# 15 "Ask the Expert"

am often asked hair-related questions by medical students when I lecture at hospitals, from other dermatologists when I give presentations at American Academy of Dermatology meetings, and from patients who schedule appointments at either of my San Francisco dermatology practice offices.

I also answers questions from men and women of all ages who contact me through my web site (www.hairdoc.com), or from various on-line chat groups, and "answer" web sites such as allexperts.com.

The following are some examples of some typical, and some not-so-typical, hair loss and hair growth questions, and my answers. Similar questions have been grouped together, and there has been some editing for clarity.

Many young men contact me about their hair loss. Often they are terrified, and some of their attempts to address their "problem" reveal the impact that hair loss at an early age is having on their lives:

# QUESTION FROM A 15-YEAR-OLD FEMALE:

I have been pulling my hair out for a while now. I would give anything to get it to grow back! Please help me! Are there any pills or medications I can take that will make my hair grow faster? Please, I am only fifteen-years-old! It's hard to wake up every morning and try to cover up all my disgusting bald spots on my head! I can't even wear my hair down anymore! Please.... Give me some advice! Anything!!!

Your condition is more complicated than an answer by e-mail can do justice. It is important to determine the reason you are pulling your hair. Start by seeing a dermatologist, to determine if you have a medical condition that needs treatment, and perhaps to talk about other possible causes. You may have issues that are troubling you, and you may be referred to another professional whom you can talk with more easily than the dermatologist, or your parents. Often hair-pulling behavior is a temporary condition, and with some therapy it may clear up quickly.

# QUESTION FROM AN 18-YEAR-OLD FEMALE:

Recently I've been experiencing an abnormal amount of hair loss. When I brush my hair, or even just pull on it, hair comes out. There's no history of this in my family, and I'm on no medication, and I'm not sick, except for having a really bad cold for the past three weeks. I'm really worried. Do you know of anything that could cause this?

#### ANSWER:

A really bad cold can cause actively growing hair follicles to shift into the resting phase, and a few weeks to a couple of months later the hairs in those follicles can start to shed. Normally, about ninety percent of the hair follicles are in the growing phase, and about fifty to 100 hairs are shed each day from other hair follicles that are in the regression and resting phases. A severe stress can increase the percentage of hairs going into the resting phase, and as a result increase the amount of hairs being shed each day, sometimes quite dramatically. You may consider seeing a dermatologist to make sure the loss is not due to some other cause, such as iron deficiency anemia. If your hair loss is due to stress from the bad cold, Rogaine applied every day for a few months can help reduce the shedding until the hair follicles go back to their normal growth cycle.

## QUESTION FROM AN 18-YEAR-OLD FEMALE:

During the last two years I have been going through a stage where I had very crazy hair. I dyed my hair many times and had gravity-defying hairstyles. I think my hair was in total stress, because now I notice

that my hair is a lot thinner. I remember when I was styling my hair before, I had hair falling off, but I didn't think much of it because I had lots of hair. I believe it is just hair breakage, because when I saw my hair coming off, I didn't see the "bulb" or anything. I'll stop mistreating my hair now, and I hope it will grow back. It should because all the women in my family have lots of hair. Even my grandmother, she has lots of hair. But my brother and dad do suffer from hair loss. Is there a chance I might be suffering from that too?? You don't think I am losing hair permanently do you? I am still very young and I don't want to become bald when I am thirty. How can I stop this from happening?

#### ANSWER:

From your description of the situation I do not think you are suffering from permanent hair loss. Women do inherit a tendency for pattern hair loss, just as men do; however, many of these women do not exhibit hair loss or even hair thinning. When women with genetic programming for hair loss do start losing hair, they usually suffer a generalized thinning of hair late in life, especially on the top of their heads, rather than developing completely hairless bald spots. It is possible to accelerate the appearance of inherited pattern hair loss by repeatedly pulling hairs from the hair follicles with tight braids and other hair styling techniques that pull on the hairs. Each time a hair shaft is pulled from the follicle, the follicle starts a new growth cycle, which if the hair was not pulled out, may not have happened for five or more years. Dermatologists call this type of hair loss traction alopecia. I believe that hair follicles have a limited number of growth cycles in them, and then they stop growing new hairs. Each time a hair is pulled out from a hair follicle before it was ready to be shed, the hair follicle is one step closer to not growing any new hair. This is why plucking eyebrow hairs or repeatedly having waxing treatments to pull out unwanted hairs can eventually reduce hair growth.

But it is more likely that your hair loss involves the hair shaft, and not the hair follicles where the hair grows from. The hair shaft is made of dead cells that are the visible hair strands that we generally think of as "hair." Your hair has probably suffered repeated exposure to chemicals in hair dyes and perhaps excessive heat from styling techniques that have weakened the hair shafts and caused increased

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breakage. This is the easiest hair loss problem to treat: simply stop doing the things that damage the hair shafts, and the condition will correct itself as the hair grows out. Keep in mind that hair only grows about one half inch per month, so it may take several months for you to notice an improvement.

## QUESTION FROM A 20-YEAR-OLD FEMALE:

I am a black female and I am going bald in the center of my head. Sometimes it itches really bad and it is sore. Can you please give me some advice about my hair loss?

#### ANSWER:

The type of baldness you are describing really needs to be examined for you to receive proper advice. You may have a bacterial or fungal infection that may respond well to prescription medication. It is possible this condition could have been triggered by "Hot Comb" treatments that can irritate the hair follicles and increase the risk of infection. If the condition continues without treatment it may cause permanent scarring in the affected area, and this could include a permanent bald spot. I recommend that you schedule an appointment with a dermatologist for an examination and treatment.

## QUESTION FROM A 24-YEAR-OLD FEMALE:

I have recently started losing my hair and had a bad yeast infection for the past two months, which one of my doctors diagnosed as Candida. Is it possible that this is the cause of my hair loss? If the Candida is the cause, will my hair grow back once the yeast problem goes away?

#### ANSWER:

Candida albicans is a common yeast-like fungus that is found in the mouth, digestive tract, vagina, and on the skin of healthy persons. Often a stressful event or condition will reduce the body's immune response capability, and the Candida population will increase dramatically, which can result in a stubborn Candida infection. While it is possible that the stress of the Candida infection is the cause of your hair loss, it is more likely that the same stressful event that triggered the Candida infection two months ago was the cause of your current hair loss. The stressful event could have been be physical, such as having pneumonia or a heart attack, or it could have been emotional such as acute depression, an IRS audit, divorce, or death in the family. A stressful event can cause hair follicles to shift out of the growth phase into the regression phase and then the resting phase, a condition dermatologists call telogen effluvium. It may take three to six months for the growth cycles to normalize again, but the hair should grow back. A visit to a dermatologist will help determine if some other medical condition such as abnormal thyroid hormone levels or iron deficiency anemia is the cause of your hair loss. If a recent stressful event was the cause, the dermatologist may recommend Rogaine to help stabilize the hair follicles over the next three to six months.

# QUESTION FROM A 25-YEAR-OLD FEMALE:

I've lost almost eighty percent of my hair from mental stress. Can I recover it?

#### ANSWER:

The answer depends upon the degree and duration of the stress and the hair loss. If a sudden stressful event occurred, and you experienced massive hair shedding a couple of months later, then yes, most if not all the lost hair will likely grow back on its own after the hair follicles go back to their normal growth cycle. Rogaine can help stimulate the regrowth of recently lost hairs. On the other hand, if repeated or continuous stressful events occurred over several years, and the hair loss continued, you may not be able to achieve a full recovery. You should work on learning to be more balanced when faced with stress. Depending upon your situation, a psychiatric professional may be able to assist you, and you may also consider other stress-management techniques such as yoga or meditation. A visit to a dermatologist will help determine if a medical condition may also be contributing to your severe hair loss, and if so medication may be prescribed.

# QUESTION FROM A 27-YEAR-OLD FEMALE:

My hair has been shedding for about four years now, and is half the thickness it was in my early twenties. I lose over 100 hairs a day.

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I've been to my doctor, had my iron levels and thyroid checked and there is not a single female in my family who had this condition, so it is not hereditary. I've been tested for celiac and many auto immune diseases, all tests have come up negative. Up until a year ago, I was only shedding the longer hairs, but over the past year, I've noticed that even the new, shorter hairs are falling out as much as the longer ones. Many of the new ones are very thin, and seem to have hardly any bulb at the end. Any suggestions?

#### ANSWER:

It sounds as if you have had the whole list of tests. I would still be concerned about a low serum ferritin. The "normal" range most frequently listed by laboratories is between ten and 230. A report by D. H. Rushton in 2002 correlated the serum ferritin to hair loss. The conclusion was that a level below seventy would make you prone to hair loss. Ask your doctor to order this test. If it is low you can start iron supplements. Another possibility is that you have a diffuse alopecia areata, which may be able to be diagnosed by doing a biopsy and having a hair expert dermatopathologist look at the slides of the sectioned hairs cut horizontally.

## QUESTION FROM A 35-YEAR-OLD FEMALE:

Is there any vitamin or herbal product that I can take to stop my hair from shedding?

#### ANSWER:

No, there are no vitamins or herbal products that have been proven to be effective at reducing reduce hair shedding. All hairs are shed eventually as part of the normal cycle of hair growth, and vitamins and herbal products do not affect the hair growth cycle. If you are experiencing sudden hair shedding, the best treatment for you may be Rogaine, which helps stabilize the hair follicles when they have been stressed and all start losing hairs at the same time. A physical or emotionally stressful event a month or two earlier may now be causing the shedding you are experiencing, a condition dermatologists call telogen effluvium. Rogaine acts as "life support" for the stressed hair follicles, and can prevent continued shedding until the condition

stabilizes over a period of months. You should visit a dermatologist for an examination to make sure you are not losing hair because of some medical problem such as a thyroid condition or iron deficiency anemia.

## QUESTION FROM A 35-YEAR-OLD FEMALE:

I have some hair loss, but all my hormone levels have been tested and are normal. My doctor has prescribed Ortho Tri-Cyclen birth control pills and says it should help reduce the hair loss. I know some birth control pills actually cause hair loss. What is your advice?

#### ANSWER:

Hormone levels can fluctuate, and these fluctuations can sometimes have a noticeable effect on the hair follicles. It is true that some birth control pills can cause increased hair loss in some patients, and there are probably a few women who will experience it with Ortho Tri-Cyclen. Ortho Tri-Cyclen is one of the best medications for evening out women's hormone levels and as a result it can help correct thinning hair on the scalp, as well as control hormone-induced acne and excessive facial hair growth. As your doctor said, "it should help,". There are no guarantees in medicine. I recommend that you follow your doctor's advice for nine to twelve months and observe the results. Hair only grows about a half inch per month, and it may take three to four months for some of your resting hair follicles to re-enter the hair growth phase. You may not begin to notice some thickening until six to nine months after you start treatment. Also, you may want to try topical Rogaine in addition to the therapy prescribed by your doctor.

# **QUESTION FROM A 38-YEAR-OLD FEMALE:**

For over a year my hair has been thinning, which was thought to be from surgery. My blood was tested and my iron count was low, so I have been on iron for a year. The hair is still thinning. I also feel cold easily, have dry skin, am tired a lot, have been recently losing weight, but I was gaining, but all the tests show my thyroid is okay. I am using Rogaine with no effect. No one else in my family is losing hair. Why can mine be thinning at thirty-eight, and what can I do?

Stress from surgery can cause sudden shedding a few months after surgery and can age the hair follicles prematurely. Iron deficiency anemia can also contribute to hair loss and to premature hair follicle aging. It is possible that you have aged your hair follicles so that at age thirty-eight you have the hair you would have had at age fifty-eight. It is also possible that some other illness is contributing to your condition, so I would recommend that you continue to work toward better overall health. Rogaine helps you to keep the hair you have, as well as to help you to grow back recently lost hair a bit thicker and faster. It may take six to nine months before you notice an improvement, so I recommend that you continue the Rogaine treatment.

## QUESTION FROM A 40-YEAR-OLD FEMALE:

I had my thyroid hormone levels tested because I was experiencing heavy and prolonged periods. I was placed on medication to correct a hypothyroid condition. Over the past years I have also experienced a great deal of hair thinning, that I think was caused by the thyroid condition. Now that I am on medication to correct my low thyroid hormone level, what are the chances my hair will re-thicken?

#### ANSWER:

Thyroid hormone imbalances can cause hair loss in some individuals. If your hair loss was caused by your hypothyroid condition and the hair loss was recent, then there is a good chance of getting a lot of it back as a result of medication to treat the thyroid condition. If the hair loss was gradual over a period of several years, the amount of regrowth will likely be small. I recommend that you try Rogaine for at least nine months to see if it can help stop the hair loss and help you grow it back thicker and faster. Hair only grows at a rate of a half inch per month. It may take nine to six months before you notice an improvement, so be patient.

# QUESTION FROM A 45-YEAR-OLD FEMALE:

I just had a physical and blood tests, and was diagnosed as having a severely low red blood cell count, but my thyroid was normal. Over the last year I have noticed a large increase in hair loss. Do you think there is a relationship between the anemia and the hair loss, or is this just a reaction to hormonal changes at my age.

#### ANSWER:

Anemia is the decreased ability of the red blood cells to provide adequate oxygen supplies to body tissues, including the hair follicles. Anemia may be due to a decreased number of red blood cells, or a decreased amount of various substances in the red blood cells, such as iron, that are necessary for red blood cells to transport oxygen. It is quite possible that your anemia is the primary cause of your hair loss condition, hormone changes could also be playing a role. My advice is to discuss your hair loss symptoms with your physician. Treatment to correct your anemia could very well correct your hair loss condition, it make take six months or longer before you notice an improvement. Ask your doctor for a serum ferritin test and, if indicated, try to get your ferritin level back into the middle of the normal range. You may also try Rogaine to slow the rate of loss until your red blood cell count improves.

# QUESTION FROM A 47-YEAR-OLD FEMALE:

I have hair loss, "male pattern baldness," although neither my mother nor grandmothers had it. I am under a lot of stress right now, and am taking an SSRI antidepressant—Effexor. All of my blood work has come back "normal." Doctor started me on spirolactone (100 mg/ day) and OrthoCylen birth control pills for the hormone effect. So far, after one month I don't see any results. I have been on the Atkins Diet this past month, too, and just today I read that some people on the diet lose hair and that even Dr. Atkins himself warns of this on his website. I have been taking a daily vitamin called Centrum, plus a "hair vitamin" which tastes terrible, and 5000 mcg of saw palmetto. I also take one B complex a day. I have here a list of other supplements I feel I should buy that I have read about—for example biotin, flax seed oil, and even prenatal vitamins—but have not gotten any more supplements as the ones I have don't seem to be helping. My hair just keeps getting thinner. I don't know if it is from stress or what. I started to lose my hair in my twenties, but it has only now become visible because my hair was so very thick when I was younger. But now I have the actual male pattern baldness and you can see the bald

spots in certain areas. Do you know of anything I can do to nourish my hair? Is there something I can do to keep it from falling out or even growing back?

## ANSWER:

There are many possible causes for your hair loss: 1) inherited baldness from either side of your family, 2) chronic stress, 3) low serum ferritin, 4) antidepressants, 5) hormonal imbalance. It looks as if your doctor has you on the right medications to prevent more loss due to inherited androgenic alopecia and hormonal problems. You did not mention the degree of hair loss your father had. In any case, you can have inherited balding genes from both sides and end up having the thinnest head of hair in the family. I would suggest you use Rogaine to help the loss due to stress. I will take four to six months to see new hair growth due to these medical treatments. Hair loss due to dieting would come under the heading of loss due to stress and is usually the starvation dieting where you would lose thirty or more pounds a month. If that is not the case I would not think Atkins diet is the cause.

Since your hair loss began before you began taking your SSRI antidepressant it may not be the cause. Ask your doctor about your serum ferritin level. It should be above sixty even though most laboratories list twenty to 150 as normal. If you are low the treatment with ferrous sulfate 325 milligrams a day may help. I do not think the other supplements and hair vitamins will be of any value.

## **QUESTION FROM A 48-YEAR-OLD FEMALE:**

About fourteen years ago as a result of a severe viral illness with very high fever, night sweats, vomiting, and incessant coughing, my hair started to fall out. I assumed it was due to acute telogen effluvium and that the situation would right itself in due course. This is not so. I am not bald because new hairs grow immediately after an old one is shed, but the anagen phase seems to be very short. Some of the shed hairs are new—less than one centimeter long. Is there anything that can be done?

It certainly sounds as if you had severe telogen effluvium. When the anagen (growth) phase becomes short, it is usually a sign of androgenetic alopecia, inherited pattern hair loss. It is possible that your telogen effluvium episode accelerated the date when some of your hair follicles would shorten their growth phase. These hairs follicles will eventually stop producing hairs altogether. I recommend that you try Rogaine to help prolong the anagen phase of the affected hairs, which will then allow the hairs they produce to grow longer. Apply it across the front, and very thinly. Leave the sides along, as the medication will find its way there.

## QUESTION FROM A 54-YEAR-OLD FEMALE:

I had a great deal of stress over the past three months and then I noticed that my hair was all over the desk at work, my chair, and at home. I had some tests done and my thyroid is a little on the low side but the doctor decided to leave it alone. I also had two other episodes of alopecia areata (patchy hair loss) when taking care of my ill mother. My dermatologist at the time said that I might have other episodes of this, but that I should just get the treatments and that I would recover the hair. I have had the shots recently, and the hair seems to have stopped falling out in massive amounts. I also had a biopsy done and it came back as "androgenetic alopecia" which I tend to disagree with, since I have always had hair regrowth with the shots. I have been doing a lot of research and have been desperate for the last two weeks. What do you think?

#### ANSWER:

It sounds as if you had a classic case of telogen effluvium. The timing of the loss and subsequent thinning is consistent with that diagnosis. The diagnosis of androgenetic alopecia, inherited pattern hair loss, is also quite possible. Usually four to five months after an incident of telogen effluvium or alopecia areata, the hair follicles begin to grow new hairs again, however each hair follicle is programmed to have only so many "lives" and repeated stressful events that cause premature shedding can use up some of these "lives" and age the hair follicles. The result can be an inherited condition such as androgenetic

alopecia showing up early, and causing your hair to appear as it would have ten or twenty years from now. The best therapy combination would be to learn to respond better to stress and use Rogaine to help stabilize and stimulate the hair follicles.

## QUESTION FROM A 55-YEAR-OLD FEMALE:

I am going in for chemotherapy and my doctor mentioned there is a new medicine that could protect my hair. What can you tell me about this?

#### ANSWER:

A group of dermatologists discussed the issue of a drug being developed by the pharmaceutical company Glaxo Wellcome (now GlaxoSmithKline) that may in the future help cancer patients undergoing chemotherapy suffer less hair loss.

The medication has been applied on rats as a topical cream several hours before chemotherapy to effectively protect hairs from falling out after chemotherapy treatment. According to the discussion group participants, the research has been reported on BBC News Online, PBS McNeil Lehrer Report, and in the journal *Science*. According to the discussion group participants, cancer patients who responded to a survey by Glaxo Wellcome ranked hair loss as second only to nausea and vomiting as the most unpleasant side effect of their chemotherapy treatment. A quote attributed to Professor Gordon McVie, Director General of the Cancer Research Campaign in the United Kingdom, included: "Without a doubt (chemotherapy induced hair loss) contributes to a deteriorating self-image, and many patients do not believe that their hair will ever grow back even if they are told it is a temporary phenomenon."

## My Comment:

This medication presents a trade off of benefit versus risk. Chemotherapy works by targeting rapidly dividing cells typical of cancerous growth, but also affects other fast-growing cells such as those that produce the hair shaft inside the hair follicles. It appears the mechanism of action of the anti-hair loss drug is to temporarily slow or stop cell division in the hair follicles, which protects them

from absorbing the chemotherapy medication. This would likely also protect cancerous cells from the chemotherapy medication, if they were in or around the hair follicles. If the chemotherapy is intended only to shrink or eliminate a cancerous tumor located away from the scalp, and the tumor is the type that does not present a significant risk of metastases to the skin, then the benefits may outweigh the risks. But there is evidence to suggest that many basal cell carcinomas, the most common type of human tumor, originate in the hair follicles. If there were a risk that the cancer being treated originated in the skin or could spread to the skin and hair follicles of the scalp, then it would be best for the chemotherapy medication to be allowed to fully affect those cells as well, in order to protect the patient from the possibility of metastatic cancer cells in the hair follicles.

## QUESTION FROM A 58-YEAR-OLD FEMALE:

I'm losing my hair fast! I've been worrying about it a lot. Maybe I need hormone pills. Is there anything I can do to help this problem?

#### ANSWER:

Yes, if low hormone levels are the cause of your hair loss, there are effective treatments available. By age fifty-eight many women begin to experience hair thinning due to changes in estrogen hormone levels. Women can inherit a tendency for hair loss just as men do, and around age thirty these women will have increased blood levels of the hormone DHT telling their hair follicles to stop growing new hairs, just as would be the case in men who inherited male pattern baldness. Young women high levels of estrogen hormones interfere with the DHT message, and "protect" the susceptible hair follicles. But later in life, as estrogen levels decline, the DHT message eventually gets through to the susceptible follicles, and thinning hair is the result.

Often estrogen supplements, or oral contraceptives such as Ortho Tri-Cyclen that have a significant effect on estrogen hormone levels, can stop the hair thinning. Elevating estrogen levels to control hair loss is a treatment method that is applicable only to women, as it would have undesirable side effects on men. Also, if your blood pressure is normal or a bit high, your doctor may prescribe spironolactone, a medication that is used to lower blood pressure, but will also

help to block the hormones telling the hair follicles to stop growing. You should consult with a dermatologist, as well as your primary care physician, to be sure that hormone levels are the only cause of your hair loss.

# QUESTION FROM A 58-YEAR-OLD FEMALE:

Why is it that some of my hair is brown, while most of it is gray? How is it determined which hair grays?

#### ANSWER:

Hair color, like eye color, is genetically determined. Many people naturally experience hair color changes over their lifetime. Infants with light colored hair sometimes develop darker colored hair within a year or two, and vice versa. Certain hair follicles are genetically programmed to begin growing gray hairs after a certain number of growth cycles. In men the hair follicles at the temples, sideburns, beard, and mustache will often become gray before the hair at the back of the head. In women the pattern of gray hair is usually more generalized. There have been some cases noted where trauma from an injury or emotional shock has accelerated the graying process, but this is rare. Environmental factors such as sunlight, chlorine in swimming pools, and hair dyes can affect the appearance of hair color, without affecting the color of the hair that the hair follicles are producing.

Some stem cells that generate the cells which make pigment—producing blondes, brunettes and redheads—die off with age. Cell survival in general is influenced by an "anti-death" gene known as Bcl2. It could be that people who gray prematurely have a genetic program that knocks out Bcl2

## QUESTION FROM A 65-YEAR-OLD FEMALE:

Last year I underwent two lumpectomies for breast cancer. I had six months of chemotherapy, followed by six weeks of radiation treatment, and lost all of my hair. My hair started growing back within a few months and had a loose curl and was very manageable. But six months later I have noticed fallout at the roots, not breakage, in my brush and comb. My hair now also appears to be oily, a condition I

never had before. I am very distressed by this situation. Is this condition cancer-related?

### ANSWER:

I doubt that your falling hair and increased oiliness is due to an ongoing cancer. It is more likely that it is due to accelerated aging of the hair follicles as a result of your cancer treatment, with the result that you now have the hair at age sixty-five that you would have had at age eighty-five. Your oily hair condition may also be due to stress or changes in your diet or perhaps from drug interactions. I recommend that you schedule an appointment with a dermatologist to have your scalp examined, and be sure to bring along a complete list of all medications you are currently taking.

# QUESTION ON BEHALF OF A 10-YEAR-OLD MALE:

My grandson, who is ten years old, was burned in a house fire at the age of three months. He is bald on the top and partially on one side from this, and his skin is also very thin on top of his head because several layers of skin were burned off. He is made fun of every day. Would he be a good candidate for hair restoration surgery?

#### ANSWER:

I recently treated a thirteen-year-old girl with a similar problem. I would need to see photos of the child's scalp showing the extent of the damaged area to best evaluate what I think could be done. I would expect that he could benefit from the removal of some scar tissue and then receive a modest amount of hair transplantation. Keep in mind that he would be his own donor, and hair transplantation surgery only redistributes the patient's own hair follicles to give the appearance of a fuller head of hair.

The age at which surgery is performed depends upon how motivated the child would be to sit through several procedures spaced a few months apart, with each lasting several hours. We use local anesthesia to numb the scalp, along with a tranquilizer tablet, a sleeping pill, and a pain pill, but no general anesthesia, meaning the patient is very relaxed but awake during the procedure. While I understand how troubling his condition can be to you, and the emotional chal-

lenge the child faces from teasing by classmates at school, I usually tell parents to wait until the child asks to have the scar tissue removed in his or her early teenage years.

## QUESTION FROM AN 18-YEAR-OLD MALE:

I am having hair loss. My father is almost bald, and he is fifty years old. I've started doing Sirsasana (headstand) to increase blood flow to the scalp. I have also started putting my own morning urine on my scalp because I read that it will reduce hair loss, but no regrowth. I heard about Fabao and Kevis. Is it good? Does it work?

#### ANSWER:

Of the various treatments you have described, none of them sounds worthwhile to me. You should see a dermatologist, a doctor who specializes in treating conditions affecting the skin, hair and nails, and if it is determined that genetics is the likely cause of your hair loss, you should get a prescription for Propecia, which is the best way to slow and stop inherited hair loss. Rogaine may also help the hair you have grow a little better, longer and thicker.

# QUESTION FROM A 20-YEAR-OLD MALE:

How can I stop or slow down the thinning process in the front of my hair, and how can I stop the receding hairline? I am very scared about losing my hair! Please help, and thanks.

#### ANSWER:

An examination by a dermatologist will determine if your hair loss is caused by inherited male pattern baldness. If this is the cause of your hair loss, Propecia would be the most effective therapy for slowing, stopping, and even reversing the thinning you are experiencing. Propecia is most effective when started at an early age.

## QUESTION FROM A 20-YEAR-OLD MALE:

My hair is very thin. It is not growing properly. I am very upset to face this problem. I like growing long thick hair. Sir, my hair is very thin. All my friends are laughing at me for facing this problem at this age. Please kindly HELP me out of this problem. Please mention

some remedies to grow thick long hair. Please tell me what I should use to grow THICK, long hair. Can I use Hair Formula 37 to get thick long hair?

#### ANSWER:

You need to see a dermatologist to determine if this is an inherited condition, or some other type of medical condition. Depending upon the cause of the hair loss, a dermatologist may be able to prescribe a medication such as Propecia to slow your loss, and possibly help your hair grow back.

# QUESTION FROM A 23-YEAR-OLD MALE:

I'm developing male pattern baldness i.e. a receding hairline, and daily I consider which surgery would suit me best. I'm considering laser surgery at a clinic.

#### ANSWER:

Before considering any form of surgery, see a dermatologist who will sit down with you and explain the role Propecia can play in slowing your hair loss condition. Propecia may help you get the hair back that you recently lost, and may be able to help stop future hair loss. Do not go to a laser clinic first. Lasers are expensive pieces of equipment, and have to be used for procedures to be paid for. You may end up with scars from laser surgery that are more difficult to hide than your thin hair spots.

# QUESTION FROM A 24-YEAR-OLD MALE:

If I get transplants, will my hair loss be in the loss condition it is now when I am forty-eight? Or is hair loss reversible, or is there a stopping to it advancing?

## ANSWER:

Without medical treatment, hair loss is a progressive condition, meaning that it will continue as you age. For some people the rate of loss is slow, and for others it is quite rapid. Hair transplantation is not usually done on patients at age twenty-four because it is very difficult to predict the degree and rate of future loss at the early stages

of pattern hair loss. Also, there are now medical treatments such as Propecia, which can be prescribed by a dermatologist, and can be very effective at stopping hair loss at an early age. If you still have some hair loss, such as a receding hairline, after being on Propecia for several years, a hair restoration surgeon will be able to evaluate your hair loss condition, and then you may consider transplants if desired.

The following three questions all have the same answer:

## QUESTION FROM A 23-YEAR-OLD MALE:

What specifically causes facial hair? I personally am not going bald. However, I have a problem producing a full mustache and beard. Is there a vitamin or medication that can help me with this?

# QUESTION FROM A 25-YEAR-OLD MALE:

I still haven't got proper growth of hair on my body. I have scant mustache and very little beard without any whiskers. I don't have much hair on my arms and legs, though I have hair on my groin area. I feel very shy at times. I have checked up my hormone levels and they are normal. I don't have any other problems with anything, e.g. sexual matters. Is there any lotion, medication, or treatment with which I could grow dark mustache and beard? I have become quite introverted due to this thing. Please show me a way to get rid of this.

## **QUESTION FROM A 27-YEAR-OLD MALE:**

From the age of eighteen, I started to lose hairs, and I tried many medicines but all in vain. My father and his brothers are all bald but my two elder brothers and one younger brother do not have any problems with hairs. Why is it that I lost all my hairs?

#### ANSWER:

Pattern baldness is inherited in much the same way as height is inherited. You may be the tallest or the shortest person in your family, depending upon the combination of genes you get from your father and your mother, and your brothers may have inherited slightly different genes. You may have inherited balding genes from your mother as well as your father, and she may not show any hair thinning because she is female and has low levels of the hormone that tells the hair to

fall out. Your brothers may have inherited slightly different genes that affect hair loss. If your family does not show baldness on both sides, you should see a dermatologist to determine if your hair loss could be caused by some illness.

# QUESTION FROM A 28-YEAR-OLD MALE:

I am losing my hair. I have noticed my bathroom is full of hair after I take a shower. I don't know what to do. I am scared to death. I am afraid to look in the mirror. I have always had very, very thick hair. And in only a few weeks I can see my head through my hair. I am afraid to go to doctors because I don't want to use any chemical creams or pills to kill my hair. I have never used shampoo in my life. I have started washing my hair with egg yolk from organic eggs. Please help!

## ANSWER:

Despite your reluctance to see a doctor, you should see a dermatologist so you can be examined for conditions that may be the cause of your hair loss. A dermatologist will examine your scalp and hair, and ask the appropriate questions to determine if further tests are needed. The sudden shedding you are experiencing may be just a temporary condition, and could have been caused by a stressful event such as a bad cold or emotional stress six or more weeks ago, and is only now causing your hair loss. But see a dermatologist to be sure. The therapy suggested to you by any dermatologist is not going to kill your hair, and it may help save it.

## QUESTION FROM A 29-YEAR-OLD MALE:

I am noticing a rapid increase in the amount of hair I'm losing. I have no bald spots yet, but my hairline is receding and the hair at the top and back of my head is becoming much thinner. I am not interested in hair transplants, but would consider either Propecia or Rogaine. Which product would you recommend?

#### ANSWER:

There is no question about it; Propecia is the medication for you. It is the only drug that has been clinically tested in carefully

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controlled studies and has been proven to actually prevent the hair follicles from getting the message to grow old and stop growing hairs. Rogaine, another drug, seems to tell the hair follicles to keep growing hair, even though they are still getting the message to die. If you were to use Rogaine for ten years, and then stop using it, you would have a heavy shedding of hairs within a few months. These hairs would have been lost if not for the Rogaine keeping them alive. But Propecia seems to work by preventing the message from getting to the hair follicles in the first place. If you were to stop using Propecia tablets after ten years, your hair loss would again begin gradually, but your hair follicles would be ten years "younger" as a result of the Propecia treatment.

## QUESTION FROM A 30-YEAR-OLD MALE:

When I look at before/after pictures of people who have transplants, it seems like they never show the crown area in the "after" pics. I'm always wondering—are they trying to hide something? My thinnest area is the crown and it really bothers me. Realistically how dense could I expect the hair on my crown to be if I had transplants?

#### ANSWER:

With a few sessions of follicular unit micrografting transplants, your crown could approach the same density as the surrounding area; however, transplantation to the crown is not often promoted for three good reasons:

First, most hair loss patients are concerned about how they look from the front, which is how they see themselves in a mirror, as well as how others see them head-on. I know from decades of experience that there are many men who are balding both at the hairline as well as at the crown, and it is true that some of these men express more concern about their "bald spot" at the crown, than their receding hairlines. But the vast majority of balding men are more concerned with how they look from the front, than the back. This does not mean that your concern is not real, and there are several options for treating hair loss at the crown, including transplants.

Second, all hair transplantation techniques involve moving a limited supply of donor hairs from the back and sides of the head, to other locations such as to the hairline and crown, where they will have a greater visual impact, and create a look of a fuller head of hair. Most men with hair loss begin to first lose hair at their hairlines, and later begin to have thin hair on top, and eventually may have baldness on their crown. However, some men begin to lose hair first at the crown, and then later may experience hair loss at the hairline. Promoting hair transplantation to the crown area is a sure way to bring in more patients who will have unrealistic expectations of what the doctor can do to correct their hair loss. If the limited supply of donor hair is used up densely filling the crown area, there may be no way to address a receding hairline years later as the hair loss progresses. While some hair restoration surgeons think all patients should be told simply to "leave the back alone," I evaluate each patient on a case by case basis and take into consideration their age, current and projected hair loss, and whether the patient will use medication to reduce future hair loss. Generally the front area gets the most grafts, while the top of the head receives a smaller proportion of transplants.

Medication is the third reason for little promotion of transplantation to the crown area. Both Rogaine and Propecia, the only medications that have been proven in clinical trials to be effective at reducing hair loss, are most effective on the crown. If you review the literature describing the effectiveness of these two medications, you will see that most of the examples involve the crown area. Of the two, Propecia is most effective for stopping hair loss, and in many cases restores hair growth to follicles that recently stopped growing new hairs. Propecia can reduce the need for transplantation to the crown area. I consider a patient with some thinning at the crown who takes Propecia, to be a better candidate for transplantation to the crown area than if they did not take the medication.

## QUESTION FROM A 30-YEAR-OLD MALE:

If I get transplants how real will they look? Will I be able to grow my hair as long as I want? Will I have to keep going back to a clinic for check-ups or "re-adjustment" of my transplants? If I choose to keep shaving my head will people be able to tell that I had a transplant?

These are excellent questions. Transplanted hair using the follicular micrograft technique looks very natural because the hairs grow from the scalp in much the same way that they do naturally. The transplanted hair follicles will be removed in the form of a strip of tissue from the scalp at the back of your head, which will be separated into follicular unit micrografts containing one to three hairs, and the individual grafts will be placed into tiny incisions on the front and top of your scalp. The transplanted hair follicles will continue to grow new hairs in the locations they are moved to. On the top and front of the scalp, the transplanted follicles will grow hair just as long as they would have at the original location on the back of the scalp. Hair grows about a half inch per month, so it may take two years to grow hair a foot long, but if that's what you want, you can do it.

About a week after a transplant procedure, you would return to the surgeon's office for an examination to make sure that the transplanted follicles are growing properly, and that there are no complications, and to have sutures at the donor area at the back of your scalp removed. After that, there is no real need for additional check-ups, and with a skilled and artistically capable surgeon, no need for "readjustments." Each follicular unit micrograft procedure is designed to stand alone, and to look natural for the rest of your life, even if you continue to lose hair and never have any more work done. Depending upon the degree of hair loss you have currently, one procedure may be adequate; many patients choose to have additional procedures done to achieve increased hair density at the hairline and on top.

If you were to shave your head completely some time after a follicular micrograft procedure, the transplant would be detectable. The donor area would appear as a single fine line scar running across the back of your scalp. This scar may not be especially noticeable because it follows the natural skin folds that occur when you tilt your head back, and I use two sets of sutures to close the donor site to create the thinnest possible scar. One set of sutures are placed below the surface of the skin to relieve tension on the wound and are made with dissolving thread, and the second set of sutures close the donor site opening at the surface with removable stitches. Also, when a second or third procedure is performed, the existing scar is removed, so there would never be more than a single fine line at the donor site.

The tiny incisions on the front and top of the scalp made for each micrograft may or may not be visible if you were to shave your head completely. The individual incisions are very small, and are made with a very fine surgical blade designed for eye surgery. The degree of visible scarring at the recipient sites is largely dependant upon your skin type, and your tendency to scar. People of African, Asian, and Native American descent typically have more pronounced scarring than do people of European heritage. I had a patient of European descent who had over 300 micrografts placed to enhance his mustache, and when his job situation required him to shave off his mustache, he had no visible scars. But not every transplant patient will be so fortunate.

# QUESTION FROM A 32-YEAR-OLD MALE:

I have a mustache and a goatee, and they are quite thick, I guess. But the hairs on the sides of my face are not that thick. Moreover, on one side of my face, there is hardly any hair for stubble for a side burn. What can be done to correct this? Is there something genetically wrong with me? Some people mistake me for a woman on the phone, so I guess there is something wrong with my voice. I've tried applying Rogaine on my face, but I don't think it helped much. I know this is probably silly and making me seem vain, but being able to grow a beard is as important to me as a woman being able to give birth to a baby. I feel insufficient as a man because of this. Can you please help me?

## ANSWER:

Facial hair, as well as all other hair distribution on the body, is determined by your genetics. There are no vitamins or medications that are safe and effective at stimulating facial hair growth.

Some men have had hair transplants to enhance a mustache or beard. The problem is, we cannot be sure that if the patient shaves there will be no marks or scars showing where the transplanted hairs are growing. I had one patient, a twenty-five-year-old clerk, who came to me because he wanted a full mustache. We did 300 grafts and he was tickled pink with the result. Later, he joined a more conservative

firm that required a clean-shaven look. Fortunately, in his case, the transplants were not obvious when he shaved his mustache, but this is not always so.

# QUESTION FROM A 33-YEAR-OLD MALE:

This is going to sound like a really weird question, but for about five years now I have been noticing that I seem to be losing a lot of hair (sink, shower, brush) but still have a full head of hair and no thinning spots. Am I just being paranoid because I'm at that age? Is there a reason I'm losing so much hair but it doesn't ever show?

#### ANSWER:

Everyone is born with about 100,000 hairs on his or her head, and about half of them can be lost before the hair begins to looks thin. Each hair is shed eventually, and after a resting period, a new hair begins to grow from the same hair follicle where the old hair was shed. An average of fifty to 100 hairs are shed every day, and approximately the same number of new hairs start growing each day. Since you still have a full head of hair with no thinning spots, you are most likely experiencing normal shedding.

# QUESTION FROM A 33-YEAR-OLD MALE:

I've been losing a tremendous amount of hair every day but show no signs of thinning anywhere. I went to see my Dermatologist, and he told me I have "normal hair density" and that I am probably one of the few people with very short shedding cycle" and that I would probably never be able to grow long hair (which I haven't). Could you please tell me what all this means?

#### ANSWER:

We all start out with about 100,000 active hair follicles. On average about fifty to 100 hairs are shed every day, and fifty to 100 new hairs begin growing each day as well. Typically a new hair grows about a half inch a month for about five years, which would allow a hair to grow about thirty inches long if it was not cut during that time. After an average of five years, the hair follicle goes into regression and resting phases for a few months, during which the hair is usually shed.

After a few more months, a new hair again begins to grow from the same hair follicle, and the growth cycle starts over. Typically about ninety percent of the hair follicles are growing hair, while the other ten percent are shedding or resting. Some people have a genetic program for a shorter average growing cycle, perhaps only two or three years, while others have longer average growing cycles. A shorter average growing cycle would result in hairs being shed before they could grow as long as thirty inches. It would also result in greater hair shedding, as a higher percentage of the 100,000 hair follicles would be in the shedding phase, when compared to a person with a longer growth cycle. The person with the shorter growing cycle would also have a higher percentage of new hairs starting to grow each day, but this would be a lot less noticeable than seeing the shed hairs in the sink and shower drain.

## QUESTION FROM A 39-YEAR-OLD MALE:

My mom's dad had a head full of hair. My dad's dad went bald, and my dad is bald himself. Do I have the chance of going bald? I used to have really thick hair but it seems to be thinning. I do use hair styling products. What should I use? What can I do to prevent hair loss?

## ANSWER:

The genetic predisposition to have hair loss can be passed on by either or both parents. If your father is bald and his father also became bald, then you have a good chance of also suffering pattern baldness. Hair styling products are cosmetic, meaning they only affect appearance and will have no effect on your hair loss. The best way to address your hair loss is to see a dermatologist, and if an exam determines that your thinning hair is due to genetics, a prescription for Propecia can help to stop and possibly reverse the hair loss you are experiencing.

# QUESTION FROM A 39-YEAR-OLD MALE:

I heard that men lose hair because hair follicles either become dead or dormant. My question is what determines whether they become dead or just dormant?

Over time, a naturally-occurring hormone in the blood of both men and women called dihydrotestosterone, usually abbreviated DHT, signals certain hair follicles that have been genetically programmed for hair loss to slowly stop producing new hairs. So the answer to your question is that a combination of DHT and genetics and time all determine which hair follicles stop growing hairs. DHT in the blood gets to all the hair follicles on the body. Only the ones that are genetically programmed to be sensitive to the DHT message stop growing hairs. In men with pattern hair loss, these follicles are usually located at the hairline and on the top of the head. In women, the DHT-sensitive hair follicles are distributed more generally over the top of the head.

Initially, most hair follicles affected by DHT seem to be "dormant," and if the DHT message is quickly blocked by medication such as Propecia, or a competing message to grow occurs, such as with the medication Rogaine, some of the dormant follicles will awaken and begin to grow new hairs again. However, if the DHT message is allowed to continue, over time the "dormant" follicles cannot be awakened and may be considered "dead." The exact biochemical changes that occur when a hair follicle goes from being productive, to dormant, to unproductive, are not completely understood. But we do know that medical treatment at the early stages of hair loss is more effective than treatment at later stages.

## QUESTION FROM A 41-YEAR-OLD MALE:

I have three children and a wife, and have what I consider to be a lot of premature wrinkling spots below my lower lip off to the sides. This coincides with areas where I have bald spots in my beard area. I grew a goatee beard, except that it did not look good due to these bald spots. I was wondering if you have ever done hair transplants on facial areas such as this. Is there scarring? Is this a nutty idea?

#### ANSWER:

Certainly some people consider facial hair transplants to be a nutty idea, however they have been performed in Japan since the 1930s, and on occasion in this country since that time to correct injuries from burns and accidents. I receive a surprising number of inquiries about enhancing facial hair growth from men in their twenties and thirties who believe that if only they had a thicker mustache or beard, their lives would be different. I do not advise transplants for these young men.

Facial hair transplants involve the same theory of donor dominance that scalp hair transplants are based upon. Donor hair follicles are taken from the back of the head, and moved in this instance to the face, rather than to the scalp. The transplanted hair follicles will continue to grow hairs at the new location, based upon their genetic program. I perform mustache and beard enhancing facial hair transplants on occasion for mature men who have a good understanding of the benefits and risks of such a procedure. The procedure involves carefully placing hundreds of single-hair grafts between existing hair follicles in the mustache or beard area. The benefits, of course, are thicker facial hair. The risks include using up some of the limited supply of donor hairs, as well as the risk of small but visible scars at the recipient area. Also, the transplanted hairs may have a somewhat different texture than the existing facial hair, and may need to be trimmed more frequently. On my web site you can view photos of a man who received transplants to his mustache area, and was quite satisfied with the results. Some time after the transplant procedure, he got a job at a law firm that required a clean-shaven appearance of all employees, and he shaved off his enhanced mustache. He was fortunate in that his skin did not show visible scars from the tiny incisions that were made for the facial hair grafts. Others may have more visible scarring, should they choose to shave off their enhanced facial hair.

# QUESTION FROM A 48-YEAR-OLD MALE:

I am using both Proscar 5mg/day (tablets) and minoxidil (lotion) double strength twice a day. It seems that I am growing new hair with some gain in the back and somewhat less in the front. Has this combination been proven to be effective? Is one better than the other? Any dosage recommendations or other advice?

Proscar is the brand name for the drug finasteride when it is prescribed as a pill for treating enlarged prostate glands. The same drug finasteride, in a lower dosage, is FDA approved in tablet form for treating hair loss under the brand name Propecia. Since you are taking Proscar, I would assume it was prescribed to treat a prostate gland condition, and you are enjoying the desirable side effect of reduced hair loss.

Minoxidil is the active ingredient drug in Rogaine, which in lotion form was originally available by prescription only, and is now FDA approved as an "over-the-counter" medicine for treating hair loss. Minoxidil lotion is not absorbed well into the skin, and excessive application can cause skin irritation. For treating hair loss, the combination of oral finasteride and topical minoxidil is more effective than either one used alone, and this combination has been used since 1993. A study of the effectiveness of the drug combination was published in a dermatology journal a year or two later. Simply put, finasteride works by stopping most of the DHT hormone message telling the hair follicles to stop growing. Minoxidil works by telling the follicles to keep growing hairs, even when they get the DHT hormone message. My advice would be to continue your present treatment. Between the two medications, it is the finasteride in your Proscar tablets which will help you most in the long run.

The following two questions have the same answer.

## **OUESTION FROM A 59-YEAR-OLD MALE:**

Although I use a dandruff shampoo, I still have a flaky itchy scalp. What can I do?

## QUESTION FROM A 41-YEAR-OLD MALE:

I am troubled by dandruff. Although I wash my hair frequently (four to five times a week), my dandruff tends to reoccur. Why does this happen? Is there a way to permanently cure dandruff? I've heard that some dandruff shampoos actually make dandruff worse in the long run. What causes dandruff? What can I do?

Dandruff is a common condition, and surprisingly the cause is not well understood. First, let me state that dandruff does not cause hair loss, nor is it a symptom of hair loss. Also, there is no permanent cure for dandruff, but it can be controlled fairly easily. Dandruff is a condition characterized by excessive scaling and skin flake shedding on the scalp. Dandruff is sometimes accompanied by an itching sensation, and sometimes by excessive oiliness, but without visible redness or inflammation. Dermatologists call excessive oiliness on the skin seborrhea. Excessive scaling and skin flaking accompanied by visible redness and inflammation, usually occurring in areas where the skin is oily, is called seborrheic dermatitis. Flaking on the scalp, without redness, is dandruff.

Dead skin cells on the surface of scalp, just like skin cells on the surface everywhere else on the body, are eventually shed as new skin cells grow out from the underlying layers of skin. Normally a new skin cell grows from the innermost layer of skin, and as older skin cells are shed in an orderly manner, after about a month the new skin cell reaches the surface layers and eventually dies and is shed itself. And normally, the dead skin cells fall off a few layers at a time, in tiny clusters that are microscopic and not noticed.

With dandruff, there is a combination of an uneven rate of skin cell growth and abnormally sticky sebum (hair oil) that result in comparatively large flakes of skin twenty to forty layers thick being shed. These relatively large chunks of dead skin cells are visible as dandruff flakes.

Although the exact cause of dandruff is not completely understood, the condition is associated with an increase in the population of certain microorganisms that naturally occur on the scalp, including Pityrosporum ovale, a yeast-like fungus that lives in the oil glands and hair follicles on the scalp. The cause of the increase in the population of Pityrosporum ovale is not well understood, and dandruff conditions often change over time for an individual, even without treatment. Dermatologists have a range of prescription treatments for dandruff, including medications that control itching, reduce oiliness,

slow the rate of skin cell growth, and kill the microorganisms associated with excessive scalp flaking.

The most effective non-prescription dandruff treatments are shampoos with ingredients that reduce the population of these microorganisms. After rinsing off the anti-dandruff shampoos, the active ingredients remain on the surface of the scalp. Furthermore, alternating each day between shampoos with different active ingredients has been shown to be more effective at controlling dandruff than using a single anti-dandruff shampoo product every day.

Before scheduling an appointment with a dermatologist to control your dandruff, try alternating between Nizoral one percent shampoo, containing ketoconazole and now available at drugstores without a prescription, and either a shampoo containing zinc pyrithione such as regular Head & Shoulders, or a shampoo containing selenium sulfide, such as Selsun Blue shampoo. Or try alternating among all three. If, after a few weeks, your dandruff condition does not seem to be improving, then consult with a dermatologist.

# QUESTION FROM 42-YEAR-OLD MALE:

I am a management consultant, in the hospital field, with considerable coursework in biology and chemistry. I also sold pharmaceuticals, and I have read extensively in all the sciences. I receive a "Longevity Journal" which this month is touting and selling "Testone Cream" and "Teston 6" capsules. These products contain DHEA and "andro" plus "pregnenolone." I take high blood pressure pills, which depress testosterone, and I do have the genetic trait for male pattern baldness. I am not overly concerned about this, but if I could spend two or three bucks a day to correct my lack of vigor, and correct my increasing baldness, I would do it. But there is just so damn much hype and hucksterism going on that it seems impossible to make sound decisions. I'll be damned if I can evaluate claims outside of the field of formal medicine. Would you share your thoughts on this?

#### ANSWER:

Worthless products and treatments alleged to cause permanent weight loss, improve sexual vigor, extend the lifespan, cure cancer or AIDS, and of course stop hair loss, cost consumers around the world billions of dollars each year. It is an extremely profitable business for the sellers, and there is very little regulatory control over performance claims.

These "miracle products" inevitably target our fears, hopes, and vanity. Their claims are supported by stories and testimonials, rather than reproducible scientific studies, although some sellers of these products fraudulently claim to have such studies as well. The products may have been "used for years in Europe," or Asia, or somewhere else, and are only now available for purchase in this country. They often explain their effectiveness by inventing a somewhat plausible "cause" for the condition to be treated, and then explain that their product "cures" that particular problem. Effectiveness claims of seventy percent, eighty percent, ninety percent, and more are thrown out with reckless abandon.

The products will invariably list "ingredients" with scientificsounding names, often similar to medications that are related to treating the condition. They will claim the product is "all natural," "herbal," and "has no side effects." And there will be an offer for a money-back guarantee, if the product for some reason does not work.

It is amazing what even well-educated people will buy. We all hope for a miracle cure, a quick and easy solution to our problems. While you personally may laugh at an advertisement for a product making outlandish promises to erase cellulite or enlarge breasts, you may choose to purchase products with similar claims that are guaranteed to increase your energy level or reverse your hair loss. After all, its only "two or three bucks a day." I have to confess that I myself have a collection of half-a-dozen or so different abdominal exercise devices whose promises of miracle results seemed to make sense at the end of their 2:00 A.M. cable TV infomercials.

The United States Food and Drug Administration (U.S. FDA) is charged with regulating foods, drugs, and cosmetics. But in 1994 the Dietary Supplement Health and Education Act (DSHEA) was passed with massive lobbying by the health-food industry, and this act greatly weakened the ability of the FDA to protect consumers from unsubstantiated claims made by supplement sellers.

In addition, the Federal Trade Commission (FTC) and the United States Postal Service (USPS) have laws intended to regulate truth in advertising and interstate commerce; these laws are rarely enforced, and even when they are enforced, the penalties are small in comparison to the profits generated by the sales of bogus products.

A little common sense will tell you that if a particular product really did have the ability to safely and effectively treat any of these conditions, it would be worth hundreds of millions of dollars or more, and would be marketed in a reputable manner, not on late night TV infomercials, or talk-radio commercials, or by multi-level marketing schemes, or advertisements disguised as "newsletters" or scientific "journals."

The particular "journal" you mention, the *Journal of Longevity*, is published by Almon Glenn Braswell. According to Stephen Barrett, MD, who operates the Quackwatch web site (www.quackwatch.com), Braswell has probably sold more dietary supplements by mail over the past twenty years than any similar marketer in U.S. history. In 1983, Braswell settled a federal lawsuit for \$610,000, in which the FTC charged that his company did not have adequate scientific evidence that their hair loss products worked, including a product called "Bio-Genesis," and that they had not paid refunds as promised to their customers (See "FTC News Notes" October 4, 1983).

In 1984 a USPS official summarized at a congressional hearing that 138 false representation complaints were filed against fifty different medical-cosmetic products marketed by Braswell, Inc. One case revealed that Braswell received over \$2,000,000 in one sixmonth period for a worthless baldness cure. Mr. Braswell pled guilty to mail fraud charges involving faking before and after advertising photographs, and was sentenced to five years probation. He was also sentenced to a three-year prison term for federal income tax evasion (See "Quackery: A \$10 Billion Scandal" Washington DC: U.S. Government Printing Office, 1984, pages 137-138).

## BIO-GENESIS CONTINUES TO BE SOLD TODAY

In July 2000, an article sympathetic to "alternative medicine" attributed to Florida Governor Jeb Bush, appeared in the *Journal of Longevity*. Investigators from *Newsweek* magazine and the *St. Petersburg* (Florida) *Times* newspaper turned up a series of additional Braswell

legal "irregularities" that resulted in the Republican Party returning \$175,000 in contributions by Braswell, as well as the return of a \$100,000 Braswell campaign contribution to George W. Bush (See *St. Petersburg Times* Online, September 29, 2000).

On his last day in office as President of the United States, Bill Clinton included Braswell among the 140 felons he pardoned. It turns out that Hillary Clinton's brother, Hugh Rodham, was the attorney who actually delivered the pardon application, and was promised \$230,000 if the pardon was granted. Both Bill and Hillary have denied knowing that Hugh Rodham was advocating for Braswell, and Bill Clinton has stated that he was unaware of Braswell's pending legal troubles (see *US News and World Report*, February 12, 2001).

So you have to ask yourself, "Is this who you want to buy your hair loss treatment products from?"