circulation problems such as faulty valves, should not perform this asana.

2. Vajrasana

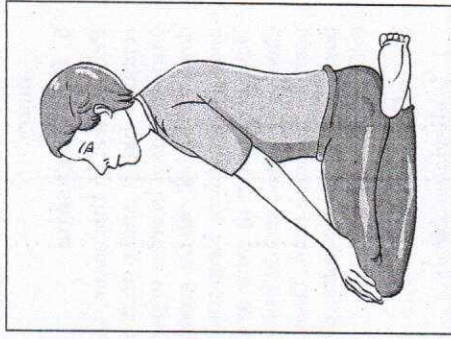
Procedure: It is a meditative asana. Kneel down on the ground or floor with your knees, ankles and toes touching the ground. Your toes should be stretched backwards. Now place your palms of both your hands on the knees. The upper body should be straight. At this time, the breathing should be deep, even and slow. Then expand your chest and pull your abdominal portion inwards.

Benefits

1. It is helpful for concentration.
2. It is helpful in curing dysentery, back pain and chest diseases.
3. It enhances memory power.
4. It alleviates the problems related to menstruation.
5. It removes mental stress.
6. It strengthens the pelvic muscles.
7. It cures postural defects.
8. It prevents hernia and helps to relieve piles.
9. It is the best medication asana for people suffering from sciatica and sacral infections.
10. It helps in reducing the hip fat.
11. It gives relief from constipation, acidity and increases digestive process.

Contraindications

1. A person suffering from joint pain should not perform *vajrasana*.
2. The individuals who have any spinal column problem should not perform *vajrasana*.
3. The individuals who have some difficulty in movement should practise *vajrasana* with a lot of care.



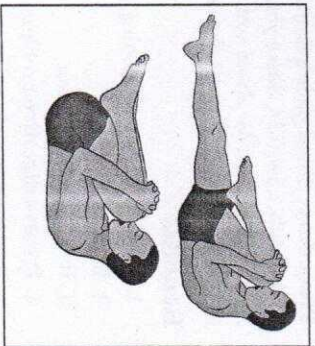
Vajrasana

3. Pawannuktasana

Procedure: Lie down on your back on a plain surface. Keep your feet together and place your arms beside your body. Take a deep breath. When you exhale bring your knees towards your chest. At the same time press your thighs on your abdomen. Clasp your hands around your legs. Hold the asana when you breathe normally. Every time you inhale, ensure that you loosen the grip. Exhale and release the pose after you rock and roll from side to side about three times.

Benefits

1. It eases the tension in lower back.
2. It enhances the blood circulation in pelvic area.
3. It stimulates the reproductive organs. It also helps to cure menstrual disorders.
4. It helps in reducing the fats of thighs, buttocks and abdominal area.
5. It strengthens the abdominal muscles. It also massages the intestines and organs of the digestive system which helps in releasing the gas and thus improves digestion.
6. Relieves constipation.



Contraindications

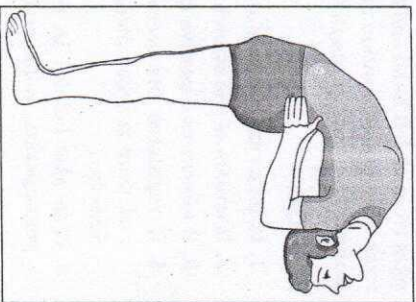
1. If you are suffering from heart problems, hyperacidity, high blood pressure, slip disc and hernia you should avoid practising this asana.
2. Pregnant women should avoid the practise of this asana.
3. If you have had an abdominal surgery recently you should avoid to perform this asana.
4. Individuals suffering from piles should avoid this asana.

4. Ardha Chakrasana

Procedure: Stand straight with both feet together. Hold your hips with your hands. Bend backwards without bending your knees with slow inhalation. Remain in this pose for some time. Do it two or three times.

Benefits

1. It helps to make ankles, thigh, shoulders, chest, spine and abdomen stronger.
2. It relieves stress and tension.
3. It improves digestion.
4. It cures menstrual disorders.
5. It cures pain in legs.
6. It reduces fat in the waist and thigh.



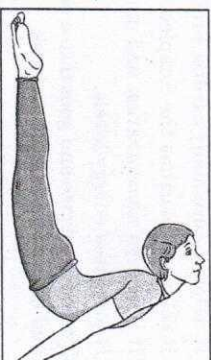
7. It helps to alleviate upper back pain.
8. It relieves stress in the neck and shoulders.

Contraindications

1. Avoid performing this asana if you have migraine, headache, low blood pressure, diarrhoea and insomnia.
2. Avoid practising this asana if you have peptic ulcer and hernia.
3. Avoid this asana in case of hip or spinal problems.
4. Pregnant women should avoid doing this asana.

5. Bhujangasana

Procedure: In this asana, the body posture remains like a snake and that is why it is called bhujangasana. In order to perform this asana, lie down on the belly on the ground. Keep your hands near the shoulders. Keep your legs close together. Now straighten up your arms slowly, raise the chest. Your head should be backwards. Keep this position for some time. Then get back to the former position. For good results, perform this asana 3 to 5 times.



Benefits

1. It alleviates obesity.
2. It provides strength and agility.
3. It gives relief from the disorders of urinary bladder.
4. It removes the diseases of liver.
5. It improves blood circulation.
6. It makes the vertebral column flexible and thin.
7. It cures gas disorders, constipation and indigestion.
8. It strengthens the muscles of hands.

Contraindications

1. This asana should be avoided by individuals who suffer from hernia, back injury, headaches and recent abdominal surgeries.
2. Pregnant women should not perform this asana.

6. Shavasana

Procedure: Lie down in supine position. Legs should be straight. Keep the arms away from the body. Leave all the limbs loose as well as relaxed. Gradually, breathe in deeply. Open your eyes and think that your whole body is becoming loose. Feel a complete relaxation in your body. Remain in this position for 10 to 12 minutes.

It strengthens the nervous system. It controls high blood pressure. It relieves mental tension. It gives new vigour to both mind and body simultaneously.

It regulates blood circulation and gives relief in various aches and pains.

It cures many psychosomatic problems.

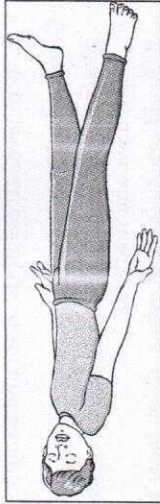
It helps to cure many cardiac problems.

It relaxes and calms the complete body.

It improves concentration and memory.

It increases energy levels.

The body relaxes and goes into a deep meditative state, which in turn repairs the cells and tissues and releases stress.

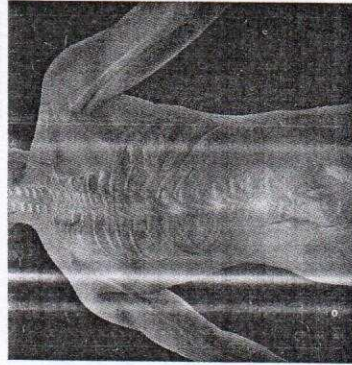


Shavasana

BACK PAIN: PROCEDURE, BENEFITS AND CONTRAINDICATIONS FOR TADASANA, ARDHMATSEYENDRASANA, VAKRASANA, SHALABASANA, BHUJANGASANA

Pain which is felt in the back usually originates from the bones, joints, muscles, nerves, etc. It may be in the cervical, thoracic or lumbar region. It may be chronic or acute. It can be constant, intermittent or radiate to other parts such as the neck, shoulders, hips or legs. It may give a feeling of burning or numbness. Sometimes numbness may be felt in the legs. In fact, back pain is not only the problem of the country but it is also prevalent all over the world. In fact, nine out of ten persons experience back pain at least once in their life. That is why it is said that back pain is a very common complaint or ailment throughout the world. Due to this problem affected persons are not able to do their work properly and efficiently. Even there are a number of cases when people start absenting themselves from their work. Though it is not a very serious problem, but it may be very harmful, especially when it radiates to arms or legs.

Back pain may result owing to bad personal health habits and personal risk factors such as overweight, lack of physical activity or exercise, excessive smoking, lack of flexibility or stress on back.



Back Pain

1. Tadasana

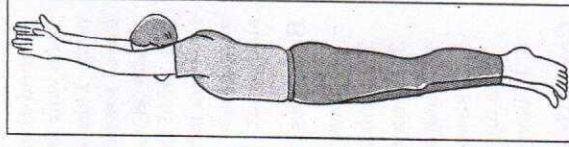
Procedure: Stand up in attention position. Lift your arms upwards. Stretch your hands upwards. Raise your heels, and come on your toes. Also pull up your body upwards. After some time breathe out slowly and come to the previous position. Repeat the same exercise ten to fifteen times.

Benefits

1. It is helpful in developing physical and mental balance.
2. It reduces obesity.
3. It cures constipation.
4. It cures digestive problems.
5. It improves body posture.
6. It alleviates sciatica.
7. It is an excellent asana for those who want to enhance their height.
8. It is beneficial in treating hypertension.

Contraindications

1. If you have low blood pressure you should not practise this asana.
2. In case of headache or insomnia you should avoid the practice of this asana.
3. Individuals, who suffer from blood circulation problems such as faulty valves, should not perform this asana.



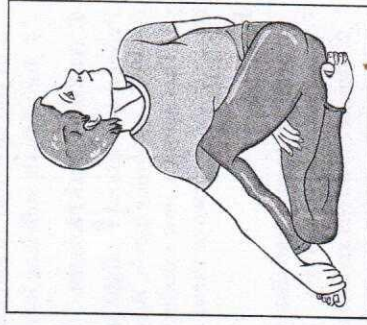
Tadasana

2. Ardhamatseyendrasana

Procedure: The left heel is kept under the right thigh and the right leg is crossed over the left thigh. After that hold the right toe with left hand and turn your head and back to the right side. In this position move the trunk sideways. Then perform the same asana in the reverse position.

Benefits

1. It keeps gall bladder and the prostate gland healthy.
2. It enhances the stretchability of back muscles.
3. It alleviates digestive ailments.
4. It regulates the secretion of adrenaline and bile and thus is recommended in yogic management of diabetes.
5. It is also helpful in treating sinusitis, bronchitis, constipation, menstrual disorders, urinary tract disorders and cervical spondylitis.



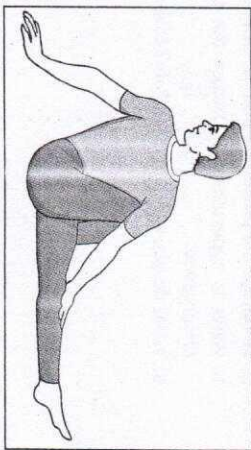
Ardhamatseyendrasana

Contraindications

1. Women who are two or three months pregnant should avoid practising this asana.
2. The individuals, who suffer from peptic ulcer, hernia or hypothyroidism should practise this asana only under expert guidance.
3. The individuals who have the problem of sciatica or slipped disc may benefit from this asana but they need to take great care while doing this asana.

3. Vakrasana

Procedure: Sit down and stretch your legs straight. Fold the right leg and keep the right leg's heel touching the left leg's knee. Place your right hand behind your back and left arm over the right knee; hold your right ankle. Push your right knee as far as possible and while exhaling, twist your trunk to the right side. Take sufficient support of left arm. Now repeat the same procedure with the left side.



Vakrasana

Benefits

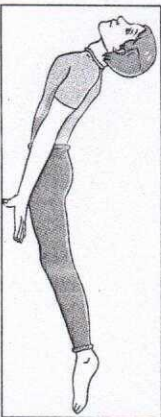
1. It improves the function of both spinal cord and nervous system.
2. It prevents and controls diabetes.
3. It strengthens kidneys.
4. It helps in reducing chronic back pain and shoulder pain.
5. It gives relief in stiffness of vertebrae.
6. It reduces belly fat.

Contraindications

1. Avoid this asana in case of high blood pressure.
2. Individuals who suffer from peptic ulcer should not practise this asana.
3. This asana should not be performed who suffer from serious back injury.

4. Shalabhasana

Procedure: In order to perform shalabhasana, lie down in prostrate position. Spread the thigh backwards. Hold your fists and extend arms. Keep your fists under the thigh and then raise your legs slowly as high as you can. For best results hold this position for two or three minutes and then lower your legs slowly. Repeat the same action for three to five times.



Shalabhasana

Benefits

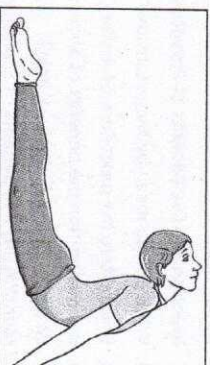
1. It provides relief to persons who have mild sciatica and slip disc problem.
2. It strengthens the muscles of the spine, buttocks and back of the arms and legs.
3. It improves posture.
4. It stimulates abdominal organs.
5. It helps in relieving stress.
6. It alleviates lower back pain.
7. It helps in removing constipation.

Contraindications

1. People with a weak spine should avoid the practice of this asana.
2. The individuals with a weak heart, high blood pressure and coronary problems should avoid practicing this asana.

5. Bhujangasana

Procedure: In this asana, the body posture remains like a snake that is why it is called bhujangasana. In order to perform this asana, lie down on the belly on the ground. Keep your hands near the shoulders. Keep your legs close together. Now straighten up your arms slowly, raise the chest. Your head should be backwards. Keep this position for some time. Then get back to the former position. For good results, perform this asana 3 to 5 times.



Bhujangasana

Benefits

1. It alleviates obesity.
2. It provides strength and agility.
3. It gives relief from disorders of urinary bladder.
4. It cures the diseases of liver.
5. It improves blood circulation.
6. It makes the vertebral column flexible and thin.
7. It cures gas disorders, constipation and indigestion.
8. It strengthens the muscles of hands.

Contraindications

1. This asana should be avoided who suffer from hernia, back injuries, headaches recent abdominal surgeries.
2. Pregnant women should not perform this asana.

Exercises

Short Answer Questions Carrying 1 Mark (20 to 30 words)

- What do you mean by Asana?
What do you mean by obesity?
Mention any five benefits of *Vajrasana*.
What are the contraindications of *Vajrasana*?
Discuss the procedure of *Trikonasana*.
Mention any five benefits of *Pada Hastasana*.
What do you mean by Diabetes?
Briefly state any five benefits of *Bhujangasana*.
Mention the contraindications of *Pashchimotanasana*.
What is Asthma?
Briefly discuss the procedure of *Sukhasana*.
Mention any five benefits of *Parvatasana*.
What do you mean by Hypertension?
Briefly state the procedure of *Ardha Chakrasana*.
Briefly mention the benefits of *Shavasana*.
What do you mean by Back Pain?
Mention any five benefits of *Shalabhasana*.

Short Answer Questions Carrying 3 Marks (80 to 90 words)

- Discuss the benefits of asanas for prevention of diseases in brief.
What is obesity? How can we come to know that we are obese?
Discuss the procedure and benefits of *Vajrasana* in brief.
Describe the benefits and contraindications of *Pada Hastasana*.
Discuss the benefits and contraindications of *Ardha Matsyendrasana*.
What do you mean by diabetes? Name the asanas which are helpful for preventing diabetes.
Discuss the procedure of *Pawanmuktasana*.
Explain about asthma.
Elucidate the benefits and contraindications of *Sukhasana*.
Discuss the procedure of *Gomukhasana*.
Briefly discuss about hypertension.
Describe the benefits and contraindications of *Tadasana*.
Mention the benefits of *Shavasana*.
What do you mean by Back pain?
Discuss the procedure of *Vakrasana*.

Long Answer Questions Carrying 5 Marks (150 to 200 words)

1. Discuss asanas as preventive measures in detail.
2. What do you mean by obesity? Discuss the benefits and contraindications of *Pada Hastasana* and *Vajrasana*.
3. Discuss the procedure, benefits and contraindications of *Trikonasana* and *Ardha Matsyendrasana*.
4. What do you mean by diabetes? Discuss the procedure, benefits and contraindications of *Bhujangasana*.
5. What do you mean by Asthma? Explain the procedure, benefits and contraindications.
6. Elaborate the procedure and benefits of *Tadasana* and *Pawanmuktasana*.
7. What is hypertension? Discuss the benefits and contraindications of *Vajrasana* and *Ardha Chakrasana*.
8. What do you mean by Back Pain? Discuss the procedure and benefits of *Shalabhasana*.