Module 3
Basics of Growing up-
Understanding Adolescence
## FLOW CHART

### Content Flow at A Glance

**Module 3: Basics of Growing Up - Understanding Adolescence**

<table>
<thead>
<tr>
<th>Subject/topic/activity</th>
<th>Objective</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise on understanding the physical changes of adolescence.</td>
<td>To understand the physical changes that take place during adolescence and to know the reasons for them.</td>
<td>3-3 to 3-5</td>
</tr>
<tr>
<td>Exercise on cognitive and emotional changes during adolescence.</td>
<td>To know and become aware of the emotional and cognitive changes that take place during adolescence.</td>
<td>3-6 to 3-8</td>
</tr>
<tr>
<td>Exercise on understanding ‘Sex’ and ‘Sexuality’.</td>
<td>To become aware of sex and sexuality.</td>
<td>3-9 to 3-10</td>
</tr>
<tr>
<td>Exercise on sexual maturity.</td>
<td>To identify the sexual organs in the body</td>
<td>3-11 to 3-13</td>
</tr>
<tr>
<td>Exercise on sexual maturity.</td>
<td>To understand the prevalent beliefs on sex and sexuality among the participants.</td>
<td>3-14 to 3-17</td>
</tr>
<tr>
<td>Exercises on nutrition during adolescence.</td>
<td>To understand the eating habits of young people. To become aware of the consequences of unhealthy eating. To become aware of the food that is healthy and nutritious.</td>
<td>3-18 to 3-22</td>
</tr>
</tbody>
</table>
Module 3
Basics of Growing Up - Understanding Adolescence

“I - I hardly know sir, just at present at least I know who I was when I got up this morning, but I think I must have been changed several times since...”

Alice in Wonderland

Introduction

As one grows up, one experiences many changes. There are changes in the body; in the way one behaves and the way others expect one to be. There are also changes in interests and preoccupations. All of this is normal. It is part of growing up, but growing up is not easy. This is a time when one has many questions and hardly any answers. It is difficult to talk about the things upper-most in your mind. Why is my body changing? Why do I get an erection? Why do I feel attracted to the opposite sex? Many older people are not willing to discuss these issues openly. As a result your friends (peer group), TV, films, magazines and imagination become your sources of information.

In order to deal with the turmoil, we need to know the facts of growing up, distinguish between myths and realities and come to terms with change. This module deals with these issues.
Session 3.1
Understanding Changes during Adolescence

Expected Outcomes
Participants will understand the facts about physical changes that take place during adolescence.

Body Maps

Objectives
To discover the physical changes that take place during puberty.
To enable boys and girls to learn about the changes in each other’s bodies.

Materials
Flip charts, markers, crayons, cello tape, scissors, stapler.

Time
1 hour and 30 minutes.

Process
Ask the participants to divide into 2 groups – males and females (if desirable separate the groups and do the exercise in separate locations).

Invite them to pick up flip charts and markers for the group task.

Explain that they will be making a body map to show the physical changes that have occurred in their bodies since they were 10 years old.

The body map can be easily drawn – one person from the group should lie on a sheet of paper (you may have to join 2 to 3 sheets together) while someone else traces the outline of his/her body.

Then the group will discuss and mark the physical changes on the body map.

Explain that technical names and drawings are not necessary. They can use the language they normally use to communicate with each other.

Allow 30 minutes to do this exercise. Ask them to put up their respective charts on a wall, or spread them out on the floor. Invite each group to present their body maps.

Put up a third chart (on the wall or on the floor along side the other two maps) that shows the physical parts of the male and female body (you can prepare this chart yourself before the start of the training or you can buy one).
Ask the participants to take a close look at their charts and the one you have put up. Encourage them to discuss and point out the similarities and differences.

The following questions can be used for discussion:
- How did you feel drawing the body map? Why?
- How did you feel about sharing the body maps with each other? Why?
- When did you first notice a physical change in your body? How did you feel?
- What questions did you have and were you able to get answers? Who did you talk to?
- Were you curious about the changes in the body of the opposite sex? What questions came to your mind and whom did you speak with?

Notes for the Facilitator
This exercise enables participation of all the group members. It also allows you to get an understanding of the way in which the participants view their bodies and their feelings related to the changes. Body mapping is a participatory tool and has been used extensively by health workers in creating awareness about the body and health problems. It is especially effective for dealing with intimate health issues, such as sexual health and gynaecological problems among women.

Using biological facts briefly summarize the physical changes that take place during adolescence. Ask the participants if they have any questions on the subject. It is good to facilitate this exercise in a mixed group. It allows males and females to understand each other’s bodies better. Sometimes, the participants feel inhibited and shy in each other’s presence. This may be due to cultural and religious reasons. Ask the participants if they are comfortable in the mixed group and proceed accordingly. If the participants are not comfortable in a mixed group you may have to do the exercise in separate groups, and you may need the help of a co-facilitator.

HELPLINE for the peer educator

Adolescence
The period between 10 to 19 years of age is called adolescence. The word is derived from the Latin word adolescere, which means to grow. During this time, a number of physical, cognitive and social emotional changes take place in the body.

Physical changes
In a span of 7 to 9 years, boys and girls grow up to be young men and women. For a brief period of two or three years, they experience what is known as a growth spurt. Adolescents experience a quick gain in height and weight. The growth spurt begins two years earlier for girls than boys, but it lasts longer for boys. Within nine years, boys gain an average of 36 cm in height and 25 kg in weight. Similarly, girls gain an average of 24 cm in height and 21 kg in weight. However, these are only average values and wide variations in these figures should not be considered abnormal.
The rapid acceleration in height and weight is accompanied by changes in body proportions. The different parts of the body have their own sequence of rates of growth. Some grow slowly, while others grow quickly. At this age, before the arms and legs reach their full length, hands and feet become almost adult size. Girl’s hips become wider in relation to their shoulders.

There is a slight change in facial features. The jaw and the nose become larger, while the mouth widens and the chin becomes prominent.

In both boys and girls, as the height increases, there is a rapid increase in the development of muscles. However, boys show a more rapid increase than girls do. As a result, they gain more muscle tissue. That is why boys are more muscular than girls. The rate of development of muscles in adolescents is faster than the development of fatty tissue. This occurs more in boys than girls. That is why girls tend to retain some of their fat, especially on their arms, legs and hips.

Along with changes in the body size, physical changes in the reproductive system also occur, leading to sexual maturity. For the first time in life, obvious differences in girls and boys emerge. Sexual maturation consists of two types of changes in the reproductive system: those that relate to primary sex organs, such as the penis and the testes in the males, and the vagina and the ovaries in the females. Associated changes visible on the body are referred to as secondary sex characteristics. These include breast development in females, facial hair or beard in males and growth of underarm and pubic hair for both sexes. Girls also begin their monthly menstruation cycle. For boys, semen secretion begins to take place (while urinating boys may find a few drops of whitish fluid known as discharge and this can be frightening for some). Erections also become frequent, especially when one is excited.

The skin becomes oilier and pimples may appear on the face and sometimes on the back. These changes happen because of changes in the natural chemicals in the body known as hormones. Voice also begins to change in both boys and girls. The voice of boys becomes hoarse and full, while in girls it becomes high-pitched and clear. Both boys and girls have hormones but they have different amounts of different hormones.
Session 3.2
Understanding Cognitive and Emotional Changes during Adolescence

Expected Outcomes
Participants will learn the facts about cognitive and emotional changes during adolescence.

Body Maps Revisited

Objective
To understand the emotional and cognitive changes during adolescence.
To realize that emotional and cognitive changes among boys and girls are less similar.

Materials
Body maps from the previous exercise, markers, flip charts.

Time
1 hour.

Process
Invite the participants to sit in a circle. Place the body maps in the centre of the circle.

Explain that the physical changes that take place in the body during adolescence have already been discussed, and this session will focus on the emotional and cognitive changes that take place during adolescence.

Ask them to discuss “emotional changes since the onset of puberty” and “cognitive changes since the onset of puberty.”

They can use the body maps to mark out the emotional and cognitive changes. Let the participants decide and proceed accordingly.

The body maps that were prepared by the participants during session 3.1 may be re-used for this exercise. If not, the participants can draw fresh body maps. For this purpose, they will need large sheets of paper and markers. One member of the group should lie on the sheets that have been taped together and another member should draw the outline of his/her body.

Allow the participants 30 minutes for the discussion.

After the exercise has been completed, facilitate a discussion using the following questions:

- How did you feel about doing this exercise in a mixed group? Why?
- Are there any differences in the changes (emotional and cognitive) between the males and the females? What?
- Are women more emotional than men? Why/Why not?
- Are men more intelligent than women? Why/Why not?
- How did you handle the emotional changes?
- Did you notice any changes in the way adults behaved toward you? What and how?
- Did you receive any support from your friends in dealing with the changes? What kind of support did you get?
- Now that you know a little more about the process of growing up, will you be able to help those who may be going through the process? How will you help?

Conclude the discussion with a brief summary of the discussion and a presentation on the basic emotional and cognitive changes experienced by the adolescent. You may want to use the material given in the “Helpline for the peer educator” for the presentation and concluding remarks.

**Note for the facilitator**
This exercise provides the participants with information on the similarities and differences between males and females. This exercise can be further developed to include a discussion on the concept of “gender”. You may ask the participants to decorate their body maps by adding clothes and other accessories that define the male and female look. You could then facilitate a discussion on whether these are basic biological differences or differences created through social and cultural norms and beliefs.

**HELPLINE for the peer educator**

**Emotional changes:** Increased hormonal activity during adolescence produces changes in the emotional state of the adolescent. They experience frequent changes in moods, ranging from feelings of extreme happiness to extreme sadness. At times, they find themselves bursting into a rage or tears. Later, they wonder why they did what they did.

Sex drive emerges in both boys and girls. Sex drive is an impulse related to the sexual need. It is a natural biological instinct. The immediate outcome of the sex drive for the adolescent is:
- Attraction towards members of the opposite sex
- Crushes or infatuations (can be with persons of opposite sex or same sex)
- Need for sexual experimentation (this is critical in the context of HIV/AIDS and STIs)
- Need for physical contact and intense emotional relationships

During this period, friends and peers become more important. Acceptance and popularity among peers become very important. To gain acceptance in the peer group one starts adopting the prevalent norms and behaviour of the group (using slang, smoking, hairstyle, dress etc). This is also one reason for experimentation with sex and drugs. The stress is on looking and sounding different from children and adults. The need for independence intensifies and awareness of the self increases.

**Cognitive changes:** One of the main features of adolescent thought is systematic thinking. Adolescents develop the capability to organize their thoughts, reflect on
them and come to a decision that they may implement. For example, if a 16-year old is given money to go shopping, s/he will go to the market, look at the things available, choose what s/he likes and then buy it.

Adolescents are also capable of abstract thinking: the ability to imagine phenomena that are concrete, hypothetical or imaginary. This includes mathematics, physics, geography and other concepts.

Adolescents become more creative and seek to experiment with new and different things/ideas.

They develop coping strategies to deal with change and sudden occurrences.

Adolescents develop the abilities to seek relationships and keep them.

Changes also emerge in the way they communicate. Often they develop a special vocabulary that reflects their disdain for adult society. They coin phrases and words that express their exclusivity and strengthen their bonds with their peer group.
Session 3.3
Sexual Maturation during Adolescence

Expected Outcomes
Participants will know the facts related to sex and sexuality.
Participants will develop a common understanding of “sexuality”.

Understanding ‘Sex’ and ‘Sexuality’
Sexuality is about many things such as emotions, beliefs, relationships and self-image. It is definitely more than simply sex. All human beings are sexual and develop their sexuality from a number of influences, including social, cultural, biological, economic and educational factors. Sexuality is a multifaceted and sensitive issue, and there is often confusion about how best to address it. Notions of sexuality, sexuality education, sexual health and rights have different meanings in different contexts. Different people in different societies understand these notions differently. As a result, there is a need to understand sexuality in the broader context of culture, tradition, religion and morals.

Objective
To help the participants explore their understanding of the term “sex.”
To develop a common understanding and definition of “sexuality.”

Materials
Flash cards, markers, blackboard/white board, chalks/white board markers or large flip charts.

Time
1 hour 30 minutes.

Process
Invite the participants to sit in a circle. Explain the objectives of the session and reassure the participants that this exercise is simply an exploration of their personal understanding of the terms and that there are no right or wrong answers.

Give one flash card to each participant and ask him or her to express his or her understanding of the term “sex” either through writing or drawing on the flash card. Give them 10 to 15 minutes.

Ask the participants to read out/show their card and place it on the floor.

When all the cards are placed on the floor, ask the group to cluster the similar cards together.

Once this has been done, ask them to make a collage for display and put it up on the wall.

Facilitate a discussion using the following questions:
- How did you feel doing this exercise? Why?
- What does the collage depict – “sex” or “sexuality”?
- Do you think there is a difference between “sex” and “sexuality”? Why/Why not?
Note for the facilitator

Usually this exercise can be done in a mixed group, but if participants feel uncomfortable, you can do the exercise in separate groups for men and women. When asked to define sex, participants often end up describing sexuality, and that is one reason why the exercise is effective in prompting discussion on sexuality. You should be ready with the dictionary definitions of “sex” and “sexuality” to facilitate this exercise. Help the participants to arrive at a common understanding of the two terms, and express it through a collage prepared from their writings and drawings. Listed below are the definitions that you may want to use during the discussion on sex and sexuality.

- **Sex**, noun – being male or female, males or females collectively. (Oxford dictionary)

- **Sex**, noun 1 identify the sex of the animal gender. 2 attraction based on sex, sexuality, sexual attraction, sexual chemistry, sexual desire, sex drive, sexual appetite, libido. 3 lessons in sex/sex education facts of life, sexual reproduction, reproduction. 4 have sex with him/a relationship without sex intimacy, coitus, coition, coupling, copulation, carnal knowledge, making love, mating, and fornication. (The Concise Oxford Thesaurus, Oxford University Press, 1995)

- **Sexuality**, noun 1 differences based on sexuality, sex, gender, sexual characteristics. 2 famous for her sexuality sexual desire, sexual appetite, sexiness, carnality, physicalness, eroticism, lust, sensuality, voluptuousness, sexual orientation, sexual preferences. (The Concise Oxford Thesaurus, Oxford University Press, 1995)
Session 3.4
Sexual Maturation during Adolescence

Expected Outcomes
Participants will understand the biological facts of sexual maturity.
Participants will know the terms used for male and female sexual organs.

My Body

Objective
To create awareness about sexual maturity among young men and women.

Materials
Body maps made by the participants in earlier exercises, flipcharts, markers, tape, flash cards.

Time
1 hour.

Process
Ask the participants to divide into 2 groups – male and female.

Explain that they will revisit their body maps, (made during session 3.1 and 3.2) and discuss the changes in their respective sexual organs since the onset of puberty. They can indicate the changes on the body maps, if this is not done already. The participants may wish to draw new body maps; encourage them to do so.

They should discuss the “terms” and body parts related to sexuality, and put them on the body map. The “terms” need not be scientific. Commonly used terms should be used.

Allow the groups 30 minutes to do this exercise and then facilitate a sharing of their outputs. If the groups do not feel comfortable sharing, ask them to share it with you separately, and you can become the medium to bring the two outputs together.

Place the 2 body maps on the floor and ask the participants to sit around them in a circle. Use the following questions to facilitate a discussion:

- How did you feel during this exercise? Why?
- What are the differences between the male and female reproductive systems? Can you point these out using the body maps?
- How do you feel about your body and your sexuality? Why?
- Do you discuss your body and sexuality with your friends?
- Have you ever discussed these issues with any adult? Why/Why not?
- Do you know of any beliefs or taboos associated with these body parts? If yes, what are they?
- Why are there so many beliefs and taboos associated with sexual body parts and sexuality?
- How do you feel about the opposite sex? Why?
Notes for the Facilitator
This exercise may have been covered under the “physical” changes exercise also done with the help of body mapping. In this case, however, the participants will be discussing their sexual organs and their relationship to sexuality. Please request the participants to focus on this topic of discussion. You may ask the participants to improvise on the earlier body maps, or create new ones for this exercise. You should be prepared with the facts and drawings of the male and female reproductive system. Encourage the participants to share these exercises, but if they are too shy, for whatever reason, try to bring them into the discussion gradually.

Helpline for the peer educator

Terms used in male sexuality

Penis The male organ for sexual intercourse.
Scrotum The pouch located behind the penis that contains the testicles, provides protection to the testicles and controls the temperature necessary for sperm production and survival.
Testis Two round glands that descend into the scrotum following birth, produce and store sperm and produce the male sex hormone testosterone.
Seminal A sac-like structure lying behind the bladder that secretes a thick milky fluid that forms part of the semen.
Prostate Vesicle A gland located in the male pelvis that secretes a thick milky fluid that forms part of the semen.
Semen Milky white fluid passed out of the penis at the time of ejaculation. Semen contains sperm, secretions of the prostate gland and seminal vesicles.
Erection The process by which the penis fills with blood in response to thoughts, fantasies, temperature, touch or stimulation and grows taut.
Ejaculation The release of semen from the penis caused by sexual excitement. This occurs in situations other than intercourse. It may occur at night and is commonly known as a “wet dream”. However, this is a misnomer for nocturnal emission, because it does not occur only because of a sexual dream. It is a natural and normal phenomenon. It is also known as spermarche.
### Terms used in female sexuality

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labia majora</td>
<td>Two sets of folds on either side of vagina; and labia minora provide protection to the clitoris and the urethral and vaginal openings.</td>
</tr>
<tr>
<td>Clitoris</td>
<td>A small structure located at a point where the labia meet; the point of stimulation for the female.</td>
</tr>
<tr>
<td>Vaginal opening</td>
<td>Located between the urethral opening and the anus; outlet for menstrual flow.</td>
</tr>
<tr>
<td>Vagina</td>
<td>Canal through which a baby passes during delivery; passageway for the menstrual flow. Capable of expanding during intercourse and childbirth.</td>
</tr>
<tr>
<td>Pelvis</td>
<td>The basin shaped bone structure that provides support and protection to the internal reproductive organs, bladder and large intestine.</td>
</tr>
<tr>
<td>Hymen</td>
<td>It is a fold of mucous membrane stretched across and partially closing the vagina. Tears during physical activity or sexual intercourse. Different societies have different myths about the hymen.</td>
</tr>
<tr>
<td>Cervix</td>
<td>The mouth or opening into the uterus; protrudes into the upper most part of the vagina.</td>
</tr>
<tr>
<td>Uterus</td>
<td>A pear shaped muscular organ located in the pelvic region; beginning at puberty, the lining sheds periodically (usually monthly) during menstruation; baby develops here during pregnancy.</td>
</tr>
<tr>
<td>Fallopian tubes</td>
<td>Passageway for the egg from the ovary to the uterus, place where fertilization occurs.</td>
</tr>
<tr>
<td>Ovaries</td>
<td>Oval shaped structure located in the female pelvic region. Begins release of eggs at the time of puberty, produces female sex hormones.</td>
</tr>
<tr>
<td>Ovum or egg</td>
<td>Roughly the size of a pinhead. If the egg meets the sperm, then conception occurs. If the egg is not fertilized i.e., does not encounter the sperm, then it dissolves and is discharged during menstruation.</td>
</tr>
<tr>
<td>Ovulation</td>
<td>Release of an ovum from the ovary. Usually one egg is released every month.</td>
</tr>
<tr>
<td>Fertilization</td>
<td>The union of the sperm with the ovum. It takes place in the fallopian tubes.</td>
</tr>
</tbody>
</table>
Session 3.5
Sexual Maturation during Adolescence: Beliefs and Misconceptions

Expected Outcomes
Participants will know that many things that they believe about sexuality and sex are actually misconceptions.

Agree, Disagree, Don’t Know

Objective
To surface the prevalent misconceptions about sex and sexuality in the group.
To clarify the misconceptions.

Materials
List of statements, signs that indicate agree, disagree, don’t know.

Time
1 hour 30 minutes.

Process
Invite the participants to put the three signs up (agree, disagree, don’t know) around the room.

Explain that the signs will be used in the exercise on myths and reality about sex and sexuality.

All societies have myths regarding the subject of sexuality. Many beliefs and misunderstandings surround the subject. The exercise will explore these misconceptions and provide the facts.

Explain that you will read out some statements. The participants should listen to the statements and decide whether they agree, disagree or don’t know. Depending on their response, they should stand under the corresponding sign (these signs have already been pasted on the walls around the room).

After each statement, ask the respective responders to give reasons for their agreement, disagreement or confusion.

After the participants give their response to each statement, you should provide the correct response.
Complete the list of statements and ask the participants to sit in a circle. Facilitate a discussion using the following questions:

- What are your observations on the exercise just completed?
- Have you learnt something from this exercise? What?
- How do you feel about your understanding of sex and sexuality?
- Did you gain any insights into why you believe or disbelieve certain things?
- After the exercise, will you be able to clarify misunderstandings and doubts of your friends?
- How will you inform your friends about the new things you learnt through this exercise?

**Note for the facilitator**
This exercise is non-threatening and can be done in a mixed group. It allows the participants the necessary space for reflection and correction. The exercise requires preparation by the facilitator. The facilitator must prepare the list of statements and correct responses before starting the session. The facilitator should also give reasons for right and wrong answers. The facilitator can always seek the help of the participants. Ask the participants if anyone got all the responses correct. You can give a chocolate to that person or to the person who got the maximum number of correct responses.

**List of statements that may be used for this exercise (this list is only a guide and you may add and delete statements depending on the group and the time available):**

- Once a girl has had her period, she can become pregnant.
- Masturbation makes a boy impotent.
- Masturbation is something that only boys do.
- A girl should not engage in physical activity during her period.
- A drop of semen is equal to 60 drops of blood. Therefore, the loss of semen weakens the body and should be avoided.
- The size of the penis is important and determines masculinity or virility.
- Boys can tell when a girl is having her period.
- One should not bathe during menstruation.
- Nocturnal emissions are a disease and require treatment.
- Thinking about sex is dirty.
- A girl cannot get pregnant if she has sex only once or only a few times.
- It is possible to get pregnant by kissing.
- During menstruation a girl becomes “unclean” or “impure”.
- If a boy has swelling in his breast, it is nothing to worry about.
- Women are responsible for the sex of the child.
- Men who have sex with men or think of having sex with men are not normal.
- If a girl does not bleed after initial intercourse, she is not a virgin.
- Women who have sex with women are depraved or abnormal.
- It is immoral to have sexual fantasies.
- Having an orgasm is essential for sexual pleasure.
- All girls must start menstruating by the time they are 13 years old.
- Using protection, such as condoms during intercourse, reduces pleasure.
- Only immoral and perverted persons get sexually transmitted infections.
- Only men can use contraceptives.
- The “pill” is good protection against sexually transmitted infections.
- Girls should not eat spicy food as it increases their sex desire.
- Sex is the only way to express love and affection.
- Going to sex workers is safe for the society because it prevents rape and molestation.
- Men have sexual needs but women do not.
- Abstinence is the only method of birth control that is 100% effective.
- Once you have had gonorrhoea and have been cured, you cannot get it again.
- A girl can get pregnant even if a boy does not ejaculate or “come” inside her.
- Sexually transmitted diseases can be cured if the infected man has sex with a virgin.
- Most of the women who have HIV/AIDS are prostitutes.
- STI/STDs can only be transmitted via the genitals.
- Girls and boys can have sexually transmitted infections without showing any symptoms.

**HELPLINE for the peer educator**

**Sexual maturation in girls and boys occurs in the following sequence:**

**Girls**
- Breast development: Breasts enlargement continues throughout adolescence.
- Appearance of pubic hair.
- Growth in the vagina and the uterus.
- Growth in the other parts of the female genital i.e., labia and clitoris.
- Menarche or the first menstruation: contrary to what most people believe, menarche is not the first sign of puberty in girls but appears fairly late in the sequence of pubertal events. The event consists of a flow of sticky blood in small amounts from the vagina. There are many rituals linked with the onset of menarche in many societies. It is a subject of many taboos and misconceptions.
- Ova (eggs) begin to ripen. Release of the mature ovum from the ovary (ovulation) begins a few months after menarche.
- Broadening and rounding of hips.
- Growth of underarm hair.

**Boys**
- Increase in the size of the testes and wrinkling of the scrotum.
- Appearance of hair in the pubic area.
- There is an increase in the size of the penis, the external sex organ. It continues to grow for two years.
- Enlargement of the prostrate and seminal vesicles (which together produce semen; the fluid that contains the sperm.).
- Appearance of facial hair and axillary hair (also called underarm hair). The facial hair emerges most prominently on the cheeks, the chin and the upper lip.
- Spermarche is the first spontaneous discharge of the semen through the penis. It generally occurs during sleep and the person may be unaware.
- Appearance of hair on the chest and legs.
- Cracking of the voice: this happens because the larynx (voice box) enlarges and vocal chords lengthen. The change causes a lowering of the pitch so the voice becomes deep. While the change from the high pitch to the low pitch takes place, the voice cracks uncontrollably.
Session 3.6  
Nutrition during Adolescence

Expected Outcomes  
Participants will become aware of their anxieties related to food.  
Participants will know about foods that are essential for their healthy growth.

Gosh, I Am Too Fat!  
Often adolescents are very particular about their bodies and strive to meet mainstream standards of beauty. Often this desire to look “good” leads them to eat too much or too little. The adolescent needs a lot of calories and other nutrients, due to rapid growth and increased physical activity. If they eat food that is lacking in nutritional value or do not eat enough, their growth will be affected adversely.

Nutritional deficiencies during this period retards physical growth, impairs intellectual development and delays sexual maturation. The diet of adolescents should meet the demands of physical and intellectual growth, provide adequate reserves for illness/pregnancy and prevent onset of diseases related to nutrition.

Why I Eat What I Eat

Objectives  
To enable sharing of the group’s anxieties about eating.  
To give information on adequate nutrition during adolescence.

Materials  
Flip charts and markers.

Time  
45 minutes.

Process  
Ask the participants to divide into groups of 5 or 6.

Explain that during adolescence the body needs extra nutrients. In many cases however, young people are too worried about their looks to pay adequate attention to their body requirements. In other cases, young people may not be able to get adequate nutrition due to poverty, cultural myths and taboos.

Food is critical for survival and healthy life.

Ask them to discuss their daily diet and anxieties or concerns they have regarding their eating habits. Invite them to use flip charts and markers to record the discussion for presentation.

Allow the groups 20 minutes to do this exercise.

Reconvene the large group, and ask each group to make their presentation.
You can use the following questions to facilitate a discussion:

- What is the average diet of a young person in your group?
- Do you notice any differences between the diet of a young man and a young woman? What and why?
- Do you know of any beliefs or taboos regarding food in your society? What are they?
- What could be the reasons for not eating enough?
- Are there any differences between men and women regarding the consumption of food? What and why?
- Do you have a friend who does not get enough to eat or know someone who avoids food on purpose? Would you like to share your knowledge with the group?
- Are you familiar with the terms “anorexia” and “obesity”? What do these mean to you?

**Note for the facilitator**

This exercise helps the participants to explore their eating habits and creates an environment for discussion on food and its importance in the lives of young people. It also allows you to facilitate an exploration of socio-cultural and gender dimensions of food. Make sure that information is given in a language understood by the participants and that it is useful for the participants. For example, young people living on the streets may not find it useful to learn about food they cannot afford or access.

**HELPLINE for the peer educator**

**Some facts about food**

**Proteins and carbohydrates:** are available in pulses, cereals, vegetables, meat, fish, eggs etc. Generally protein and carbohydrate requirements can be met through the consumption of a diet consisting of a combination of these items during the course of the day.

**Minerals:** are available in fruits, vegetables and dairy items like milk and yogurt. Since there is an increase in skeletal mass and blood volume, the body needs calcium, phosphorus and iron.

**Calcium:** calcium intake must be increased. Adolescents should drink at least one glass of milk a day and consume milk products like cheese and yogurt, as they are a rich source of calcium.

**Iodine:** the iodine requirement can be easily met through the consumption of iodized salt in food. Usually iodine deficiency is found in remote rural areas and places where iodized salt is not available.

**Iron:** lack of adequate iron in the diet results in anaemia. An anaemic person looks pale and feels tired easily. Sometimes, upon recommendation from a doctor, it may become necessary to take iron tablets. Iron demand increases in adolescents due to rapid increase in blood volume and muscles.
In boys, iron deficiency occurs due to rapid muscle growth if it is not adequately supplemented. In girls, it occurs due to menstruation in addition to the rapid growth, if it is not adequately supplemented. The effects of iron deficiency are more profound in girls. In most developing countries, women suffer from anaemia. Anaemia in pregnancy leads to low birth weight babies and complications during pregnancy and delivery.

Green leafy vegetables, puffed rice, red meat, whole pulses and fruits, such as dates, are a good source of iron. For better absorption of iron, one should also eat food rich in vitamin such as citrus fruits (lemons, grapes, oranges), amla and sprouted grains, such as black gram and green gram.

**Obesity and Anorexia Nervosa**

Obesity and anorexia nervosa are two increasingly common eating problems of youth in urban areas.

**Obesity:** A person is considered fat or obese if his/ her body weight is 20% or more over the weight considered normal for that age, height and body frame. Adolescence is a vulnerable period for obesity. During puberty, when the rate of growth is accelerated, young people feel very hungry. These hunger pangs also are heightened during periods of depression. If the adolescent does not do enough physical exercise, eats at irregular intervals and eats food high in fats and carbohydrates, s/he may become obese. Obesity in adolescence may persist in adult life and has significant implications. It can lead to cardiovascular problems and hypertension.

**Anorexia Nervosa:** this refers to a persistent refusal to eat, which appears to be motivated by the pursuit of extreme thinness and a fear of gaining weight rather than genuine lack of hunger (Wicks-Nelson and Israel, 1984, p. 120). It is largely a female disease, with only about 5 to 15 percent of reported cases being male. The highest incidence is in females between the ages of 15 to 24, and it occurs most frequently in higher socio-economic strata of society (Jones, Fox, Haroutan, Babigian, and Hutton, 1980). Characteristics associated with this disorder include - loss or disruptions in the menstrual cycle, sensitivity to cold and sleep disturbances.
Session 3.7
Nutrition during Adolescence

Expected Outcomes
Participants will analyze their daily diet and know whether the food they eat is healthy, or not.
Participants will know what food is healthy and essential for a strong body.

Is My Food Healthy?

Objective
To learn about good nutrition consisting of food from the essential food groups.

Materials
Flash cards, markers.

Time
1 hour.

Process
Invite the participants to sit in a circle on the floor. Explain that they will be doing an exercise to understand the nutritional value of the foods they eat.

Ask a volunteer to sit in the circle with a stack of flash cards and markers. Ask the participants to call out the food they eat during the course of the day.

Ask the volunteer to record the names of the food called out by the participants on flash cards, and place it on the floor so that every one can see it. Encourage the group to help the volunteer write and arrange the cards.

The cards may contain names food prepared with a combination of ingredients. Ask the participants to specify the things used in the preparation of the food.

After all the cards are ready and placed in the centre of the circle, ask the participants to classify/categorize the cards according to what they think they gain by eating those foods. For example, rice may be classified as carbohydrates.

The participants may not know the technical classifications for the food but allow them to classify according to their own understanding of what each food gives their body.

You can use the following questions for discussion:

- Do all of you eat this food in an average day? Why/Why not?
- Is some food okay to eat for males but not for females? Why?
- Were you comfortable classifying the types of food? Why/Why not?
- Given the choice what types of food would you like to eat? Why?
- Why are you not able to eat the food you would like to eat?
- Do young people require more food? Why/Why not?
- Do you know of any illnesses or deficiencies that may be caused by inadequate food? What and why?

**Notes to the facilitator**

This is a useful exercise to enable participants to analyze their eating habits and the kinds of food they eat - why they eat and what is the benefit of eating what they eat? You can facilitate this process by giving information on the nutritional value of the food they indicate as part of their diet. This could be done either by inviting someone knowledgeable about local food and nutrition (maybe a local doctor) who can give feedback on the nutritional values of the foods, or you could do it yourself by preparing notes in advance on the subject. For the latter, you would have to gather information on local food and its nutritional value.

Since food is a sensitive socio-cultural subject, it is useful to learn about the food normally eaten by the participants so that you can provide feedback. Pre-designed lectures on “good food” and “bad food” are not useful, because often people are not in a position to change the food they eat. You may suggest alternatives to the current food intake as long as they can be accessed locally and are affordable.

Clarify misconceptions and myths related to food and explore the gender dimensions of food - do women eat less, or are they prohibited from eating certain foods? Why?
**Below is a chart of the 5 major categories of food essential for a healthy diet**

This can be used by the peer educator for preparation and as a handout.

<table>
<thead>
<tr>
<th>Protein is the body builder. Builds and repairs body tissue for growth, builds resistance to infections, and supplies additional energy</th>
<th><strong>Vegetables</strong> (Vitamins – A, B1, B2, C, D, E, K)</th>
<th><strong>Carbohydrates</strong> are the main source of energy. Supplies energy to the body</th>
<th><strong>Fruits</strong> (Minerals – calcium, phosphorous, iron, iodine)</th>
<th><strong>Fats and Oils</strong> give more energy than carbohydrate or protein per unit of weight. Supplies essential fatty acids, helps body make use of fat soluble vitamins (A, D, E, K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mussel</td>
<td>Mushrooms</td>
<td>Potatoes</td>
<td>Apples</td>
<td>Butter</td>
</tr>
<tr>
<td>Squid</td>
<td>Tomatoes</td>
<td>Corn</td>
<td>Mangoes</td>
<td>Coconut</td>
</tr>
<tr>
<td>Eggs</td>
<td>Cauliflower</td>
<td>Rice</td>
<td>Grapes</td>
<td>Egg yolk</td>
</tr>
<tr>
<td>Beef</td>
<td>Eggplant</td>
<td>Cassava</td>
<td>Pomelo</td>
<td>Vegetable oil</td>
</tr>
<tr>
<td>Fish</td>
<td>Bitter gourd</td>
<td>Noodles</td>
<td>Custard</td>
<td>Palm oil</td>
</tr>
<tr>
<td>Chicken</td>
<td>Sugar peas</td>
<td>Taro</td>
<td>apples</td>
<td>Breads</td>
</tr>
<tr>
<td>Shrimp</td>
<td>Shallots</td>
<td>Sugar cane</td>
<td>Lychee</td>
<td>Beans</td>
</tr>
<tr>
<td>Crab</td>
<td>Kale</td>
<td>Yams</td>
<td>Mangosteen</td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>Bell peppers</td>
<td>Sugar</td>
<td>Rose apples</td>
<td></td>
</tr>
<tr>
<td>Peanuts</td>
<td>Pumpkin</td>
<td>Bread</td>
<td>Oranges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coriander</td>
<td></td>
<td>Pineapple</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lettuce</td>
<td></td>
<td>Banana</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Onions</td>
<td></td>
<td>Langsat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Garlic</td>
<td></td>
<td>Zalacca</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sweet peppers</td>
<td></td>
<td>Milk/ milk products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bird peppers</td>
<td></td>
<td>Salt</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cucumbers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cabbage</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The facilitator can use this chart to give feedback on the nutritional value of the food consumed by the participants.

During the course of the day, if a person eats at least one item from each of these groups, s/he is eating the nutrients required by his/ her body.