

## Unit 2 | Children & Women in Sports

### Introduction

Sports are good for children's of all age. Children can enjoy their physical activities by taking part in sports and games. In fact the most important thing is that children's motor development should be according to their requirement.

### Exercise Guidelines of WHO

The World Health Organization (WHO) has published exercise guidelines for different age groups, which are designed to promote health and prevent chronic diseases such as obesity, diabetes, and heart disease. Here are the exercise guidelines for different age groups as recommended by the WHO:

1. For Children under 5 years of Age
2. Children & adolescents aged 5-17
3. Adults aged 18-64 years
4. Adults aged 65 years & Above

### Stages of Life

INFANT (0-1YRS)

TODDLER (2-4YRS)

CHILD (5-12YRS)

TEEN (13-19YRS)

ADULT (20-39YRS)

Middle Adult Age (40-59 yrs)

SENIOR (60+ YRS)

### Children & Adolescents

1. Children and adolescents should engage in at least 60 minutes of moderate-to-vigorous intensity physical activity daily.
2. This can include activities such as running, swimming, cycling, playing sports, and dancing.
3. Muscle-strengthening activities should also be performed at least three times a week, such as push-ups, squats, and lunges.

### Adults (18-64 yrs):

1. Adults should engage in at least 150-300 minutes of moderate-intensity aerobic physical activity per week or 75-150 minutes of vigorous-intensity aerobic physical activity per week.
2. This can include activities such as brisk walking, jogging, cycling, swimming, and dancing.
3. Muscle-strengthening activities should also be performed at least two days a week, such as lifting weights and doing push-ups or sit-ups.

### Older Adults 65+yrs

1. Older adults should engage in at least 150-300 minutes of moderate-intensity aerobic physical activity per week, or 75-150 minutes of vigorous-intensity aerobic physical activity per week, depending on their ability.
2. This can include activities such as brisk walking, dancing, gardening, and cycling.
3. Balance exercises should be performed at least three days a week to prevent falls.

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### Posture

Posture is a position in which a person holds his body while standing, sitting, or lying down. It is the body's alignment when sitting, standing, or performing any other activity.

### Common Postural Deformities

#### SPINAL CURVATURE

##### Kyphosis



It is usually related to abnormality curve spine. It's most common in older women.  
Causes - Due to malnutrition, heavy load, weak muscle etc  
Remedies - Use pillow under the back while sleeping, perform dhanurasana.

##### Lordosis



It is usually the inward curvature of spine. Increase forward curvature in the lumbar region.  
Causes - Due to improper development of muscle, obesity, etc.  
Remedies - perform sit ups, perform halasana.

##### Scoliosis



It is a lateral direction deformities also called sideways curvature.  
Causes - Due to under developed legs, paralysis.  
Remedies - bending exercises should be done, swim Bhai using breaststroke techniques.

##### Round Shoulder



In this postural deformity the shoulder become round and sometime they seem to be band forward.

Causes - due to heredity because of tight cloth.

Remedies - perform chakrasana and dhanurasana

##### Bow Legs



It opposite to knock knee position if there is a wide gap between the knee when standing with feet together the individual has bowleg.

Causes - Deficiency of calcium Phosphorus and bone  
Remedies - vitamin d should be taken, balance diet

##### Knock Knee



It is one of the major postural deformities in which both the knees knock or touch each other while normal standing position.

Causes - lack of balanced diet specially vitamin d calcium and phosphorus  
Remedies - perform padmasana, gomukhasana.

##### Flatfoot



Flatfoot is a condition that affects the feet, causing them to become flat and painful. Children with flat feet experience pain when they run & struggle to stand and walk.

Causes: Genetics, Age, obesity, diabetes, and certain medical conditions.

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### Women Participation in Sports

For women's participation in sports we have a look at ancient period. Regarding participation in the first modern Olympic (1896 Athens), there was no participation of women.

1. Women participated first time in 1900 Olympics. (22 women participated in)  
In 1904 six women participated.
2. After 100 years in 2000 Sydney Olympics 4069 women had participated.
3. In 2008 Beijing Olympics 4637 women participated.

Participation in India:

1. In 2000 karnam Malleswari was the first woman who won bronze medal in Sydney Olympic from India.
2. In 1984 performance of P.T. Usha was very good in Athletics.
3. In 2012 london olympics Saina Nehwal and M.C. Maricom got bronze medal.
4. In 2016, Rio Olympics, Sakshi Malik won bronze medal, P.V. Sandhu won silver medal where as Deepa Karmakar opened new dimensions in gymnastics.

Reasons for the low rate of sports participation by women in India:

Gender equity & social attitude, No parental encouragement, Traditional society, Women constraining other women, Lack of plans & initiatives for sports women by the Government, Male dominant culture, Less availability of women coaches, Less competition, Economic Factor, Media Coverage, Lack of Incentives & Career

Physical Benefits:

Healthy lifestyle, Weight Management, Physical Fitness, Stronger Bones, Delays Ageing, Increases Muscle strength & functions

Psychological Benefits

Help moderate stress, Improve Your mood, Boost mental health, Help with depression, Higher self esteem, Better self image, More self confidence

Social Benefits

Social Empowerment, Team work, Communication Interpersonal Relationship.

### Special Consideration

There are some specific considerations that should be taken care by sportswomen. Some special considerations are menarche and menstrual dysfunction. These are the natural considerations that are present in every women. Girls and women who are active in sports, need to consider these seriously. These considerations are associated with their physiology and also affect their psychology. They are described in detail below:

#### Menarche



Menarche is the girl's first menstrual period or bleeding. It can happen as early as age 9 or upto age 16. The exact period of menarche depends upon the biological, genetic and environmental factors.

As a sportsperson, a young woman has to take special care of herself at that time. It is essential to take proper nutrition during this period, so that the body performs all its functions normally.

#### Menstrual Dysfunction



It means abnormal bleeding and irregular menstrual cycle. Normally, a menstrual cycle lasts upto 3 to 7 days and occurs every 22 to 35 days. During menstrual dysfunction, women often complain of headache, back pain, fatigue, cramps, tiredness, etc. This not only hampers their physical performance but also challenges them psychologically. During these days, women should be more careful about their cleanliness and hygienic habits.

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### Female Athlete Triad

The 'Female Athlete Triad' is a syndrome of three related conditions i.e. Osteoporosis, Amenorrhea, Eating Disorders, generally seen in teenage or adult female athletes who aren't meeting their energy requirements properly, which ultimately leaves them undernourished. This also affects their performance severely.

#### Osteoporosis



Osteoporosis is a weakening of the bones due to the loss of bone density and improper bone formation.

Women suffering from this disease lack minerals in their bone contents. Oestrogen is also low. The bones become porous, brittle and break easily. This condition reduces the sports performances and makes a person prone to fractures & injuries.

#### Amenorrhea



Exercising intensely and not taking enough calories can lead to hormonal imbalances that results in a girl's menstrual cycle becoming irregular or stopping altogether. This condition is known as amenorrhea.

Thus, amenorrhea refers to the absence of menstrual periods or becoming irregular. Hair loss, headache, change in vision and development of facial hair are symptoms of amenorrhea.

#### Eating Disorder



It refers to taking very little calories due to which there is deficiency in the body. The deficiency can be of essential nutrients or even lack of energy. Eating disorder is related to mental illness and affects a person's physical and mental health.

To improve athletic performance, most of the female athletes try to lose weight.

For this purpose, they do not eat enough food containing fat and particularly iron, which leads to serious disorders like anorexia nervosa, bulimia nervosa, anaemia, etc.

#### Anorexia Nervosa

It is an eating disorder which causes people to obsess about weight and what they eat. Anorexia is characterised by a distorted body structure, with an unwanted fear of being overweight.

People trying to maintain a below-normal weight through starvation or too much exercise.

#### Bulimia Nervosa

In this disorder female athletes eat excessive amount of food and vomit intentionally in order to not gaining weight.

It is a serious eating disorder marked by bingeing. Bulimia is a potentially life-threatening eating disorder.

People take dangerous steps to avoid weight gain like vomiting (purging), excessive exercising or fasting.