This document presents the third of five newsletters on sex education for parents. The newsletters were designed to help parents increase their ability to communicate with their adolescents about sexual issues. They explore the origins of the parents' feelings about sex; teach the importance of a healthy self-concept and how to build it in the adolescent; unravel the physical, social, and emotional mysteries of adolescence; and develop some skills that will help parents talk about sex with their adolescents. The specific goals of this newsletter on puberty and adolescence are to help parents have a better understanding of: (1) the difference between puberty and adolescence; (2) the physical, social, and emotional changes that occur during adolescence; (3) adolescent tasks and characteristics; (4) the myths associated with adolescence; (5) the reproductive and sexual response systems; (6) the myths about masturbation, homosexuality, and nocturnal emission; (7) the process of menstruation; and (8) the connection between self-esteem and the adolescent's ability to handle the pressures and changes of this stage of development. The newsletter is presented in workbook format with spaces provided for parents to write answers to questions and exercises. It concludes with a reference list and a short list of suggested readings for parents. (NB)
Growing Pains

SEX EDUCATION FOR PARENTS
A Newsletter Series
by
The University of Connecticut
Cooperative Extension Service

Letter I  Sexuality
Letter II  Self-Esteem
Letter III  PUBERTY/ADOLESCENCE
Letter IV  Communication and Negotiation
Letter V  Talking About Sex

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DIFFERENCE BETWEEN ADOLESCENCE
AND PUBERTY

The term ADOLESCENCE describes youth between the ages of 9 to 19. "Adolescence" is an in-between stage. Youth are in-between childhood and adulthood. Many cultures (groups of people) do not have this in-between stage, their children go directly from childhood to adulthood.

The term PUBERTY describes the physical, social, emotional, and intellectual changes that take place during adolescence. Actually puberty is the beginning of adolescence. It may start as early as age 9 or as late as age 14 for girls and as early as 12 or as late as 16 for boys. This growth is the most intense and rapid of any stage in human development. Boys and girls in all cultures go through puberty.

CHANGES DURING PUBERTY

How do these changes begin? They start with the Pituitary Gland in your brain. This gland controls the hormone balance of the body. It produces the gonadotropic hormones which stimulate the activities of the gonads or sex glands. This increases the production of sex hormones and the growth of mature sperm in males and mature ova in females. The sex hormones are called testosterone in males and estrogen in females.

How and when you grew was determined by your heredity and your environment. It meant more than just getting bigger. If growing up was just getting bigger, today you would look like this.
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PHYSICAL CHANGES

Place a number in each circle to show in what order you think the male changes take place.

You didn't just get bigger, you grew and developed in many ways. There were visible and invisible signs telling you that you were changing from a girl to a woman or from a boy to a man. They are called secondary and primary sex characteristics.

(Answers found on page 12.)

Place a number in each circle to show in what order you think the female changes take place.

How did you feel about your changing body?

Many adolescents feel sensitive, self-conscious, ashamed, or proud of these physical changes. This worry and preoccupation with physical changes will lessen as they grow older, the changes are completed, and nearly everyone is at the same stage of development.

EMOTIONAL AND SOCIAL CHANGES DURING PUBERTY

Your adolescents may be frightened by the intensity of their emotions. We call these ups and downs "mood swings." It is important that you understand the reasons for these mood swings so you can explain them to your adolescents and be more tolerant of their "moodiness."

Some changes are:
- they are more critical of themselves and others
- they want to be more independent
- they need to be accepted by peer group
- they have increased need for privacy
- they have a strong desire to make commitments to causes and people
• they show increased interest in their own sexuality and a new interest in the opposite sex.
• they show impulsive behavior
• they question adult decisions and values

WHY DO ADOLESCENTS START QUESTIONING EVERYTHING?

One of the most difficult changes for adults to accept in their adolescents is their need to question almost everything. Questioning is their way of finding out and making sense of their world. It is like trying on hats. You don't intend to buy all of them but you want to know which one fits the best and looks the nicest. Instead of being upset with your adolescent's behavior try to look at it as their way of acquiring the beginnings of mature judgement and thinking through the values you and others have been "throwing" at them for the last 9 to 14 years.

WHY HAS ADOLESCENCE BECOME SOMETHING TO DREAD?

Through the years many myths have come to be associated with adolescence. Which of the following statements are MYTHS and which are FACTS? Please circle the correct answer.

1. Adolescence is a time of extreme mood swings which causes serious problems. MYTH FACT
2. Adolescents are all alike. MYTH FACT
3. Age, physical growth and maturity develop simultaneously. MYTH FACT
4. Adolescence is transitional — the boy or girl will grow out of it. MYTH FACT

All of these are MYTHS. These myths have contributed to the idea that adolescence is a time of terrible "stress and storm." LET'S TAKE A LOOK AT SOME OF THESE MYTHS:

MYTH #1
Adolescence is a time of extreme mood swings which causes serious problems

FACT: 80% of all adolescents will cope with this stage just fine. Most adolescents do have mood swings. However, these mood swings seldom lead to serious problems. Most adolescents will not have any more or any less difficulty getting through adolescence than they did getting through the different stages of childhood. But you say, "my child didn't give me any trouble until he or she was an adolescent." This may be true but it may be your reaction to their behavior that is causing the problem rather than the behavior itself. If you are parenting your adolescent the same way you parent your eight year old then you will have problems.

MYTH #2
Adolescents are all alike.

FACT: Physically, socially, emotionally and intellectually, none of us arrives at a particular stage at the same time. Look at a class of 13 year olds — to be told a person is 13 is to be told just about nothing except maybe the person's grade in school.
MYTH #3

Age, physical growth and maturity develop simultaneously (synchronized growth).

FACT. An adolescent can look physically mature and act seven years old or look like 10 years and act 16. If you treat a smaller-than-average boy like a child long after he is able to make adult decisions, or a physically developed 12-year-old girl as an adult, you risk doing them serious psychological harm.

MYTH #4

Adolescence is transitional — the boy or girl will grow out of it.

FACT. When you view this stage as transitional, you run the risk of not taking your young people seriously. This, in effect, denies them the assistance they need from you to face the changes.

WHY DO ADOLESCENTS DO THE THINGS THEY DO?

Each stage of development carries with it a certain set of tasks to be completed. You need to know what these tasks are for adolescents. If you do not know what these tasks are you can hinder their growth and development.

First Set Of Tasks:

The first task of adolescents is to grow. This stage is second to none in the rate of growth; some of the results of this sudden and extreme growth are:

Problems with Coordination: It is common to hear a parent complain that an adolescent has suddenly become so clumsy that he or she “trips over the linoleum.” This problem is caused partly by the general change in the body which takes getting used to, and partly by the fact the different parts of the body grow at different rates.

Nutritional Deficiencies: This may be hard to believe if you are feeding an adolescent. Because of the rapid growth and changes occurring in the teen’s body, there is a tremendous need for body building foods, especially protein and calcium. Very often adolescents rely on “junk foods,” sugar rich, which burn up quickly and don’t help body growth.

Obesity: While a highly active teen may burn up all the calories eaten, those teens whose daily calorie intake exceeds their energy output may start to get fat. The best way for teens (and adults too) to control obesity is to increase their activity level and to eat more foods containing body strengthening protein and calcium and fewer foods containing sugars and fats.

Fatigue: A growing and changing body uses a great deal of energy. Poor diet and lack of adequate rest can affect the adolescent quite severely. Encourage your teen to eat well, sleep longer, and rest for short periods during the day.

Skin Blemishes: Acne affects about 85% of all adolescents and may contribute to a lowered self-esteem. During adolescence oil glands become more active, and oily skin produces blackheads or pimples. Most doctors agree that the best treatment for ordinary acne is keeping the face very clean and keeping fingers away from any blemishes. If your teen has severe acne see a doctor for treatment because it can leave scars.
Second Set of Tasks:

The second set of tasks are grouped under socio/emotional development.

Who Am I: For years your children’s values have been a reflection of your values and ideas. Now they are beginning to form their own values. They are searching for their own identity. They are trying to answer the question, “Who Am I?”

Forming Commitments: They begin to develop lasting relationships with others. They also make commitments to sports or to a job such as babysitting, yard work, or a paper route.

Separation: This is the beginning of the untying of the apron strings. However, it is not unusual to hear a parent say, “One minute my son is acting like an adult and the next he is acting like a child.” Separation is not an all or nothing task. It takes time. Adolescents actually do remain close to their parents values while struggling for the autonomy to make choices. The adolescents’ desire for increasing independence does not occur in every area all at once. They continue to need adult guidance and help in setting limits and they need support and comfort at certain times.

Abstract Thinking: Young people begin to think beyond the limits of what they have actually experienced. Some begin to imagine what their future might be, where they will live, what they will do, and whom they will marry. In early adolescence this ability is just starting. Many adolescents may understand what they have learned about preventing sickness yet not be able to apply what they have learned in a health class to their own behavior. This abstract thinking sometimes causes the adolescent to lose touch with reality:

I am the Center of Attention or Self-consciousness: They assume that everyone is watching and listening to them. This feeling will lessen as the adolescent becomes an individual with an inner identity.

No One Understands Me: “Nobody knows how I feel” or “I can’t talk to anybody.” This gives a feeling of being alone.

It Won’t Happen To Me: This brings on the risk-taking behavior that keeps parents from letting go for fear of what might happen to “their child.” The adolescent thinks “I won’t get pregnant,” or “I won’t wreck the car,” or “I won’t fail the test.” They think they are immune to the consequences of their actions. It could happen to others but not to them.

Looking Back Exercise

Let’s take a trip to memory lane. Do you remember feeling or thinking “everyone is looking at me,” “nobody understands me,” or “it won’t happen to me?” Write down your thoughts about these feelings and share them with your adolescent, spouse, partner or good friend.

Were the apron strings that held you untied or did you have to break them? Write down any feelings you remember, and any specific things that were said or done that helped or hindered the untying of those strings.

I am a person who... (Take three minutes, yes, actually time yourself, and write down thoughts that come to mind.)
HOW DO HUMAN BEINGS REPRODUCE?

There are many changes that take place during adolescence. However, the fundamental changes are the sexual ones. It is at this stage of development that male and female reproductive systems mature enough to make it possible to produce another human being. To understand human reproduction we need to take a look at the reproductive parts of the human body. The following quiz is designed to test your knowledge of those reproductive systems.

Female Reproductive System:
Match the definition from Column 2 with the word it describes in Column 1.

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Reproductive Organs</td>
<td>Definitions</td>
</tr>
<tr>
<td>1. Anus</td>
<td>A. Tube through which urine passes from the bladder.</td>
</tr>
<tr>
<td>2. Bladder</td>
<td>B. A muscular passageway from the outside of the woman's body to the uterus. It is the birth canal and organ for sexual intercourse.</td>
</tr>
<tr>
<td>3. Cervix</td>
<td>C. A sac which contains sleeping (undeveloped) eggs.</td>
</tr>
<tr>
<td>5. Egg</td>
<td>E. A body sac in which urine is collected.</td>
</tr>
<tr>
<td>6. Fallopian Tube</td>
<td>F. The lips or folds of skin which cover the openings of the vagina and urethra.</td>
</tr>
<tr>
<td>7. Latia</td>
<td>G. A pear-shaped nest inside the woman. The baby grows in this nest when a woman becomes pregnant. It can expand to hold the baby as it grows larger.</td>
</tr>
<tr>
<td>8. Ovary</td>
<td>H. The opening from which solid waste materials leave the body.</td>
</tr>
<tr>
<td>9. Urethra</td>
<td>I. A highly sensitive area just above the opening of the urethra.</td>
</tr>
<tr>
<td>10. Uterus</td>
<td>J. A long passageway from the ovary to the uterus. A ripened egg is swept into it from the ovary and travels inside it to the uterus.</td>
</tr>
<tr>
<td>11. Vagina</td>
<td>K. The small opening from the uterus to the vagina. It must dilate (open) right before the baby is to be born.</td>
</tr>
</tbody>
</table>

THE JOURNEY OF THE EGG (OVULE)

JOURNEY OF THE EGG (FRONT VIEW)

PLEASE PLACE THE PROPER NUMBER FROM ABOVE IN THE BOXES.
How Does Human Life Begin?

Now that you have had a review of the reproductive systems let’s review the process of how a human life begins. When a man becomes sexually aroused, the blood vessels in the penis fills with blood causing it to become erect. During intercourse the penis is inserted into the woman’s vagina where semen is released or ejaculated. If ovulation (the release of an egg from the ovary into the fallopian tube) has taken place the sperm which is traveling up through the uterus into the fallopian tubes will attempt to find the egg cell and be united with it (th... is called conception or fertilization). The resulting cell will grow and divide on its way to the uterus where it will implant itself in the lining and grow for the next nine months.

What happens if conception does not occur?

Shortly before ovulation, the uterus builds up an extra lining (endometrium) to nourish a fertilized egg. If the egg is not fertilized, no baby will develop. The lining will not be needed and is discharged from the uterus through the vaginal opening to the outside of the body. Most of the menstrual flow is blood with some tissue in it. The flow usually lasts from three to five days and during that time a woman will wear a sanitary napkin or tampon to keep the flow from staining her clothes. The process of menstruation begins in puberty and continues until a woman is about 45 to 50. At first, periods will be irregular. In about a year the flow will occur about every 26 to 33 days. Parents can help prepare their daughters by explaining what is going to happen and conveying that this event is a natural part of growing up.

SOME FACTS YOU SHOULD KNOW

During this period of growth sexual thoughts and actions become evident. Therefore, here are some facts you should know.
Masturbation
Masturbation, or touching one's own sex organs for pleasure, is a very common practice that often starts during adolescence. Many males and females masturbate throughout their lives, while many others do not. Masturbation does not cause mental problems, blindness or any other health problems. Masturbation can be a problem if it interferes with a person's daily activities and in building interpersonal relationships. It can also cause guilt if a person has been taught that it is wrong.

Nocturnal Emissions or Wet Dreams
The term nocturnal emission means literally “night time coming out.” This discharge of semen during sleep is common during adolescence. It is a sign that your adolescent is becoming capable of reproducing another human being. It is not bad or harmful to one’s health and many boys have their first ejaculation in this manner.

Circumcision
At birth the head of the penis is covered by a fold of skin called the foreskin. Sometimes, for cleanliness or religious custom, most of the foreskin is removed by a simple surgical procedure called circumcision.

Homosexuality
There is a lot of talk and information about homosexuality that may cause you to worry that your adolescent may become a homosexual. It is not unusual for boys and girls to have an attraction for the same sex. Some also have crushes on older persons of the same sex. Young people may play sex games with others of their own sex or have homosexual fantasies or dreams. This does not mean that they are homosexual. Young people also worry that they are homosexual if they find themselves sexually attracted to members of the same sex, or if they have acted upon that attraction they may think they are homosexual for life. This may keep them from exploring sexual relationships with the opposite sex.

It is important that you talk to your sons or daughters about homosexuality, assuring them that their attraction to the same sex is a normal part of development and will probably not last. Whether it lasts or doesn't, they still need you. Help your adolescents talk about their feelings and assure them of your love and support. If you need more information, check your local bookstore or look up the references on adolescent sexuality at the end of this letter.

The physical and emotional changes occurring in adolescence bring a variety of feelings. They range from wonderment, excitement and strong sex drives to fear, embarrassment and guilt. Parents' sensitivity to the adolescent's needs, bodily changes and feelings can help make adolescence a healthy growth experience. Adolescents who have concerns about their sexual feelings and behavior often feel very alone. It is hard to talk about sexual problems and adolescents often feel that parents will not understand. It is especially hard if they cannot talk to you about other problems as well. In your next letter we will talk about how to communicate with your adolescent.
Myths about adolescence can make this stage more difficult than it needs to be. These myths deal with homogeneity or sameness of adolescents, synchronized growth and the stage of adolescence as transitional.

Adolescents look more to peers now, but parents continue to be an important stabilizing force in their lives.

The tasks of adolescents are adjusting to physical changes and searching for their own identity.

Puberty is a time of rapid physical change.

Adolescence includes puberty and all the social and emotional change that accompany it.

The way adolescents handle these tasks is determined by the way they feel about themselves (self-esteem), and the way they feel about themselves is affected by how well they handle the tasks. Each affects the other.

Let's summarize:

The tasks of adolescents are adjusting to physical changes and searching for their own identity. Puberty is a time of rapid physical change. Adolescence includes puberty and all the social and emotional change that accompany it. The way adolescents handle these tasks is determined by the way they feel about themselves (self-esteem), and the way they feel about themselves is affected by how well they handle the tasks. Each affects the other.
SUGGESTED READINGS:
The following information has been compiled to serve as a resource guide for those who want to learn more about puberty, adolescence and sexuality:


Reference material used in this letter:

Harris, Nancy, Todd, Kay. The Birds, Bees and The Real Story. Network Publications, Santa Cruz, CA 1980.

Lipsitz, Joan Schiff. Adolescent Development. Myths and Realities, Center of Early Adolescence, School of Education, University of North Carolina, Chapel Hill, 1980.


Answers to body clock quiz from page 3.

Female Body Clock
1. Breast budding
2. Growth of body pelvis
3. Growth spurt
4. Pubic hair
5. First menstruation
6. Underarm and coarser body hair
7. Oil and sweat glands activated
8. Growth of uterus and vagina completed

Male Body Clock
1. Growth of testes and scrotum
2. Straight pubic hair
3. First ejaculation
4. Growth spurt — arm, legs, and penis
5. Voice change (growth of larynx)
6. Underarm and coarser body hair
7. Oil and sweat glands activated
8. Facial hair (beard)
TWO ACTIVITIES TO DO WITH YOUR 9 TO 14 YEAR OLD

I. Using a separate sheet of paper, complete the Anatomy Quiz found on pages 7 & 8 with your adolescent. Then answer the following three questions and discuss your answers with your spouse and/or adolescent.

1. How did you feel during this exercise with your adolescent?

2. What did you learn about your adolescent?

3. What did you learn about yourself?

II. Complete the How Knowledgeable are We quiz with your 9 to 14-year-old. This is designed to help you talk together about sexual issues or topics. It is not a test. Then answer the following questions:

1. What did you learn about your 9 to 14-year-old?

2. What did you learn about yourself?

HOW KNOWLEDGEABLE ARE WE?

Complete the following quiz with your adolescent by marking the following statements either true or false. The quiz is provided to help you practice talking with your adolescents about sexual matters. Some of the correct answers and information needed to complete the quiz are contained in this letter. The rest will be given in the next letter.

1. Eggs from one ovary produce male children, and from the other female children.
2. A woman may ovulate at any time during her menstrual cycle.
3. Fertilization of the egg (conception) occurs in the vagina when sperm is deposited there through sexual intercourse.
4. Douching is one of the adequate and satisfactory methods of contraception.
5. Sterilization is a very unpopular method of birth control because it diminishes the person's sexual desires.
6. A person is likely to contract a venereal disease if he or she uses a toilet seat that has been used by an infected person.
7. Both men and women can tell if they have V.D.
8. If you tell teens about sex they will go out and try it.
9. Since sex education is required in our schools, most children will eventually have the necessary information.
10. Of teens 18 years and under, about 75% have had sexual intercourse. For boys and girls under 14 it is about 25%.
11. The most frequent site for teenage sexual activity is in a parked car.
12. It is more dangerous for a teenager to get pregnant than a woman in her 20's.
13. More males masturbate at one time or another during their lives than females.
14. Puberty is the best time for parents to begin educating their children about sex.
15. Wet dreams are a natural occurrence of the male developing body.
16. Puberty occurs for all males and females from ages of 12 to 14 years of age.
END

U.S. Dept. of Education

Office of Educational Research and Improvement (OERI)

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