Growth and Development
Grooming and Hygiene Vocab

Adolescence: _____

Puberty: _____

Pituitary gland: _____

Hormones: _____

Primary sex trait: _____

Secondary sex trait: _____

Scoliosis: _____

Plaque: _____

Enamel: _____

Flossing: _____

Fluoride: _____

Cavity: _____

Halitosis: _____

Melanoma: _____

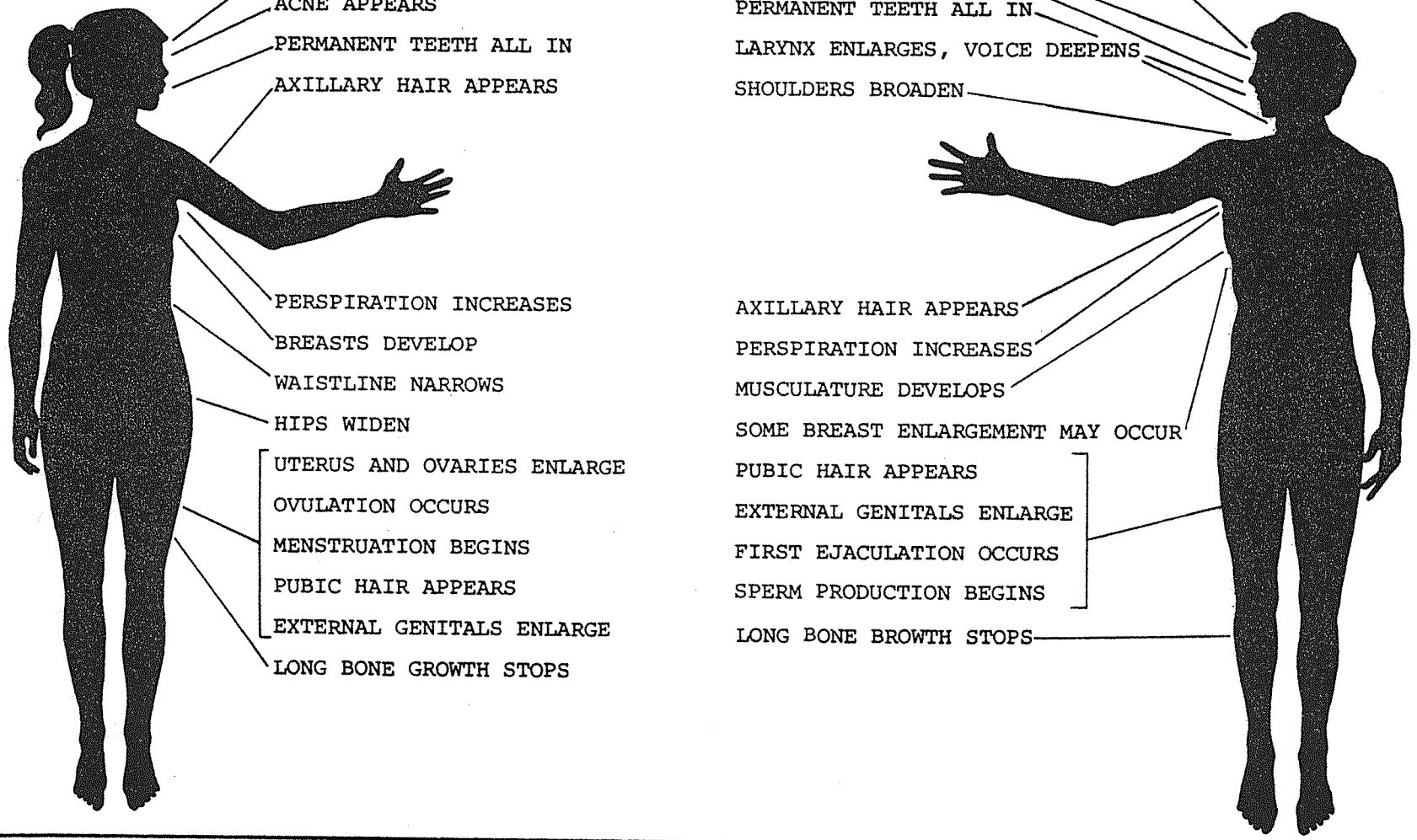
Melanin: _____

SPF#: _____

Acne: _____

a. Pimples _____
b. Blackheads _____
c. Whiteheads _____
d. Sebum _____

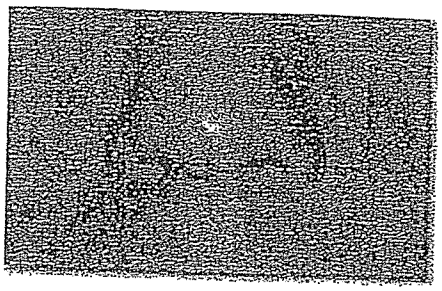
PHYSICAL CHANGES OF PUBERTY



KidsHealth

What Acne Is and What You Can Do About It

If you're a teenager or almost a teenager, chances are pretty good that you have some acne. Almost eight in ten teenagers have acne, along with lots of adults. In fact, if you counted all the adults and teens in America who have acne, you'd come up with 17 million people!



Acne is very common - so common that it's considered a normal part of puberty. But knowing that doesn't always make it easier when you're looking at a big pimple on your face in the mirror. Luckily, learning about acne and taking some simple steps can help you feel better about your face.

What Is Acne and What Causes It?

Acne is a condition of the skin that shows up as different types of bumps. These can be blackheads, whiteheads, pimples, and cysts. The type of acne that a lot of teenagers get is called "acne vulgaris." It usually shows up on the face, neck, shoulders, upper back, and chest.

The hair follicles, or pores, in your skin contain sebaceous (say: seh-bay-shuss) glands (also called oil glands). These glands make sebum (say: see-bum), which is an oil that lubricates your hair and skin. Most of the time the glands make the right amount of sebum, and the pores are fine. But sometimes a pore gets clogged up with too much sebum and dead skin cells.

If a pore gets clogged up and stays closed but bulges out from the skin, you're left with a **whitehead**. If a pore gets clogged up but stays open, the top surface can darken and you're left with a **blackhead**. Sometimes the wall of the pore opens, allowing sebum, bacteria, and dead skin cells to make their way under the skin - and you're left with a small, red infection called a **pimple**. Clogged up pores that open up very deep in the skin can cause cysts, which are infections that are bigger than pimples.

Why Do So Many Teens Get Acne?

Teenagers get acne because of all the hormones that come with puberty. As your body begins to mature and develop, these hormones stimulate the sebaceous glands to make more sebum, or oil, and the glands become overactive. When there is too much sebum, it clogs the pores and leads to acne. For most people, acne goes away almost completely by the time they are finished being teenagers. If your parents had acne as teenagers, it's likely that you will, too.

What Doesn't Cause Acne?

There are a lot of things that don't cause acne, but many people have the wrong idea about this. **The only real cause of acne is overactive oil glands in the skin - and that's it.** Acne isn't caused by eating greasy foods like french fries or pizza, chomping on chocolate, or drinking dark sodas. It isn't necessarily caused by wearing makeup, especially if the makeup is labeled "oil-free," "noncomedogenic," or "nonacnegenic." And stress doesn't usually cause acne in teenagers (although it can in adults).

What Can I Do About Acne?

To help prevent the oil build-up that can contribute to acne, wash your face twice a day with soap and warm water. Don't scrub your face hard with a washcloth - acne can't be scrubbed away, and scrubbing may actually make it worse by irritating the skin. Try using just your hands instead.

If you wear makeup, make sure it's labeled "oil-free," "noncomedogenic," or "nonacnegenic." This means it won't clog your pores and contribute to acne. And when you are washing your face, be sure you take the time

emove all of your makeup. If you use hair sprays or gels, try to keep them away from your face, as they can also clog up pores. If you have long hair that touches your face, be sure to wash it frequently enough to keep oil away. And if you have an after-school job that puts you in contact with oil - like in a fast-food restaurant or gas station, for example - be sure to wash your face well when you get home. Also wash your face after you've been exercising hard and sweating a lot.

There are many lotions and creams available at the drugstore to help prevent acne and clear it up at the same time. You can experiment with these to see which helps. Be sure to follow the instructions exactly - don't use more than you're supposed to at one time (your skin may get too dried out and feel and look worse), and follow any directions for seeing if you're allergic to it first.

What if I Get Pimples Anyway?

Sometimes even with washing and lotions and oil-free makeup, kids get acne anyway - and it's still totally normal. In fact, some girls who normally have a handle on their acne may find that it comes out a few days before they get their period. This is called premenstrual acne, and about seven out of ten women get it from changes in hormones in the body.

If you look in the mirror and see a pimple, **don't touch it, squeeze it, or pick at it.** This might feel hard to do - it can be pretty tempting to try and get rid of it. But when you play around with pimples, you can cause even more inflammation by poking at them or opening them up. Plus, the oil from your hands can't help! More importantly, though, picking at pimples can leave tiny, permanent scars on your face.

Acne isn't really helped by the sun, either. Although a suntan can temporarily make acne look less severe, it n't help it go away permanently. And too much sun isn't a good idea, anyway, since it can cause wrinkles ..d skin cancer later in life. So don't soak up those rays - either under the sun or from a tanning bed - in an effort to help your skin.

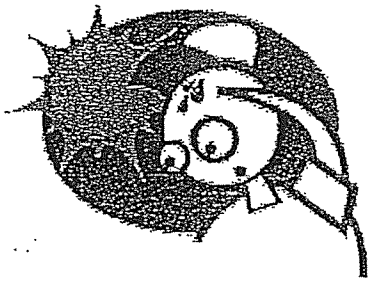
Some teenagers who have severe acne can get help from a doctor or dermatologist (a doctor who specializes in skin), who can treat the acne with prescription medicine. Depending on the person's acne, this can mean using stronger creams than you can buy at the store that prevent pimples from forming, or taking antibiotics that kill the bacteria that help create pimples. Sometimes in the case of cystic acne, minor surgery can be done.

Most importantly, remember that you're not the only one with acne. Looking around at your friends should help you see that most teenagers are in it together! And of course, keep in mind that acne doesn't hang around forever, and that within a few years you won't have it anymore.

KidsHealth

What's Sweat?

You're biking quickly up the hill, your legs pumping and your tongue hanging out as you lean over and pedal even harder. You're almost there and - hello, what's this?! Your back is all wet, and so is your forehead. Don't sweat it - it's only sweat!



Normally, your body works best when it's about 98.6 degrees Fahrenheit (37 degrees Celsius). When your body gets hotter than that, your brain doesn't like it - it wants your body to stay cool and comfortable. So the part of your brain that controls temperature, called the hypothalamus (say: hi-poh-tha-luh-mus), sends a message to your body, telling it to sweat on the double!

The sweat glands in your skin start doing their duty by making sweat. Sweat is also sometimes called **perspiration** (say: per-spuh-ray-shun). The sweat is made almost completely of water, with tiny amounts of other chemicals like ammonia, **urea** (say: you-ree-uh), salts, and sugar. (Urea is what's left when your body breaks down protein.) The sweat leaves your skin through pores (these are like tiny holes in the skin) and brings your body's heat out into the air. When the sweat hits the air, the air makes it evaporate (this means it turns it from a liquid to a vapor). As the sweat evaporates off your skin, you cool down. Whew!

Why Does Sweat Smell?

But the next time you get a whiff of yourself after running around outside and want to blame your sweat glands, hold on! Sweat by itself doesn't smell at all. It's the bacteria that live on your skin that mix with the sweat and give it its stinky smell. And when you reach puberty, special hormones affect the glands in your armpits - these glands make sweat that can smell super funky.

Luckily, regular washing with soap and water can keep those stinky bacteria and sweat combos under control. Many teens and adults also find that wearing deodorant or antiperspirant (say: an-tee-per-spuh-rent) keeps their pits smelling pretty.

If you're losing too much water through your skin, though, you have to make sure you put it back in your body by drinking tons of water and avoiding dehydration.

So don't worry about being a drip the next time you sweat - it's totally normal and everybody sweats. Sometimes too much sweating can be a sign that there is something wrong in the body, but this is rare in kids. It's usually just a sign that it's time to start using a deodorant or antiperspirant. If you think you have a sweat problem, though, talk to your mom or dad or your doctor about it.

Oral Hygiene

Taking measures to keep your mouth clean is essential for excellent dental health. A daily oral hygiene regimen is needed to remove the dental plaque that causes tooth decay and gum disease. And good oral hygiene not only helps prevent cavities, but is necessary to battle bad breath. After all, we go to great lengths to look and smell pretty -- why not treat our teeth as well as we treat our bodies?

Making an effort to focus on your dental health will not only produce a dazzling smile, but has some added benefits as well. Since oral health is linked to overall health, good oral hygiene can improve your well-being. When your oral health is neglected, bacteria multiply and wreak havoc on your mouth.

If gums become infected with periodontal disease, harmful bacteria can actually enter the bloodstream and make its way to other parts of the body. Practicing good oral hygiene can reduce your chances of developing complications or illnesses from a dental disease and could prevent the need for a costly gum disease treatment.

At-Home Techniques

A beautiful smile starts with an excellent oral hygiene regimen, so we've provided a few guidelines to help you lay the foundation for at-home care:

Brushing

Brushing is a common oral hygiene practice, yet many people don't do it correctly. Dentists recommend you brush at least twice a day and after meals. After eating, sugars and carbohydrates from food left on teeth combine with the bacteria in your mouth. This produces acids that attack your teeth, leaving you susceptible to tooth decay. A good tooth cleaning after eating will help remove dental plaque bacteria and reduce your chances of getting dental cavities.

Learning how to brush properly is vital. For proper brushing techniques, hold your toothbrush at a 45-degree angle towards the gums. Brush in a back-and-forth motion, making sure to reach every surface of each tooth. And don't forget the tongue -- brushing the tongue will further remove the bacteria that cause bad breath! Your toothpaste may also play a role in the success of your oral hygiene routine -- since there are several toothpastes to choose from, it's best to ask your dentist which will benefit you. The American Dental Association recommends brushing with fluoride toothpaste to greatly reduce dental plaque bacteria.

Remember, a great rule to live by is to brush longer, not harder. You should brush for at least two minutes to remove as much dental plaque as possible. Harder brushing won't actually get teeth cleaner -- it can irritate the tissues in your mouth and actually cause gum damage! Use a soft-bristled toothbrush to protect your gums, and be sure to replace your toothbrush every three months.

Flossing

No matter how well you brush, there are some areas you just won't be able to reach. Flossing removes dental plaque that's hiding in between teeth. Learn how to floss properly with these tips: Start by holding the floss securely with each hand, and ease the floss between teeth. Gently rub the floss up and down, and curve it towards each tooth to cover more surface area. Once you reach the top, slide it under your gum line to remove plaque from beneath the gums. And be sure to use a fresh section of floss for each tooth -- you don't want to put food particles and bacteria back in your mouth!

Flossing at least once a day is recommended to remove the ongoing accumulation of dental plaque that forms between teeth. If you have trouble flossing, dental products are available to help -- waxed floss makes for easier maneuvering and floss holders assist those who have trouble handling the stringy material.

Mouthwash

Antibacterial mouthwashes can also remove the bacteria that cause dental plaque. This helps prevent gingivitis, the first stage of gum disease. Like fluoride toothpastes, fluoride rinses help strengthen teeth and prevent tooth decay.

Diet

You're probably surprised by this one! But healthy eating habits are an equally important part of your oral hygiene regimen. Since sugars and carbs promote tooth decay. the more you eat, the better chances you have of ruining your teeth! Instead, focus on protecting your oral health by eating nutritional foods.

Professional Techniques

Regardless of how well you practice oral hygiene at home, regular dental visits every six months are essential to your dental health. A professional dental cleaning will remove dental tartar that you can't remove on your own. If necessary, your dentist may even perform an in-office fluoride dental treatment. And an exam is not only a good time for a checkup, but for checking in -- a dental hygienist can provide tips on brushing and flossing, and show you areas that need improvement in your oral hygiene routine.

Bad Breath Remedies: Simple Ways to Freshen Up

Bad breath, also known as halitosis, may be caused by a number of factors. We all know that pungent foods such as onions or garlic can cause less-than-fresh breath, but dry mouth, periodontal disease and tobacco use can also contribute.

Bad breath can also be caused by bacteria that feed off of food particles and other debris that sticks to teeth, dental braces or dentures. Thorough brushing and flossing at least twice a day or after eating should take care of the offending odors. Paying specific attention to your tongue while brushing can also help eliminate odors since bacteria can cling to the tongue's surface.

If you are concerned about having bad breath after eating, but do not have time to brush afterwards, chewing gum or sucking sugar-free candy can help stimulate saliva flow which helps wash away bacteria and debris.

What to Do Next

Drinking plenty of water and snacking on crunchy fruits and vegetables such as apples, celery and carrots can also prevent halitosis-causing bacteria from forming. If you smoke, bad breath is one of many health concerns that may affect your decision to quit. Since smoking can cause vitamin C deficiency, which could be contributing to your bad breath, taking a vitamin C supplement may help.

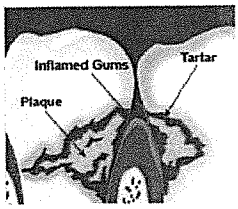
It is also important to understand that infamous bad breath causers - such as onions and garlic - often live up their reputations. Once you begin to digest them, their odor-causing chemicals are absorbed into your blood stream. As they travel through your circulatory system, they may be transferred to your lungs and become detectable in your breath. When this happens, you may be stuck with an unfortunate odor for two days no matter how often you use your toothbrush!

Products like breath sprays, mints and mouth wash are also great ways to mask bad breath on the run but will not treat its root cause and may wear off quickly. If you notice that you are developing chronic bad breath, it is a good idea to speak with your dentist.

If your halitosis is caused by periodontal disease, your dentist can offer a gum disease treatment to relieve symptoms or may refer you to a periodontist to address the underlying cause of your bad breath. If you are prone to heavy dental plaque build up, your dentist may recommend that you use a special antimicrobial mouthwash. Tooth decay can also cause bad breath, so consult your dentist if you don't smell an improvement after a few days. If you need help finding a dentist, give us a call!

Dental Tartar

How do your teeth feel when you roll your tongue over them? Is it smooth like porcelain, or is it rough? If it's the latter, chances are that you have dental tartar buildup.



Unhealthy Gums

Dental tartar, also called dental calculus, is dental plaque that has hardened on your teeth. Dental plaque is a film of colorless bacteria that sticks to your teeth like a needy boyfriend or girlfriend. Bad oral hygiene habits cause dental plaque to build up and dental tartar to eventually collect above your gum line, which provides more sticky surfaces for dental plaque to grow on that again collect dental tartar. It's a vicious cycle.

Not only is dental tartar a dental plaque magnet, but also a stain magnet. It absorbs stain from coffee, tea or smoking so easily that over time, it paints your teeth a strange kind of yellow or brown -- colors that kindergarten kids do not usually associate with teeth.

Dental Tartar Can Lead to Dental Cavities

This dental plaque-and-tartar partnership doesn't just push people away, feeding personal insecurities, but also spawns more serious health issues as well, such as cavities and gum disease that at its best leads to a tooth filling or gum disease treatment but at its worst leads to tooth loss. Yes, dental tartar is stickier than we give it discredit for, also because you can't remove dental tartar yourself. But you can keep it from causing all that mess. Begin by going to your dentist, because only a dentist can remove dental tartar with a dental treatment called scaling and root planing. The dentist or dental hygienist uses special instruments to remove dental tartar from your teeth and below the gumline.

Your responsibility continues outside your dentist's office with preventing dental tartar from coming back. All you need to do is to practice good oral hygiene habits -- brush at least twice a day with fluoride or tartar control toothpaste, floss daily -- and see your dentist regularly every six months. That's not too much to do if you want to tick "mouth," "teeth" or "gums" off your insecurity list.

Without dental plaque and dental tartar drawing bacteria and disease to your mouth, your teeth and gums will be happier than ever -- and you can confidently draw more people to you and your healthy smile. Make sure you visit a dentist regularly to remove dental tartar.

Raise Your Sun IQ

by Melissa Abramovitz

Ready to head for the beach and get a tan? Check out these sun sense facts before you do.

Lindsey loved to hang out at the beach and bask in the sun. Being light-skinned, she burned easily and often ended up with painful blisters and peeling skin. Her doctor warned her that the permanent tissue damage from these sunburns might not show up for many years. Lindsey finally realized she was damaging herself and agreed to wear a sunscreen and to stop sunbathing.

Unfortunately, Lindsey still has a good chance of developing skin cancer. Researchers find that kids and teens who experience three or more serious sunburns are more likely to get skin cancer. In addition, the damage that produces wrinkles and blotchiness builds up over time and can make even young people look old if they do a lot of unprotected sunbathing. Youthful skin is more sensitive to the DNA and other cellular damage that creates these skin disorders, so it's important to be especially careful during the childhood and teen years.

That's not to say that you should forget about sun protection if you've already experienced sunburns or suntans. The dangers are cumulative, so the sooner you start shielding your body from the sun's rays, the less chance you have of developing serious problems. Of course, the best strategy is to protect yourself before the damage begins, so read on to find out how you can raise your sun sense.

Dangerous Rays

Ultraviolet (UV) radiation from the sun is the culprit behind sun damage. UV rays are invisible, so you can't tell when you're getting zapped by them. But if you are outdoors, you are exposed to UV rays even in the shade, because they bounce off surfaces like water, sand, and snow.

UV rays are strongest in the summer, which is why most sun damage occurs then. But they are present all year round. Doctors recommend protecting yourself in all seasons.

Both UVA and UVB rays are damaging to the skin. UVA rays primarily affect cell membranes and destroy collagen, the protein that makes skin elastic. Loss of collagen results in sagging skin and wrinkles. Recent research also shows UVA rays damage cellular DNA and thus contribute to skin cancer. UVB radiation causes most of the burning and frying of the skin and does even more damage to cellular DNA than UVA, making it the main factor in the development of skin cancer.

Both UVA and UVB rays begin injuring the body the minute they strike. To protect themselves from the injury, skin cells produce melanin, a pigmented natural sunscreen. Melanin makes the skin look tan, but unfortunately this

happens after the damage is already done. Everyone, regardless of skin color, is at risk for skin cancers and other skin conditions.

Signs of Skin Cancer

The American Academy of Dermatology reports more than 1.3 million new cases of skin cancer each year in the United States and estimates 80 percent of these cases could be prevented by protecting the skin from the sun's rays. Although skin cancers can be cured if caught early enough, they are often fatal if left alone.

The three types of skin cancer are *basal cell carcinoma, squamous cell carcinoma,* and *malignant melanoma.* Basal and squamous cell cancers often appear as scaly reddish, bluish, or whitish bumps that may become open sores or scabs. They are easily treated if caught before the cancer spreads.

Melanomas are less common but far deadlier than the other forms of skin cancer. Melanoma usually results from several severe blistering sunburns or from skin moles changing and becoming cancerous. Doctors recommend regular checks for any moles or freckles that grow, change shape, bleed, develop jagged edges, itch, or have more than one color. New dark areas of skin larger than ¼ inch with any of these characteristics are also danger signals and should be reported to your doctor immediately.

Protect Yourself

Follow all of these recommendations for total sun protection:

- Stay in the shade as much as possible, especially when the sun's rays are strongest, between 10 a.m. and 4 p.m.
- Wear long-sleeved, lightweight clothing with a tight weave that lets in as little sunlight as possible. Keep clothing dry for best protection.
- Wear a wide-brimmed hat and good-quality sunglasses that block UV rays to protect your face and eyes.
- Rub in plenty of sunscreen. Dermatologists say to use it every day, no matter what your skin type or color. Apply a generous amount to all exposed skin areas about 30 minutes before going outside. Reapply every two hours or more frequently if you swim or sweat, even if the sunscreen is labeled waterproof.

Doctors recommend using products that block both UVA and UVB rays. Most people need a sunscreen with an SPF of at least 15. If you're light-skinned, experts advise at least a 30 SPF.

SPF stands for sun protection factor, a rating that represents how long you can stay in the sun without burning compared to the length of time if you were wearing no sunscreen. A sunscreen with an SPF of 15 usually means you can stay in the sun about 15 times longer than with no sunscreen.

Avoid using sunlamps or tanning booths. Doctors report that these devices are just as dangerous as natural sunlight.

Make sun protection a routine part of your life. It makes a lot of sense. ✦

TEACHER RESOURCE

Warning signs differ in teens, adults

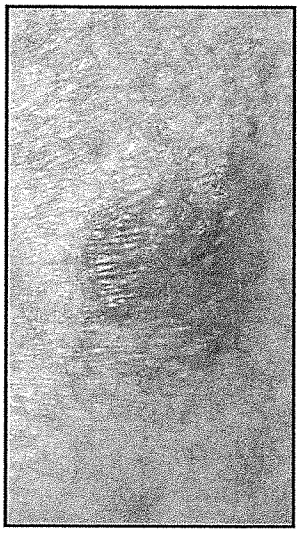
A recent study published in Journal of the American Academy of Dermatology found that children and adolescents diagnosed with melanoma often showed visual symptoms that were less common in adults.

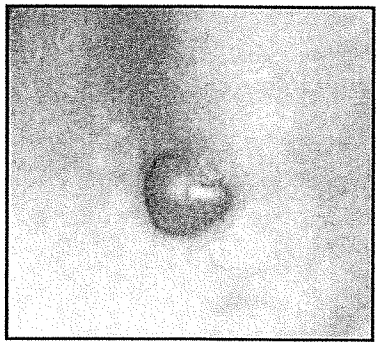
About 80% of adult melanomas exhibit early "ABCDE" warning signs typical of radial melanomas.

A – Asymmetry (one half of lesion not the same as other half)
B – Borders are irregular, uneven, or notched.
C – Color may be non-uniform
D – Diameter generally larger than ¼"
E – Evolution (visual properties changing with time). Applies to all types of melanoma.

In contrast, 40% of patients 11 – 19 years old and 60% of those under age 10 did not exhibit the ABCD signs but instead presented these signs that are more typical of nodular melanomas:

Amelanotic (pink, red, or flesh colored)
Bleeding
Bumps
Uniform color
Variable diameter
New development (arose from clear skin rather than from pre-existing moles)





Pictures are amelanotic (left) and nodular (above) melanomas. The key factor in detecting any melanoma early is change. If you see a change in your skin at any time, go see a doctor.

The key property for diagnosing possible melanomas is "CHANGE" so, no matter what it looks like, have a lesion that is changing on your skin or on your child's skin for more than 2-3 weeks checked by a dermatologist or plastic surgeon right away.

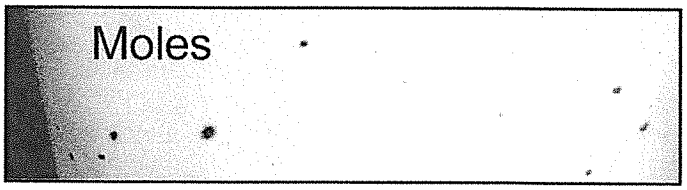
For a complete discussion of radial and nodular melanomas visit www.skincheck.org/Page4.php

The difference between freckles and moles

Students are often confused about the difference between flat moles and freckles, and may have the misconception that moles are always raised. Here is some information to clarify the issue:

- Moles may be flat, fully raised, or partially raised; true freckles are always flat.
- Freckles usually occur in clusters; moles may occur isolated or in irregular groupings.
- Moles are often, but not always, darker than freckles.
- Freckles sometimes become darker during the summer and lighter during the winter.
- No one is born with freckles, only the tendency to develop them upon sun exposure.

- Freckles are clusters of the natural skin pigment, melanin. Unlike moles, true freckles cannot become cancerous because they have no cellular structure.



Free melanoma lesson now available globally

The award-winning MEF SkinCheck® lesson for high school and middle school students is now being taught in all 50 states. The next goal is to teach it around the world. With the transition of the melanoma lesson videos and resources to online streaming, the free lessons are now available to all high school and middle school teachers of health-related topics globally. Information about the lessons, and online registration to access the lessons, is available at www.melanomaeducation.net. Teachers may preview the videos without obligation.

So you want a nice looking tan without the dangers of sun exposure and you think tanning beds are the way to go? Think again.

Exposure to any kind of ultraviolet radiation, whether from the sun or from tanning lamps, increases your risk of melanoma and other skin cancers. Tanning lamps are to skin cancer what cigarettes are to lung cancer.

Why are tanning lamps unsafe? Because they expose you to ultraviolet radiation, which is a known carcinogen (cancer-causing agent). There are two types of harmful ultraviolet radiation from the sun that reach the surface of the Earth. The first is called UVB and is the radiation that causes sunburns. The second type is UVA, which doesn't burn but penetrates into the skin more deeply than UVB. Tanning beds expose you to the same intensity of UVB as the sun and 10 to 13 times greater UVA intensity than the sun.

If you are under age 30 and use tanning beds regularly (10 times or more per year) your risk of developing melanoma is increased nearly 8 times.

Is there a safe way to get a tan?

Yes, by using a modern sunless bronzing lotion or spray, you can get a tan that cannot be distinguished from the killer tans produced by exposure to the sun or tanning lamps. Sunless tanners work by dyeing only the outermost layer of the skin. This layer consists of dead skin cells which are not harmed by the tanners. Spray booths such as Mist-On Tan make it easy to get a safe, natural looking tan in just a few minutes.

There are also many products available for self-application. The key to getting a natural looking tan with a self-applied lotion is to match the lotion to your skin type and to apply it properly. The web site, www.sunless.com, has complete instructions for selecting the right product and applying it effectively. Most sunless bronzers do not contain sunscreen so use appropriate protection to prevent exposure.

This information is provided by the Melanoma Education Foundation, a non-profit organization dedicated to saving lives from melanoma, a common and deadly skin cancer that affects young people as well as old. For more information visit the educational web-site, www.skincheck.org.

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