

Hair for Life

**A complete step by step system help
you reverse thinning hair & hair loss.**

**See your hair grow day by day.
Positive results like never before.**



5th Edition

by Pharmacist's Lou & Darryl Segal

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Why I wrote this book

Some people hate their hair. Others stop hating it and give up entirely. How about you? While it's difficult to change your face or body build, it is possible to change your hair. Our hair is a kind of permanent apparel. While it may serve a small function in keeping the head warm, hair is primary decorative, enhancing (hopefully) our overall appearance. Think about it- even after you've stripped off your fashionable clothes from that carefully selected wardrobe, you're still 'wearing' your hair. Who can forget the powerful attraction of someone with beautiful hair?

These days, hair is important to both men & women. As a society, we annually spend millions of dollars on hair styling, permanent waves and hair coloring. Anyone whose hair is departing from his head probably feels more miserable about it now than ever before in history. Those people will desperately latch on to anything to prevent hair loss, including implants or other surgical procedures. And yet, with all the technology of the hair care field available, many people are still dissatisfied with their hair. It is reasonable to ask why so many people have major hair problems such as hair loss, baldness and dandruff. Surely there must be a cause for these conditions and hence a way to do something about them. There is. This book will tell you everything you need to know to keep your hair looking its healthy best throughout your life.

The good news is that there are preventative measures that can be taken to avoid the serious problems of baldness and hair loss. By considering heredity and other contributing factors, steps can be taken to prevent you being robbed of the head of hair you deserve. You will see, as you read through this book, exactly what those factors are, and what you can do to minimize the havoc they can wreak on your hair.

By having the awareness that your hair is 'alive' and changing throughout your life, you can adjust your personal hair care program accordingly. We've all heard people complain that their hair seems to have a mind of it's own, doing what it 'wants', well that's true. This book will give you the practical answers to 'read' the 'mind' of your hair and solve your own hair problems. Remember, if you want to keep your hair for life, you can. The Hair for Life program will help you, but you must make the commitment to doing so.

It takes at least four to six months before you see the benefits of this regime. During this time, your hair should get no worse and grow no thinner. With patience, you will finally have the hair growing thicker and improving in quality.

Look at it this way. It takes about 50 days of harmful treatment and diet to manifest itself as dullness in the hair of dandruff, longer for hair to start thinning. Conversely, about the same amount of time is required for a program of good nutrition, massage, exercise and correct product use to produce added shine and healthier hair. Don't expect overnight results. But, over the long haul, this program will repay your dedication efforts many times over.

A key to the success of the program is DAILY hair care. It is a must, particularly for a person with a problem scalp or hair condition. If you neglect daily care, you are admitting that you don't really care whether or not the desired results are achieved. If you read this book thoroughly and follow my Hair For Life Program daily, applying each step, you will improve your hair. As you do this program, you will see how much sense it makes and how easy it is to carry out. Finally, you will be delighted with your 'better than ever' hair.

Lets go back to the very beginning...once upon a time

It is a known fact that about 80% of men and 60% of women will lose a significant amount of hair during their lifetime. As we get old we start to age and the reality is that hair loss and thinning hair is part of this inevitable process. Well, I have good news. I have a program that my father discovered over 30 years ago and I have improved on substantially. I believe what I have to offer will help you reduce the amount of hair you are losing as well as give you being able to have the healthiest, thickest and strongest hair possible. Let me start this book by telling you how I got so interested in the subject of hair loss...it all began a long time ago....

"Accidental Discovery" Reveals Natures Secret for healthy hair growth



It was while vacationing in East Africa that my father Lou, also a Pharmacist, was impressed by the exceptionally luxuriant, thick and shiny hair of the natives of that region. They were applying an exotic extract to their heads and faces for tribal rituals. They were unknowingly using 'nature's secret'- a blend of herbal botanicals Extract, Coltsfoot Extract, Officinale (Comfrey) Extract, Willow Herb Extract



including Equisetum Arvese (Horsetail) Nettle Extract, Burdock Root, Symphytum Extract, Rosmarinus Officinalis(Rosemary)



and Chamomilla Sinensis (Matricaria/Chamomile) resulting in thick and healthy-looking hair.

Successful Results Reported:

This botanical extract a mixture of leaves, flowers and roots subsequently became the basis of a line of hair and scalp products yielding excellent results amongst my fathers' clients in Cape Town, South Africa. Reports of reduced hair loss, control of thinning hair, elimination of dandruff and itchy scalp came from hundreds of people. Even new hair growth was reported. As a young child I became fascinated at how natural remedies can help treat and possibly reverse such things as male & female pattern baldness. I made it my career to make these formulas available to people all over the world as well as continue to improve and update his original discovery.



A New Perfect Combination of Science & Nature



Because of the tenuous political situation in South Africa, my family and I immigrated to Canada, where I set about to searched all over the world and nutrients and added these to Panthenol, Inositol, Salicylic Biloba, Vitamin E, Silk Protein, Polysorbate 80 (Researched at I believe that my Scalp



improve on my father's original formula. I selected the best-known, proven hair his formulas. Some of these are Biotin, Acid, Jojoba Oil, Gingko Green Tea and the University of Helsinki). Formula is the most

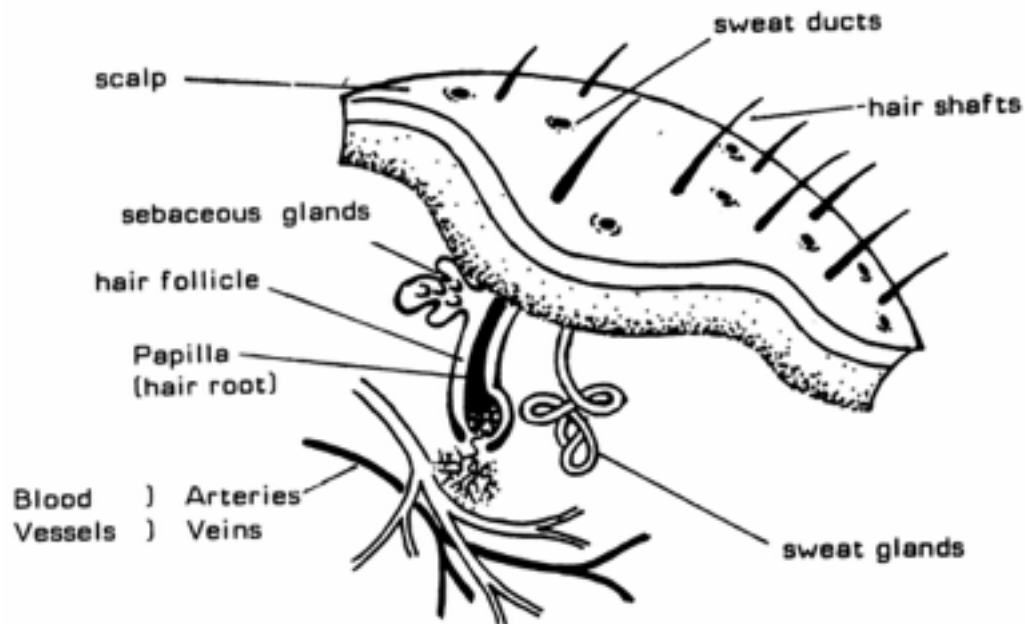


advanced and comprehensive non-prescription one of its kind. I also began to realize that hair loss like any 'disease' is multi-faceted and that it is not just simply 'rubbing' something on your scalp. We need to look at all the contributing factors that could possibly cause hair loss and then do everything we can to eliminate each and every one of these. That is the reason why I set out to write a book on the

subject...to explore this very point. My original book was called “Preventing & Reversing Hair Loss”, and this new book has a lot more detailed information included. This book will show you everything you need to know and exactly what you need to do to reduce hair loss and grow thick, strong and healthy-looking hair. The results will astound you!

Lets first get to the ‘roots & shafts’ of the situation!

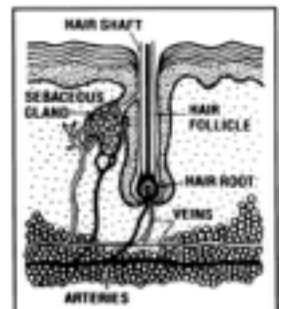
A basic knowledge of the structure and life cycle of the hair is invaluable in understanding the Hair for Life Program. Let’s take a quick behind the scenes look into the life of a strand of hair.



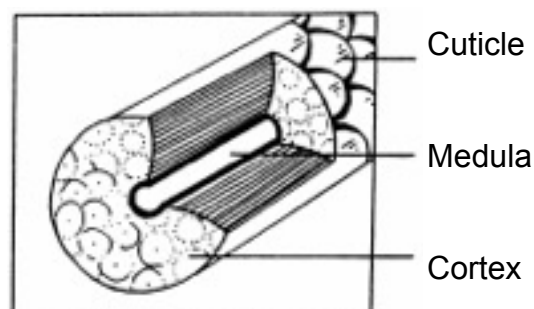
Every hair has

Similar to a tree or a plant, there is more to a strand of hair than what you can actually see. Found below the skin, the hair root is contained in a tube-like structure called the hair follicle. The hair root is the active growth site of each hair and is found at the base of each hair follicle. New cells are created in the hair root. As they enlarge and divide, they are pushed up and out, causing visible hair growth. You may be surprised to know that once hair is visible, it becomes dead tissue. In this respect, hair is similar to the tips of your fingernails.

a root!



Every hair has a shaft! Each strand of hair has two main components: the shaft (hair strand) and the root. The shaft is formed from the old cells that are pushed out as a result of new cell growth in the root.



By understanding the components, which make up a strand of hair, (and their functions) we can more easily treat and rejuvenate damaged areas. The parts of the hair are divided into three segments, including the cuticle, the cortex and the core.

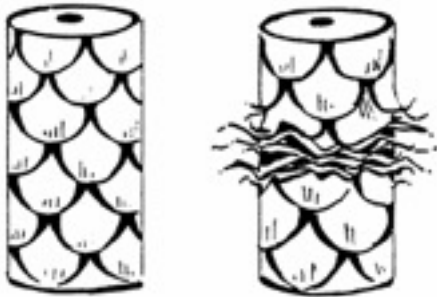
1) The Cuticle, forming the outer layer is made up of transparent cells that overlap each other like the scales of a fish. General hair condition is largely determined by the condition of the cuticle, since it is the layer giving elasticity and resiliency to the hair

2) The Cortex, forming the middle layer is protected by the cuticle. If this is damaged, the cortex becomes exposed, allowing for moisture loss. When this happens, the cortex unravels, resulting in split ends and damaged hair.

3) The Medulla is the supporting structure for a strand of hair. It is interesting to note that the medulla can be absent or interrupted without weakening the hair strand.

The 'Cuticle' is your hairs first line of defense

Hair is primarily composed of keratin, a solid, resilient, strong, fibrous form of protein. Getting a bit more technical, keratin is made up of amino acids linked together in a chain.



The outer layer of the hair shaft is called the cuticle. The cuticle is the protective coating for the hair shaft. This rather uninteresting structure is probably the most relevant one when it comes to the health and protection of your hair. As the cuticle goes, so goes the hair. When the cuticle is intact, you have healthy hair. When the cuticle is damaged, you have problems. Most of what you can do to keep your hair healthy involves taking care of the cuticle. Later, when I discuss which hair-care products live up to their claims, I primarily look at how these products affect the cuticle. Hair products that claim they can restore, repair, and restructure have to not only

get past the cuticle to help the inside of the hair, but also adhere to the cuticle in order to mend tears and holes in the cuticle or to shore up vulnerable spots that can allow the inside of the hair shaft to also become damaged. Of course all of that is only temporary, but it is the only way to create some feel of normalcy.

Under an electron microscope, blown up several thousand times, the cuticle resembles fish scales or layers of bark on a tree trunk. These overlapping layers form a tight barrier to the outside world's repeated attacks of washing, blow-drying, brushing, styling, and a number of other assaults. Sadly, the cuticle is not, shall we say, as tough as nails, and it can only withstand our daily grooming rituals up to a point before it starts to break down.

The Cuticle can get damaged in so many ways:

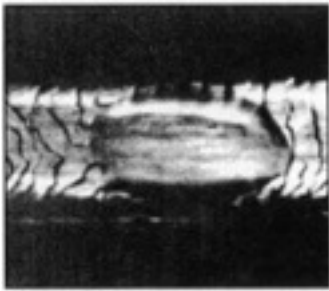
When the cuticle is healthy and intact, lying flat and tight against the hair shaft, the hair reflects light evenly, producing a wonderful lustre and shine. When the cuticle is bruised, from chemical processes, heat, or any kind of manipulation, the edges of the cuticle begin to lift and separate from the hair shaft. Initially, that can have a positive effect on the appearance of your hair. When the cuticle is roughed up and the edges of the scales stand up, the hairs are held apart from one another, giving a fuller appearance. One of the reasons permed or dyed hair can appear thicker (if the hair is not overly permed or dyed and is not multiprocessed) is because the chemicals from the dye and perms cause the cuticle to lift. The same is true for hair that is backcombed or "ratted." Backcombing roughs up the cuticle, lifting the edges so the hairs grab each other at the overlapping, frayed edges, creating a pretty tough network that keeps the hair aloft. That's why backcombed hair can stay in place for a

fairly long period of time. To an extent, none of this is a serious problem – but only to a certain degree. Hair can become over processed or overworked to the point of no return.

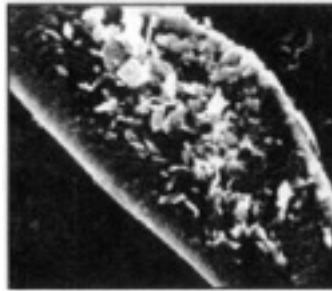
When the cuticle is repeatedly mistreated, chips of cuticle are torn away from the hair shaft, literally peeling away like the layers of an onion until there is nothing left except an exposed core.

Hair is exceptionally porous. Water readily absorbs into hair; about 20 percent water is present even when the hair is dry, and that can go up to 75 percent (the maximum amount) when it is wet. Too much water, though, can destroy any hairstyle, and the lack of water in the hair can do the same.

Examples of damaged cuticles:



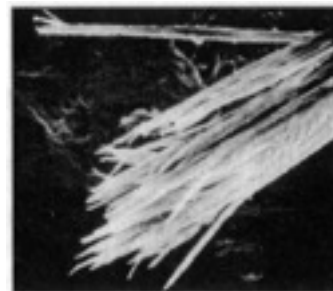
from blow drying



from salt



from chlorine



from the Sun

Your Scalp ‘Needs’ Attention if you Want Healthy Hair Growth

Your hair and your scalp are vastly different, yet intricately related. Oil production and dry scalp are probably two of the biggest headaches women have to deal with when deciding what shampoo and conditioner to use. Both oily and dry scalps can adversely affect the appearance of the hair on a daily basis. But even for someone with normal hair, a healthy scalp can play a significant role in the appearance of the hair over the long haul.

Like the skin on your face, your scalp goes through a shedding process. The lower layers of skin cells are alive and generally quite healthy and vital. Unlike other parts of your body that aren't protected by a dense covering of hair, the scalp rarely, if ever, has any sun damage, and that makes it some of the healthiest skin on your body.

As skin cells go through their life cycle, they transform, begin to die, and move toward the outside, changing shape and function along the way. By the time they get to the surface, they are dead and ready to fall off. Emerging from the scalp via hair follicles embedded deep in the scalp are single strands of hair. Each hair follicle is connected to a sebaceous (oil-producing) gland, nerve endings, and blood vessels. Circulation at the base of the hair follicle feeds the developing hair cells, helping to make a stronger, healthier strand of hair. If for some reason the hair follicle gets plugged, whether from the oil produced by the sebaceous gland, from hair-care products (styling products or conditioning agents), or from dead skin cells that have not been shed, it can hamper hair growth.

The primary way to deal with almost all scalp types and to reduce damage to the hair shaft is to focus most of your shampooing attention on your scalp and not your hair. That doesn't mean treating the scalp roughly or over scrubbing it, it means gently massaging the scalp with your fingertips. Not only does this help to remove dead skin cells, but also the massaging action of your shampooing increases circulation. Gently increasing circulation is one of the only ways to help nourish the root of the hair follicle from the outside in to help maintain healthy growth. It won't produce miracles like helping grow hair where there isn't any, but improving circulation can be subtly beneficial. Don't be

concerned that you won't be getting the length of your hair clean; despite the way products can build up on the hair, it actually gets pretty clean without much manipulation. Moreover, less manipulation of the hair shaft means less damage to the cuticle.

So, regardless of the apparently close relationship between scalp and hair, it is essential to treat your scalp and your hair as if they were not at all related or even existing on the same head. Remember, the scalp is part of a living system, and the hair you see and need to maintain is dead. Scalp needs and hair needs are very different.

.....
Hair Grows Through 3 Cycles...it Grows, Rests, & then... Sheds

Inside the hair follicle, deep below the skin, hair is growing through a life cycle all its own. At any given time, all the hair on your body is either growing, resting (or dormant), or shedding. Hair grows in three distinct stages. The first stage is the **Anagen (Active Growth Stage)**. At this point, the hair is very busy developing in the hair follicle, a pocket-like structure located deep in the skin that houses the bulb-shaped root of the hair. At the very base of this root is an intricate network of capillaries and nerves that feed the embryonic hair. During the growth stage, each individual hair formed by rapidly dividing cells that push forward and up through the follicle. As they multiply and expand, the cells reach the surface, where they die and harden into what we know as hair. This growth stage can last anywhere from two to six years. During this phase, hair grows an average of about half an inch per month, or six inches a year (but that is only an average and it can vary drastically from very active hair growth to very slow growth for different people).

Over the entire period of growth, the hair can reach a length of approximately three feet, about the middle of the back for most women. Naturally, there are variations in length potential, and women with tresses six feet long have been reported, but there are also women who can't grow hair much past their shoulders. The reason for this is that length of hair is genetically predetermined, and that explains why some women feel they can never get their hair to grow past a certain point while other women can't get to a hairdresser often enough to keep up with the grow-out.

The next stage of hair life is the **Catagen (Transitional Resting Stage)**. After two to six years of growth, the hair cells stop reproducing and the growth process is just about over. For about three to six weeks, the hair just lies around taking it easy while the root slowly moves up to the skin's surface.

Replacement
of New Hair



Entering its last phase of life, the hair is ready to literally jump ship and shed. The **Telogen (Final Shedding Stage)** is short-lived. At this point the hair root has moved almost to the surface (near the opening of the oil gland), where it is completely separated from the base of the follicle. In a matter of weeks the anagen (growth) stage begins again at the base of the hair follicle. Hair cells again start dividing and multiplying, generating a new shaft. This new hair sprouts to the surface, pushing the old hair out of its way.

So all that hair collecting on your brush, in the bottom of your drain, or on your clothing, about 40 to 70 hairs a day, is usually hair that has passed from the growth phase through the transition plateau and then, sadly, into the final period of shedding.

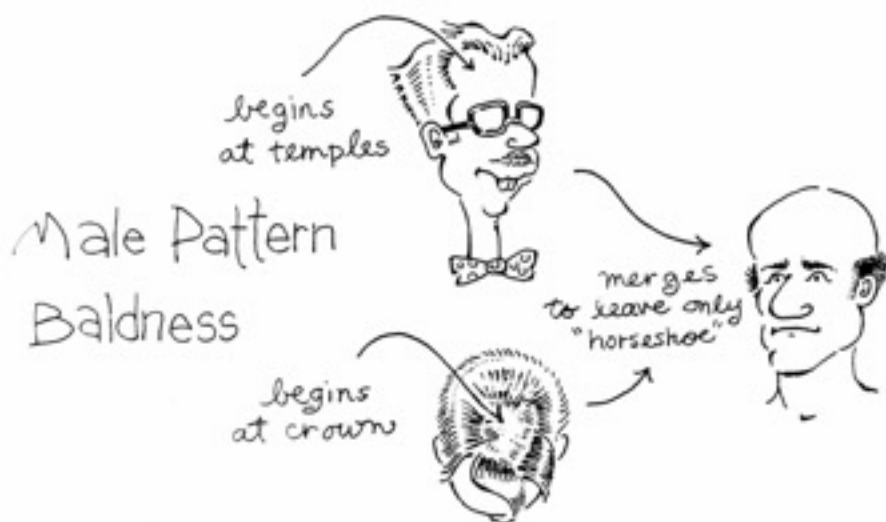
At any given time, approximately 85% of scalp hair is in the Anagen phase, 1% in the Catagen phase, and 14% in the Telogen phase. Thankfully, hair is predominantly in the growing phase (at least, if male pattern baldness has not started to take place), which explains why we end up having more hair than less, despite the ones we lose on a daily basis. When the cycle restarts, the new hair may have to push the old hair out of the follicle, which is why, sometimes, two hairs can be seen in the same follicle.

.....
The problem arises when the % of hairs in the Telogen Phase increase to 20 or 25%. Then we notice a dramatic increase in overall hair loss and this can of course be very alarming! My program works very well in this situation!

.....
Lets look at how the balding process works... anyway!

The normal life cycle of hair is five years. Each hair develops to maturity, eventually stops growing and then falls out. These hairs are replaced by a new hair over and over.

Balding starts when this new hair lives a shorter period of time. It too falls out and is replaced by a new hair that may last only a year or two. That hair with the shortened longevity will be replaced by one that will live an even shorter time, perhaps only six months, and so on. Hair follicles genetically programmed to cease growing will eventually fulfill their destiny. A time will come when this hair will fall out and simply not be replaced.



Normal Hair Loss & the Beginning Stages of Hair Balding

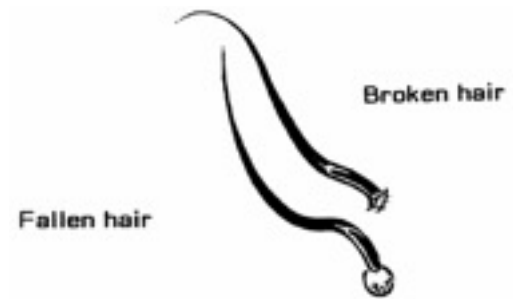
Most people lose an average of 40 to 70 hairs per day. For the most part, we are unaware that we are losing those hairs. If your hair is healthy and heredity is on your side, those hairs will be replaced and the hair loss will not be noticeable.

The first warning sign of baldness appears as excessive amounts of hair fall on your comb and brush. Another signal is finding a lot of hairs on your pillow, or thinning on the temple or on the crown. More advanced signs of creeping baldness is a definite recession of the hairline. Even if your genes have predetermined that you will ultimately lose your hair, there still are several steps you can take to slow this process down.

The Difference Between Hair Loss and Hair Breakage

One point to note here is the difference between hair loss and hair breakage. Hair that is falling out will have a little white bulb on the end. Broken hair won't. This white bulb is not the hair root – you can't lose the root. Rather it is a part of the hair nearest to the root as well as some scalp and skin. Since the active hair root doesn't come out with the hair, there is always the possibility for new growth.

On the other hand, if the fallen hair does not have a white bulb, then the hair is broken. Specific treatment shampoos and conditioners can be used to correct this problem. The most common causes of hair breakage are the following:



- (a) Styles that pull on hair for instance a ponytail, plait, or bun that's too tightly kept in place. Even frequently tugging on hair or nervously twisting may have the same outcome.
- (b) Over-Zealous Brushing: - Especially with a brush made of plastic or metal.
- (c) Traumatizing wet hair: - Using hair dryers or styling wet hair can break hair. Ideally towel-dry hair to get out the extra water, allow it to dry naturally.
- (d) Avoid frequent use of heated, rollers and curling tongs for their can result in excessive loss of hair's natural oils and moisture, causing them to become brittle and break-prone.
- (e) Subjecting hair to processes like bleaching dyeing or perming can lead to alteration in molecular structure of hair.
- (f) Use of harsh shampoos: - can make hair dry and brittle causing it to break off.

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There are many different kinds of hair loss!



We lose hair continuously, normally at the rate of sixty to one hundred hairs per day, although the rate varies with the seasons. The lowest losses occur in the summer. The normal number of hairs for an adult is about 100,000 with blondes typically having more and redheads fewer. *Baldness starts to occur when the rate of hair loss exceeds the rate of growth.*

Because the hair relies on the efficient functioning of the nervous and circulatory systems, dysfunctions in these systems will tend to have an effect on hair growth. Good general health is therefore an important contributor to healthy hair growth. There are a number of different types of hair loss and the next section examines the most important ones and their causes.

Types of Hair Loss

There are many different forms of hair loss (medical name Alopecia) and scalp conditions. All types of people - men, women and children - from all walks of life can suffer from them. This section provides background information concerning the more commonly observed of these hair loss conditions. In this regard we will first spend some time on the subject of Male Pattern Baldness (which counts for approximately 80 per cent of all hair loss conditions) - followed by a brief description of other forms of Alopecia. The conclusion of this section provides an overview on how hair loss has increased - not only effecting men but also



significantly in women in today's society.

The general term for hair loss is Alopecia and there are a number of generally recognised types, which are caused by different factors from physical abuse, through heredity, to illness and disease. Also, although some are common to both sexes, others afflict only one sex. Each of the most common types is reviewed below.

1. Alopecia Androgenetica

Commonly referred to as 'male pattern baldness' (MPB), this is by far the most common type amongst men. It is thought to be responsible for about 95% of baldness in males. It is manifested by a receding hairline combined with loss of hair from the crown. The condition can occur from the late teens through to old age but generally appears by the late thirties. There is typically a genetic pre-disposition to male pattern baldness but the physical causes are known and can often be addressed. Women can also suffer from Alopecia Androgenetica when they reach menopause but in much smaller numbers (about 15%).

Those suffering from Alopecia Androgenetica experience a shorter anagen phase and the new hairs become progressively shorter and finer. Eventually, the follicle shuts down completely leaving the whole area bald.

The fundamental cause of this condition is a set of chemical reactions. Testosterone produces a derivative called dihydrotestosterone (DHT), caused by a reaction between the testosterone and sebum, the naturally occurring oil secreted by the skin tissue. DHT enters the hair follicle and in those with a genetic pre-disposition to hair loss, it reacts chemically in the follicle and gradually destroys the hair root. Latest developments indicate that while the male hormone testosterone (which governs the sex drive) does play a part in MPB, it is not the entire story. It is now widely accepted that the enzyme 5 alpha reductase signals high conversion of testosterone to dihydrotestosterone (DHT). High levels of DHT bind to the hormone (Androgen) receptor in the hair and this interferes with the function of the follicle causing it to produce shrunken follicles in future hair cycles.

There are thus three ways to deal with the problem:

1. Control the creation of DHT.
2. Remove DHT from the scalp before it enters the follicle.
3. Clean the DHT out of the follicle before it does any damage.

Drugs are available that operate the first way and can be very effective. However, in some cases, they have some very undesirable side effects such as impotence and some cannot be used by women. The Hair for Life Program works in the second and third ways, with no side effects.

2. Alopecia Areata

This type of hair loss refers to patches where the hair has fallen out by the root. The areas sometimes join up and form large areas of baldness. It can occur on any part of the head and can appear very suddenly. Sometimes the hair will re-grow quite quickly. It occurs in all ages and young people are affected most often. There is no sex discrimination; it affects males and females equally. It usually occurs on the scalp, but any hair growing part of the body can be involved. The causes are variously thought to be genetic, stress related, or the result of a disease or immune deficiency, so a doctor's visit is the first priority to establish that an identifiable physical problem is not the cause. Probably related to Alopecia Areata are two more extreme conditions, the loss of all scalp hair (Alopecia Totalis) and the loss of all body hair (Alopecia Universalis)

3. Alopecia Totalis & Universalis

With Alopecia some people develop only a few bare patches and regrow them within a year, even without treatment. In others, the condition spreads until all hair on the scalp is lost; this is called Alopecia Totalis. In still others, all hair on the entire body is lost, this is called Alopecia Universalis. No matter how widespread the hair loss is, the hair follicles remain alive below the skin surface, and the possibility of regrowth remains.

4. Diffuse Alopecia (Female Pattern Baldness)

Female Pattern Baldness



Diffuse Alopecia refers to a gradual thinning of the hair specifically in females over a period of many years. There are a wide variety of possible causes and medical advice should be sought to identify the specific problem.

In female pattern Alopecia, thinning of the hair takes place over many years but only becomes noticeable when areas of the scalp become so thin with hair that upon washing and combing, bald areas are obvious. Once left to dry the hair looks very fine and thin no matter what hairstyle is adopted. It is considered that stress and hormonal imbalance can be influential factors in this condition. Some hairstyles, excessive perming, bleaching, or colouring and the wrongful use of hair cosmetics are other factors, which contribute to an adverse effect on the growth of the hair shaft.

Excessive brushing of the hair, along with other mechanical extremes, contributes to breakage and thinning of the hair. Look at the effect on a piece of wire bent backwards and forwards; of course the wire breaks and so too does hair if placed under extreme mechanical strain. If these harmful routines are discontinued in time there can be a very quick improvement in the hair shaft and regrowth of the hair. If however this problem is diagnosed too late then the condition can worsen and become permanent. Some other common causes are moulting following childbirth, stress, fever, and problems with the pituitary or thyroid glands, iron deficiency or anti cancer drugs.

5. Traction Alopecia

Traction Alopecia is caused by too much stress being placed on the hair and again is found primarily amongst women. It can be the result of rough brushing, tightly pulled ponytails or braids, hairpins, curlers or just excessive blow-drying.

Other types of less common Alopecia are Cicatricial Alopecia (due to scars), Alopecia Adnata (baldness at birth), Alopecia Follicularis (follicle inflammation), Alopecia Senilis (old age), Alopecia Neurotica (nervous disorder), and Trichotillomania (pulling out own hair).

6. Toxic Alopecia

We live in a highly technical age and the amount of chemicals and impurities, which creep into our environment, are impossible to detect. Toxic Alopecia can result after ingestion of some chemicals and drugs. This type of Alopecia is also known to frequently follow malaria, severe dysentery, typhoid fever, syphilis and leprosy.

It should come as no surprise to read of the adverse effects some chemicals have on our hair, we need only remember reports on television and in the newspapers of the effects on the human body that can result from chemical spills, industrial fires, and toxic dumping.

7. *Psychosomatic Alopecia*

This type of hair loss is associated with stress or trauma. This can be literally a self-induced condition caused by the individual worrying so much about their hair (with or without reason) that they speed up the hair loss condition.



What are the main causes of hair loss?

There are a lot of contributing factors causing our hair loss & baldness!

The main causes of hair loss.... is unfortunately hereditary & this we can do nothing about!

One of the most distressing forms of scalp disorders is alopecia, also known as male pattern baldness. The symptoms of this genetically predetermined disorder include physical changes in the hair, including loss of normal vigor and elasticity. Eventually, the hair can become thin and brittle and begin to fall out. While this type of baldness is referred to as male pattern baldness, it can occur in either sex. With females, however, the hairline becomes sparse, but does not recede.

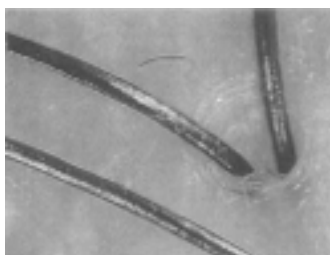
For some people, thinning hair or even balding can begin to appear during puberty. It is caused by an upset in the hormonal balance, with the main culprit being an over-abundance of androgen. Heredity is the predominant factor in male pattern baldness as it determines which “target follicles” will be susceptible to these powerful androgens. Hair loss in women generally occurs after menopause, reflecting decreased levels in estrogen, and thus comparatively higher levels of androgens in the system.

But there are others... which we can do something about!

In addition to hereditary factors triggered by hormonal imbalances, there are other kinds of hair loss, which, if treated, are reversible. Some of us have a predisposition towards hair loss. This is ‘handed’ down by our parents and grandparents. However, there are a number of others situations, which if corrected could help overcome hair loss & thinning hair. The most common ones are the following:

Clogged follicles

Every hair follicle has a sebaceous gland and people with hair loss have a predisposition toward having excess sebum secreted from these glands. This substance accumulates in the follicles and literally ‘clogs’ it. My program will help reduce this.



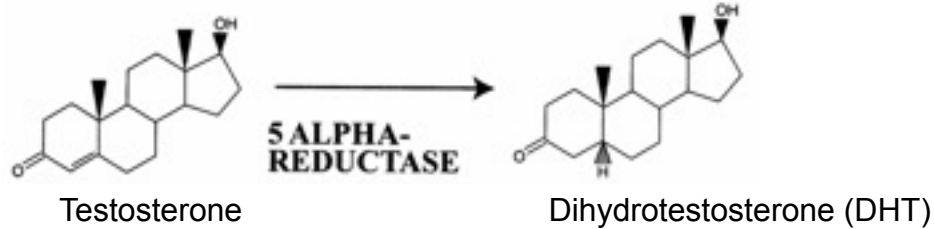
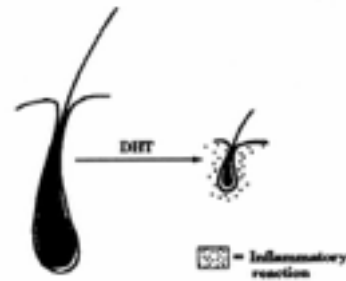
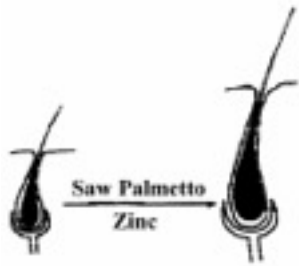
Healthy hair



Clogged hair

A build up of DHT

One of the major causes of hair loss has been found to be the build up of the hormone DHT (Dihydrotestosterone). This happens when the testosterone, which is in men as well as women, is converted to DHT by the enzyme 5 Alpha Reductase (5AR). The secret then is to reduce the amount of 5AR so that there is as little or no conversion to DHT, which is the big culprit! There are a number of drugs on the market that can effectively do this, however they do have side effects. My program can help to achieve this with no known side effects.



Impaired Scalp Circulation

If the scalp is tight, blood circulation to the follicles is reduced, and hence the hair “starves”. There are several factors, which contribute to the making of a tight scalp. These include changes in climate, medication, discontinuing birth control pills and post partum hormonal imbalances.

Menopause

As women go through menopause this of course changes the hormonal balance in the body and causes havoc to the hair.

Birth Control Medication

Has been shown to cause hair loss in women who have a predisposition to this.

Nutritional Imbalance

A vitamin and protein deficient diet provides inadequate nutrients for the scalp, thus affecting hair growth. Especially with crash diets, a lot of men and especially women going on diet cut out protein and this caused severe hair loss. Vegetarians have the same problem.

Excessive Stress

This is a huge one. Continued stress for a long period of time can cause havoc to your hair...if you are predisposed to hair loss! A sudden shock or physical stress from surgery or chemotherapy may also cause hair loss. Stress causes the hair follicle to tighten, shrink and you notice the hair loss increase. The more stress the more hair loss. This happens not only in men but women as well.

Poor Hair Hygiene

Using the wrong hair products, which are full of chemicals, such as Sodium Lauryl Sulphate, Cocamide Dea, Sodium Chloride (salt), artificial colouring can also contribute to poor hair health. Having perms, colouring your hair, chemical treatments are obvious causes of hair loss. Blow dryers and teasing hair, hair pumps...also.

A tight scalp prevents the required nutrients reaching the scalp to nourish the hair follicles. The best treatment for the above is 1) Healthy diet and 2) Massage and exercise to promote good circulation.

Think also of the effects of gravity on our bodies. If hair loss occurs as a result of restricted blood circulation and stimulation, which part of the whole body is highest most of the day? Conversely many people who stand on their feet all day may eventually end up suffering from varicose veins, which is the condition of permanently and abnormally dilated and swollen veins.



Women Stress & Hair Loss... what a combination!

About 70% of people who call, write and e-mail me regarding their hair loss problems are women. This is the opposite of what it was 10 years ago, when it was 70% of men!

Most people associate hair loss as being a male problem – not so, in fact about 20% of American women suffer the effects of female pattern baldness (technically known as androgenetic alopecia as discussed above). Symptoms of this condition are a general thinning of hair over the whole scalp area and a moderate loss of hair on the crown of the head or at the hairline. It is rare for women to develop completely bald areas as men often do. Hair loss in women typically begins around age 30 and becomes noticeable around age 40. The process speeds up after menopause. As with men, hair loss in women is caused by a combination of dietary, genetic, and hormonal factors and psychological stress.

The common causes of female pattern baldness are:

- Malnutrition from an unbalanced diet
- Rapid weight loss from dieting
- Severe illness or surgery
- Prolonged emotional stress
- Anemia or low blood count
- Thyroid abnormalities
- Abuse of drugs, especially amphetamines

Postpartum hormonal changes or discontinuation of birth control pills can also cause significant hair loss, but in most cases it is temporary, and hair will recover its body and luster as the woman's body chemistry stabilizes. Hair loss in women is often associated with crash dieting. Nutritional deficiencies are often the culprit. Fasting or an incorrect diet often results in a shortage of vitamin C, vitamin E, beta carotene, and other antioxidants, leading to hair loss. Vegetarians often find their hair thinning and their hairline receding, especially when they first switch to a meat-free diet. The culprit is usually a lack of protein in the body. When they increase the amount of non-animal protein — soy products, for instance — in their diets, hair loss stops and often reverses itself.

For all those women who know their hair is not as thick and vital as it once was this Hair for Life program will be of immense value.



Smoking is Not Good for Your Lungs...and for your hair!

Cigarette smoking is the single most important preventable cause of death in almost every developed country. In the United States, more than one in every six deaths can be attributed to it. Regardless of this statistic 25 - 30 percent of adults still smoke and more and more teenagers are experimenting with cigarettes; of these about 80 percent will become addicts in adulthood. Smoking affects the heart by the action of nicotine and carbon monoxide. Nicotine stimulates adrenalin, the stress hormone, which suddenly increases the heart rate and blood pressure. Carbon monoxide interferes with the ability of the blood to carry oxygen to the heart. By stimulating the blood vessels to constrict, the nicotine that the blood picks up in your lungs increases the resistance of your entire arterial system to the pumping action of the heart. Clearly with the role of the circulatory system so vital to our hair and scalp - if you are a smoker you owe it to yourself to stop and your hair will benefit as a result. Most people wouldn't think of expecting their motor vehicle to run at optimum level if the quality of the oil is polluted or blockages prevent correct flowing and distribution of oil or petrol. Our blood is literally our lifeblood and keeps us running at our optimum level.

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Hair Loss is Not the Only Hair Problem We Can Face...there are others!

Probably the most common complaint about hair concerns damaged hair. What can be done about dry, brittle hair or split ends? Let's take a look at the different ways hair becomes damaged.

As you remember from the section on hair anatomy, hair is almost pure keratin protein, which is a strong, impervious natural substance. At the surface, the natural lustre and sheen of the hair is created by the smooth overlapping of the keratin cuticle. Chemicals contained in harsh alkaline shampoos, bleaching agents and waving lotions all take their toll on the protective cuticle of the hair. When the cuticle is injured, moisture from the inner hair layers evaporates, leaving the hair dry and brittle.

How do these chemicals go about their nasty business of damaging hair? In order for permanent waves or colouring chemicals to "take", they must penetrate the cortex fibres. The cortex is located below the hair cuticle; it determines the condition of the hair and contains most of the pigment particles, which create natural colour. When permanent wave or hair colouring chemicals penetrate the cortex, they also damage the rope like structures contained therein. Thus the hair is weakened, often to the point that it will break with even modest combing and brushing. If the damage is excessive, the hair may break at the root and give the impression of hair loss. The moisture loss also causes split ends, decreased body, and lack of shine. Other culprits that damage this delicate cuticle are blow dryers, electric rollers, curling irons and uncoated bobby pins.

Of course, there are other causes of damaged hair in addition to those described above. A deficiency of oil from the sebaceous glands in the follicle can cause dry hair. Nutritional deficiencies, certain medications, poor circulation, heredity and the aging process are other factors.

And here is some bad news for those of you who love the sand and surf - exposure to chlorinated or salt water and the sun can damage unprotected hair. In addition, excessive build-up of salt from perspiration can be another culprit. Of course this can easily be alleviated by simply washing your hair after a workout or a long hot day. One more season influence is cold and wind. Just as cold winter winds chap the skin, they can also blow the moisture right out of your hair.

Now that we have this general overview of the different kinds of damaged hair, let's take a closer look at each specific problem and its related treatment. By knowing and understanding the causes of common hair problems, you should be able to actively control them. This background information to the Hair for Life Program will help you know both what to do and why.



Going, Going Grey?

One of the mysteries still unsolved by medical research is why our hair turns grey. There is no common pattern to greying; we simply don't all go grey at the same rate. Think of all the young people you've run into who are "prematurely" grey. Contrast them with older folks well into their sixties who still have their original colour and it's clear that age is only one puzzle piece of the "grey mystery".



While we may not know exactly why people grow grey, we do have useful information on the general phenomena of grey hair. Let's look at the most frequent questions people have asked me about grey hair.

What exactly is grey hair?

The truth is that grey hair is a sort of optical illusion. The hair isn't really grey. Rather, it is white hair in which the natural colour has receded. To be more precise the pigments, or colour granules, gradually cease to form in the hair shaft. Hair lacking in colour granule appears white. The number of white hairs interspersed with the coloured ones determines the degree of greying. A head of hair without any coloured pigment granule appears white, not grey.

Assuming that we probably will go grey as we age, does greying affect the health or strength of my hair?

Fading colour is no more a disease than is the darkening of hair pigmentation, which occurs in many individuals between early childhood and maturity. In fact, it is normal for hair colour to alter in density with age. This alteration, however, is not related to the health of the hair or to its ability to grow. Grey hair is neither weaker nor "wiser" than coloured hair. The strength and structure of a grey hair is the exact same as that of a coloured strand.

At what age does greying begin?

As was stated earlier, there is no set pattern for greying - it can begin at any age. Many babies are born with white hairs. Some people start getting white hairs during puberty. For most however, the first grey hairs seem to coincide with the magic age of 30.

Is greying hereditary?

There are various factors contributing to greying and heredity is an important one. If either parent greyed early, there is a higher probability of that trait occurring in the offspring.

Is grey hair related to hair loss?

The onset of greying often coincides with the start of hair loss. On the bright side, while almost 100% of adults over age 50 will have some amount of grey hair, only 60% of men and 40% of women experience some hair loss by the time they reach that age. There is, however, no direct link between greying and baldness.

What about other causes of greying?

While greying is associated with age, since white hair increases, as we get older, other factors, such as stress can have an affect. Many people who are under stress suffer from nutritional imbalances. A nutritional imbalance, such as a lack of B vitamins, can contribute to hair turning white. It is a good idea to take vitamin B, which will help retard greying and aid in the production of healthy hair. Both stress and nutrition and their affect on hair are thoroughly discussed later on in this book.

Does pulling out one white hair encourage two to grow?

Definitely not! When someone constantly pulls out their white hairs, they risk damaging the hair root or rupturing the hair follicle. If the hair follicle ruptures, it could take several months for a new hair to grow. During that time, the hair follicle immediately adjacent could also stop producing pigment and two white hairs would then grow out side by side. There is, however, no direct cause and effect relationship between pulling one white hair and having another grow in just next to it.

Can hair turn white overnight through shock?

Definitely not! Only chemical or other forms of bleaching could remove the pigment from the hair that appears above the skin. Shock can only affect the hair forming in the follicle. It would take at least a day for non-pigmented hair to become visible and many weeks before the entire head of hair is replaced by the altered growth. Although the hair may seem to grow white very suddenly, the actual process is quite gradual.

Does smoking discolour grey hair?

Yes! Smoking, or being in a smoke polluted atmosphere, can turn an unattractive yellowish brown colour over a protracted period of time.

Is grey hair drier than coloured hair?

Not per se. Hair tends to become finer in texture and drier with age. The fact that the hair itself is grey does not influence the texture and dryness.

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Dandruff 'Fallout'

Dandruff, the most prevalent scalp complaint, affects most of us at one time or another. It is so universal that you might think of dandruff as the "common cold of the scalp". For most people, dandruff is a nuisance and is nothing to worry about. Simple [or natural] dandruff is a social, rather than a medical, problem and is easily controlled.

What is dandruff? This word is used to describe all scaly conditions of the scalp. Like the term "headache", it describes the symptoms of



a disorder, not its cause. Common dandruff [medically known as seborrheic dermatitis] is the most common kind. It appears as yellowish flakes on your hair or shoulders. The scalp becomes itchy - the more you scratch, the more you become adrift in a down storm of dead skin.

Dandruff is frequently only a temporary condition. It can be caused by a cold, sunburn, stress, and incorrect use of hair cosmetics. Sometimes specific conditions that affect the skin internally or externally can also cause this kind of temporary dandruff problem.

Dandruff forms when a chemical reaction within the body speeds up the normal shedding of the scalp skin. When these fairly large skin flakes come off, they can get trapped in the most often too oily. The dandruff flakes absorb these scalp oils, thus making the scalp appear dry.

You're probably wondering whether dandruff affects the hair. Many people with serious dandruff maintain a healthy head of hair throughout their lives. But, if thinning is an inherited trait, any kind of dandruff problem might hasten this condition for both men and women. Dandruff does not, however, cause baldness.

Speaking of baldness, you would note that even bald people get dandruff. Although all the hair may be gone, the oil glands remain. Since all that is needed to get dandruff is increased skin cell turnover, combined with excess oil secretions, even bald people can have the dandruff itch.

By the way, I'm sure you'll be happy to know that dandruff is not contagious - you can't get it from someone who has it or from their comb or hairbrush. Don't get me wrong, however. I'm not advocating your using someone else's personal hygiene equipment, except, of course, in an emergency.

Some people have a recurrent dandruff problem. Don't be disheartened if, after treatment, the dandruff comes back in a few months. You'll learn how to take care of it the Hair for Life Way.

Sometimes dandruff or seborrhea affects other parts of the body. While it's most common on the scalp, scales and itching can develop on body areas with an abundance of oil glands. Common sites are the eyebrows and eyelids, around the nose, behind the ears and on the chest. But, if these symptoms appear in the pubic area, you should consult your physician.

Now that you have a better understanding of what dandruff is, let's turn to treatment. There are two basic steps to follow:

- 1) You should massage the scalp and brush the hair using the techniques described in the Hair for Life Program. This helps dislodge the troublesome cells.
- 2) Frequent shampooing helps rid the hair of dead skin scales and normal oily secretions. Anti-dandruff shampoos, usually having *zinc pyrithione* as the active ingredient, are useful in breaking up the cells while they are still on the scalp, thus preventing the formation of dandruff flakes. More to come on shampooing techniques later on in the Hair for Life Program.

There are two types of Scalp Dandruff:

(A) Pityriasis-capitis - It is the simple kind consisting of white dry flakes falling from the scalp. The result is due the rate at which the scalp sheds its dry skin cells, which in turn depends on the health and diet of the individual stress, too seems to be related.

Can be controlled by:

- (I) Paying more attention to health hygiene.
- (II) Consuming more fresh fruits in your diet.
- (III) Drinking plenty of water.
- (IV) Use shampoo with Zinc Pyrithione, Tea Tree Oil, Neem Oil, Salicylic Acid, Aloe Vera.
- (V) Rinsing the hair carefully after shampoo.
- (VI) Brushing gently to rid the hair of trapped cells.
- (VII) Lightly massaging the scalp to dislodge the dandruff flakes.

If a simple routine like this does not work, consult a dermatologist on the use of anti-dandruff shampoo, which might slow down the rate at which the cells are shed from the scalp.

(B) Seborrheic Dermatitis - If the scalp is very greasy, an individual might end up with this type of dandruff, which is thick, oily, scaly, crusted and weeping. This condition almost always needs medical care and attention, but if it is mild you can treat it at home by using an anti-dandruff shampoo. The best remedy however is to wash hair regularly with a shampoo containing Zinc Pyrithione. Consult a dermatologist if the problem is severe or persists.

Tips on Managing Dandruff

- Restore the health of the scalp by bringing about a positive change in your diet and living habits.
- Light oil massage, can help to dislodge the existing dandruff flakes. Massage the scalp carefully. The fingertips should be used to move the skin on the scalp in small circulatory motions.
- Keep your scalp very clean. This can be achieved by washing hair twice a week with liquid shampoos.
- Dandruff can be infectious. Keep your belongings clean and separate to eliminate the chances of infection. Whenever you wash your hair, soak your hairbrushes and combs in hot water containing antiseptic lotion.
- Bring about a positive modification into your lifestyle, to eliminate stress and overcome dietary deficiencies.

Dandruff is an exceptionally common scalp condition characterized by flaking and scaling. Intermittent episodes of fine, dry, white flaking and mild itching are the hallmark of dandruff.

Although there is no known cure for dandruff, however there are things, which can help to effectively relieve and control damaged and dry hair, as well as help prevent recurrences.

The best-known ingredients to help remove dandruff flakes and moisturize dry scalp are Zinc Pyrithione (high in the mineral zinc), Sage Leaf Extract, Birch Bark Extract, Aloe Vera Extract and Panthenol (Vitamin B5).

Another Common Scalp Disorder is Psoriasis

Psoriasis is a non-contagious skin disorder, which affects millions of men and women all over the world of all ages. In its most common form, these cells form scaly, reddish patches, which are often unsightly, uncomfortable, and are frequently irritating, itchy and painful.

First visible outbreaks of psoriasis may be prompted by stress, a major infection, or a minor skin injury such as a burn or cut.

Although there is no known cure for psoriasis, however there are things that can help to effectively relieve and control the symptoms of psoriasis, as well as help prevent recurrences.

The best known ingredients to deep cleanses away excess greasiness and revitalizes the scalp are Tea Tree Oil, Neem Oil, Salicylic Acid (Meadowsweet Extract), Juniper Berry Extract, Willowherb Extract, Thyme Extract, Aloe Vera Extract and Grapefruit Seed Extract.

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Dry Hair and the Frizzies

How can you tell if your hair is too dry?

Here is a list of common indicators:

1. The hair feels stiff or brittle.
2. It looks dull and frizzy.
3. There is a lack of natural oil or moisture.
4. Split ends are usually present.



What can you do to improve the condition of your dry hair?

The glands on your own scalp produce the best anti-dryness grooming oil. To distribute that oil properly, you should brush your hair about 20 full strokes per day - if your hair is thick and long - less if your hair is thinning.

Caution: don't exceed 20 you'll risk inducing traction alopecia, a temporary hair loss caused by zealous brushing. Be sure to use a natural bristle brush, rather than one with nylon bristles.

Protein conditioners can help restore the smooth surface. An adequate coating of conditioner can bring back some of the integrity of the hair structure. However, conditioners cannot repair all the damage.

Split Ends



We've all heard that term before, but what exactly are split ends? Turning to a quick review of hair anatomy, you will recall that each hair shaft has three layers. If the outer layer [cuticle] is worn off or damaged, the middle layer loses its moisture and begins to split. The following diagram demonstrates the difference between a healthy strand and a split hair.



Hair that is split:

The hair is protected by the intact cuticle, thus sealing in moisture and natural oils. This helps to maintain a sturdy structure.



Healthy hair:

The loss of moisture and natural oils makes hair fibres more susceptible to damage at the ends. What are the main causes of split ends? There are four primary ones. As was mentioned earlier, over treatment with chemical dyes and bleaches is a real villain. In addition, over manipulation, including excessive brushing, teasing, or use of brush rollers can really hurt the hair. The sin of over-brushing could be accompanied by incorrect brushing or the use of a hairbrush whose bristles are too sharp, and thus damaging.

Excessive exposure to the heat from blow dryers can scorch the cuticle.

On the flip side of heat and dryness, we have the problem of humidity and split ends. Haven't you ever wanted to scream on a wet, rainy day when your hair gets all frizzy and uncontrollable? Why does this happen? Humidity causes the "frizzies" due to the tendency of the hair to absorb moisture from the atmosphere. During a downpour, your hair draws water from the air, swells up and thus exposes every split end, causing it to be unmanageable and frizzy.

What can you do about split ends? The main cure is to trim them off. Never, never permit a razor cut – insist that the split-ends are trimmed on a blunt cut with scissors. Hair that splits should be cut at least 3-4 times a year. Long hair is particularly susceptible to split ends; the splits can be many inches long. If you have split ends, make sure you use a conditioner after shampooing. This will reduce tangling and static, as well as restore hair softness.



Oily, Greasy Hair

If the glands attached to your hair follicles secrete too much oil, the result is that "horrible" condition proclaimed in shampoo ads as "the greasies". The rate of oil secretion is a function of your hormonal makeup. It appears, however, that psychological stress can stimulate production of the hormones controlling the output of oil glands. Thus, when someone is under stress, they may develop oily hair.

How do you know if your hair is oily? Oily hair separates into strings not too long after shampooing. It looks greasy and mats down. If you run your fingers through oily hair, inevitably some oil will remain

on the hands. In addition, many people with oily hair will also have oily facial skin.

Here is a little test you can do to find out if you have oily or dry hair, in case you're not quite sure. Make sure to do the test at the end of a day when you have had a morning shampoo. Cut strips of absorbent cotton and insert them between the rows of bristles on your hairbrush. Before bedtime, brush through your hair several times. The proof will be on the cotton: oily cotton indicates oily hair. Isn't it amazing how much oil is produced in one day? On the other hand, if the cotton is relatively oil free, then you don't have the "greasies".

Just to set the record straight, when we refer to oily hair, what we really mean is that the scalp is oily or seborrheic. The oil you feel on your hair comes from the glands beneath the scalp.

So, how can you beat "the greasies"? There is no safe, long-term method for reducing the output of the oil glands. But there is a simple way to control the problem. That is frequent shampooing, probably once a day. Beware, however, of stripping the hair too completely of its natural oils. Should you find it necessary to shampoo daily, lather only once, regardless of the instructions on the shampoo container.

On the up side, a positive aspect of oily hair is its ability to better withstand damage from dying and permanent wave chemicals than drier hair. If you have oily hair, it's probably better to go for a short hairstyle to make daily washing easier and more effective.

The Natural Balances Of Hair and The Factors Can Cause Serious Hair Damage

The following pages further expand on the hair and scalp system: it corrects balance and various influential factors in this regard. These factors are extremely important to the overall condition of the hair and scalp.

The Natural Balances:

To have healthy hair growth you need the right balance of Protein, Moisture, Sebum and Acid Balance.

Their combination at correct levels assures the best hair possible. Healthy hair shines, is non-porous, is manageable and grows from a healthy scalp protected by the Acid Mantle.

Set out here is a brief description of the 4 balances:

Protein

Protein is the principal balance for strong, healthy hair. Consider it the foundation balance. Hair is actually comprised of 97% keratin, itself a protein. When the structure of the hair is damaged, it loses keratin.

Moisture

Hair consists of 97% protein and 3% moisture, including varying amounts of trace elements, minerals and lipids. The moisture content of hair can vary from 3% - 14% as atmosphere conditions alter. The

percentage of moisture in the hair is directly related to relative humidity or water in the atmosphere. Moisture is the internal lubricant of the fibrous structure of the cortex. The correct moisture balance gives hair its elasticity, manageability, pliability. When the moisture balance of the hair is upset, these qualities are affected. Exposure to the elements, use of chemicals and cuticle damage through the use of appliances are major causes of damage. Damage is porosity and porosity causes moisture loss.

For example: *In a hair salon a client complains of a recent perm that appears wiry and straight. When wet, the curl returns immediately, obviously a moisture balance problem. The hair has lost moisture. Loss of elasticity, pliability and manageability follows.*

Sebum

Sebum is the name given to the natural oil, which is produced by the sebaceous glands in the skin and scalp. Sebum exudes from the sebaceous gland onto the scalp and travels along the hair shaft by capillary action.

Sebum is nature's own hair and skin protector against the elements. Its other roles are:

- It seals moisture in the hair.
- Acts as an external lubricant.
- Reduces friction wear.

Sebum together with perspiration is also responsible for the mildly acidic nature of the skin, scalp and hair, this we call the acid mantle, and it gives the hair and scalp a pH of 4.5 to 5.5.

A fine coating of sebum is essential for the hair and scalp. Technically one could never have too much sebum on the hair as this would only afford greater protection. However from a social point of view this obviously would not be considered acceptable. The optimum level for hair and scalp should be enough for protection and lubrication but not enough to cause rancidity at the scalp surface.

Firstly it should be recognized that with today's lifestyles, the most common cause of reduced level of sebum is frequent shampooing. This illustrates the necessity for the correct shampoo and conditioner. The shampoo to cleanse to the correct level, and conditioner to seal the cuticle, calm the sebaceous glands and lock in moisture. Whether an individual has too much or too little sebum on their hair and scalp will depend on the following factors: Hereditary Factors, Age Factors, Diet, Hormone Levels, Stress, Hair Diameter, and Porosity.

Hereditary factors obviously cannot be changed: some races and some individuals produce more sebum than others. Dietary influences can effect sebum production; food such as nuts, chocolate, fats and oils can cause increased sebum production in some people.

Hormone levels, notably Androgens can effect sebum production; this can result from an Endocrine (hormone producing) gland dysfunction and through the effect of stress on these glands.

The diameter of the hair shaft will influence the distribution and therefore the "visibility" of sebum on the hair. Fine hair generally appears to be more affected by excessive sebum production than coarse hair and becomes less manageable.

Porosity will also influence the "visibility" of sebum on the hair. If the hair is quite porous i.e. the outer cuticle is roughened or degraded then this area will tend to "absorb" sebum.

Generally as we get older sebum production decreases. Through correct dietary advice, good health and accurate product selection an optimum sebum level can usually be attained.

Acid Mantle

It has been established that an acidic environment exists on scalp and hair surfaces. Our skin produces perspiration and sebum and the mixture of these two substances has a mildly acidic pH value. This mildly acidic mixture, which covers our skin and scalp surface, can be referred to as the Natural Acid Mantle. Its pH value falls in the range of pH 4.5 - 5.5.

The Role of the Acid Mantle

1. To protect the skin from bacteria.

This natural Acid Mantle on our skin and scalp surface protects the skin from bacterial attack. The Acid Mantle is not fully developed until puberty, which is why younger children seem more susceptible to skin infections.

2. To maintain the hair fibre in a strong and flexible state.

Hair fibre does not produce sebum or perspiration and therefore does not have its own Acid Mantle; it does however, gain an Acid Mantle through the influence of sebum and perspiration from the scalp. The effect of the influence of the natural Acid Mantle on the hair fibre is to keep the fibre as compact as possible. In this natural state, hair is continually under attack from many and varied areas. Incorrect shampoos, lack of appropriate conditioning and friction damage, use of heated appliances, swimming pools and other chemicals all rob hair of necessary moisture.

We can all relate to the effect of humidity on the hair:

- Naturally wavy hair in which the curl increases during damp and humid conditions.
- An over processed perm that appears wiry and straight but curls when wet and reverts as the hair dries.

These facts clearly indicate a definite need for products that can quickly and efficiently re-hydrate hair that is suffering from moisture loss.

Hair Damage

Hair is exposed to damage the moment it emerges from the follicle. There are three major damaging influences:

- Weather Damage
- Wear Damage
- Chemical Damage

The degree of damage can vary from a slightly raised cuticle to areas where the outside layer has been destroyed. Without the protection of the cuticle the cortex is exposed. The result of such damage is a breakdown in hair strength.

The more damage the hair fibre sustains the more porous it becomes; the more porous it becomes the more subject it is to further damage and loss of moisture which causes the hair to be dry and unruly.

It is important to recognize that longer hair is in fact older hair. The further from the scalp the hair grows the less protection the mid lengths and ends receive from Sebum and the Acid Mantle. As hair gets older and progressively receives less natural protection, damage is compounded. Remember

unlike skin, hair does not mend itself. Once structural damage is sustained, suitable treatments must be given or the hair will eventually need to be cut off. It is wiser to try and prevent as much damage as possible through intelligent hair care.

Weather Damage

Everyone knows that prolonged or repeated exposure to the sun is dangerous for the skin, but it is a lesser-known fact that hair suffers too. Without protection hair becomes weathered, porous and brittle. The ultraviolet rays of the sun can damage hair in two ways:

1. They can bleach colour from hair.
2. If hair is exposed repeatedly to sunlight an actual chemical change occurs in the fibre and the disulphide bonds are converted to cystic acid. This results in a swelling and weakening of the hair fibre.

Constant exposure of hair to the wind, particularly long hair, can result in loss of moisture. Static electricity increases in low humidity conditions and is the cause of flyaway and unmanageable hair.

Wear Damage

There are many forms of damage that can abrade the cuticle layer; be careful in this regard. Brushing and Combing can also be damaging. It is important that correct brushes and combs are chosen. A natural bristle brush is the best choice or the combination of both natural bristle and nylon is much kinder to the hair than 100% nylon. Stretching or pulling hair with a brush or comb should also be avoided. DO NOT BRUSH WET HAIR.

Chemical Damage

Permanent Waving, Hair Straightening, Tinting and Bleaching all cause a degree of damage to the hair fibre by disrupting the Keratin Balance of the hair. These services are a necessary and desirable part of hairdressing and if they are conducted professionally using quality products, the degree of damage sustained can be minimal.

The correct choice of hair product selection from shampoo, conditioner, styling gel, mousse etc. is of vital importance not only cosmetically but also in order to obtain the necessary balance required.

Now that you have a basic understanding of hair anatomy and common hair problems, it's time to begin my Hair for Life Program. You will see that this complete program of total hair care will lead to healthy hair that will be your crowning glory for life.

The 4-Part HAIR FOR LIFE Program includes:

1. Hair Hygiene

Washing, conditioning and drying your hair – the correct techniques

2. Scalp Stimulation

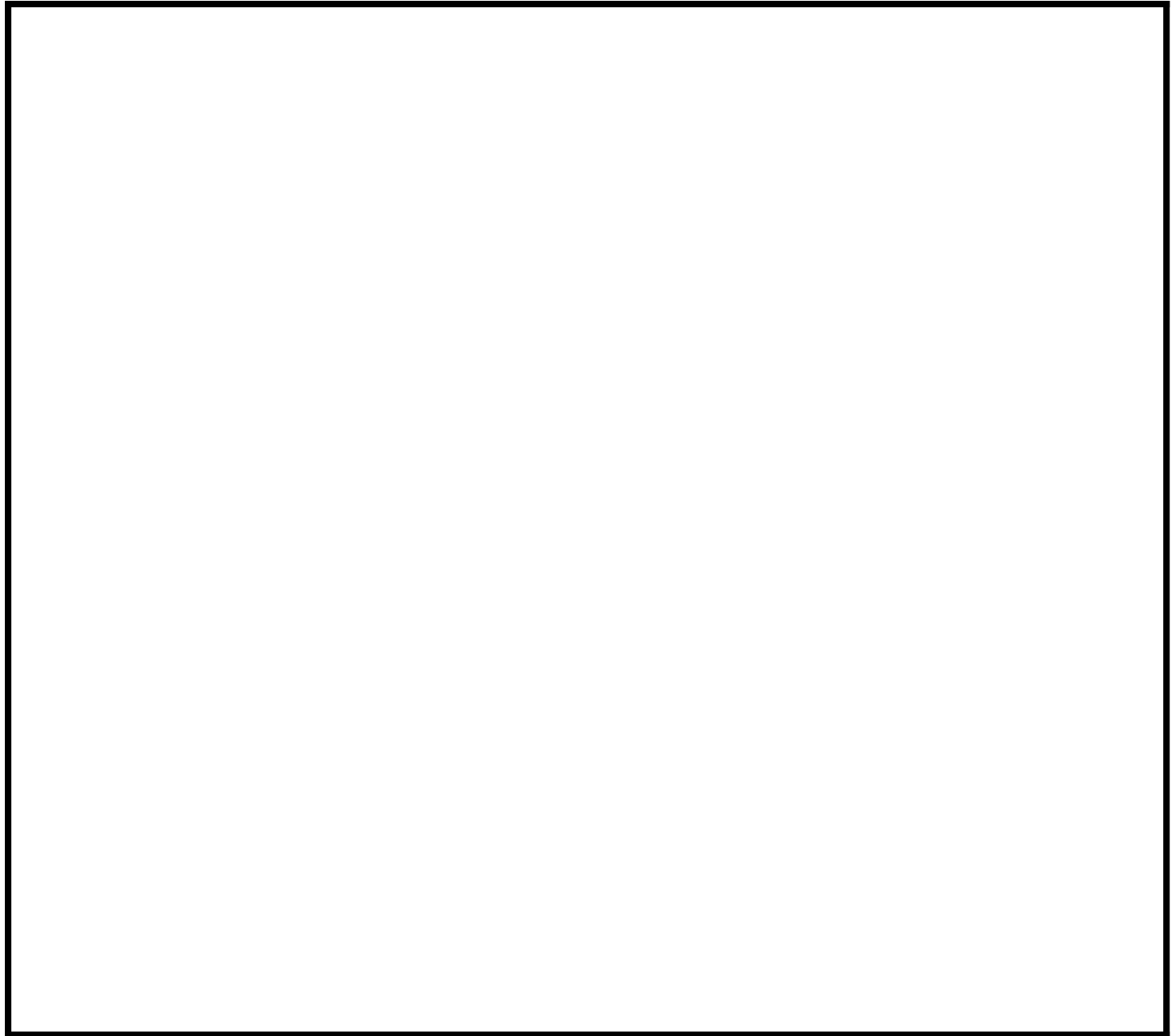
Massaging, compressing and brushing your hair to health!

3. Hairobercise

Exercises to promote healthy hair growth and reduce stress.

4. Hair Nutrition

What to (and not to) consume to 'feed your head'.



1. Hair Hygiene

Shampoos & Conditioners

Incorrect hair washing can actually cause hair loss for both men and women. It isn't just the product that is important, but also how we use it. There are three steps to follow: identify our hair, choose the right product, and then use it properly. Oily hair often means oily scalp but dry ends. I recommend a

“normal to oily” shampoo, used at least three times a week. Use a conditioner only on the ends of the hair.

Some of us feel we have dry hair, but what we really have is dry ends and an oily scalp. If hair is really dry, use a shampoo for dry or damaged hair, but shampoo no more than twice a week, and deep condition once a week. When a dry scalp sometimes itches and flakes, it is assumed the itch means dandruff. Try a dry-hair shampoo but if the itching and scaling continues, try a dandruff-control shampoo.

A step-by-step way to correctly wash your hair:



1. Before stepping into the shower, thoroughly brush your hair. This is vital to loosen dirt and scalp flakes while activating the oil glands.

2. Next, gently massage your scalp. This is a great tension reliever, besides aiding blood circulation in the scalp. Work from the front to the back. Refer to the section on massaging for complete instructions.

3. Wet hair thoroughly with warm or lukewarm water.

4. Pour a small amount of shampoo onto the palm of your hand, rub both hands together and smooth shampoo on evenly. (Pouring shampoo directly onto hair makes even distribution impossible.)

5. Massage shampoo into scalp with fingertips, adding more water for suds.

6. After a minute or two, spread the lather quickly throughout your hair; leave on for several seconds, comb through, and then rinse with warm water.

7. After the first thorough rinsing, the second rinse should be with water, which is progressively cold, colder, coldest. This reduces “swelling” of the hair tube and stimulates circulation. Cold water also makes the hairs stiffer and stronger, while locking them more firmly into their root.

8. The final step is to gently comb the hair with a wide-tooth comb rather than a brush which can stretch and break hair. There will ultimately lose your hair, there still are several steps you can take to slow this process down.



Now that you've mastered the technique, the last thing to think about in terms of shampooing is how to find the hair product that will be best suited for you. As you are well aware, there are literally hundreds of shampoos on the market, with myriads of advertising promises, fancy packaging and lovely fragrances. Given that the condition of your hair and scalp is different from someone else's (in particular the gorgeous blonde who made the commercial) how do you know which product to buy?



Here are some things to look for when deciding whether or not a particular brand is the one you will stick with:

- A shampoo should cleanse your hair and scalp. Any excess oils, scales, and dirt should be removed. If your hair isn't clean after washing with a shampoo, you're using a loser.
- The shampoo should be easy to distribute throughout your hair. It should also rinse out easily.
- This point is very important - a shampoo should not irritate your scalp. If your scalp feels itchy or burns after using a product, your head is telling you it's allergic to something in that shampoo.
- After washing, your hair should be manageable. It should both look and feel good. If a shampoo cleans your hair, but leaves it "flying away", try a conditioner. But, if your hair still mats or appears dull after shampooing, try another brand.
- Find a shampoo with a fragrance you find pleasing, since the hair will probably retain that scent for several hours after shampooing. It is preferable if the fragrance is an essential oil.
- A shampoo should be reasonably priced. However, be cautious about bargains. Bargain basement shampoos are usually diluted and therefore require that you use more for proper cleansing. You could end up recounting that age-old story: when is a bargain not a bargain?

Unfortunately, finding the right shampoo works on the trial and error principle. Experiment to find one that works for your hair. Use different shampoos with different conditioners until you find your own winning combination. Don't give up or settle for second best. If you experiment enough, you'll eventually come upon the ideal product for your own type of hair needs.

Conditioning the Hair

Now that we've gone through hair washing from A to Z, let's go on to the next important step in your total hair care program: conditioning. Let's once again turn to some of the most commonly asked questions about conditioning.

What exactly are hair conditioners?

A conditioner is intended to rejuvenate and improve the general fitness of your hair. Good conditioners enhance the appearance of hair by coating the hair shaft, thus making it less porous. The conditioner also reduces static and counteracts dryness, while restoring softness, shine and manageability. A conditioner is necessary to maintain healthy hair. Conditioners are not frills or simply cosmetic: both men and women need to use them as part of a regular hair care regimen.



Don't confuse shampoos and conditioners - they have totally different purposes. Shampoos clean the hair and scalp, but do not improve the "condition" of hair. If you are using a shampoo that is not acid-balanced, you may find that your hair is tangling. This is due to the affect alkaline shampoos have on hair. They swell the hair shaft and eat away at the cuticle. Because of the potential damage this causes, alkaline shampoos should be avoided.

Conditioners are always acidic and smooth the cuticle until it is flat. That is why conditioners help unsnarl your hair.

What is the correct way to use a conditioner?

A conditioner is for the hair, not the scalp. After the hair has been thoroughly washed and rinsed, apply the conditioner. Application of conditioner is similar to that for the shampoo - pour a small amount into the palm of one hand, then rub the hands together. Remember not to apply it directly to the scalp. Next, with palms flat, apply the conditioner to the hair. Gently squeeze it into the hair shafts, always working in the same direction. As with massaging, condition from front to back, following the natural direction of the cuticles. Part your hair from front to back and work in the conditioner along the parted hair. Then move an inch or two, repart the hair and continue in this manner until all the hair is treated. Don't use too much conditioner. If applied in excess, conditioners can weigh down the hair and reduce, rather than enhance, the lustre and body. By using less, you will also save money on conditioning products.

How long should a conditioner be left on?

Many people believe that the longer a conditioner is left on the hair, the more effective it will be. That idea conjures up an image of hundreds of people walking around with hair soaked in conditioner for hours at a time, waiting for it to be more effective - How messy and impractical! The truth is that most conditioners are effective within 30 seconds of application.

After you have conditioned your hair according to the method outlined above, remember to thoroughly rinse, first with warm water and then finishing with cold water to tighten the cuticle. After the two-step rinse is completed gently comb the hair. If you have very long hair, start combing at the ends to get rid of snarls and tangles, then return to the top of the head and continue combing.

What about cream rinses and deep conditioners - how are they different from other conditioners?

Cream rinses and deep conditioners are all members of the "conditioner family". They are products designed for use after shampooing to increase manageability and lustre while eliminating snarls and tangles.

Cream rinses are the simplest and most common type of conditioners. They are intended to make hair soft and shiny and easy to comb after shampooing.

Deep conditioners are different in as much as they contain ingredients that penetrate the cuticle for longer lasting benefits. These ingredients replace the protein inside the hair shaft and repair damaged areas. It is beneficial to use them 2-4 times a month. They should be applied according to the instructions. These kinds of conditioners are particularly good for revitalizing dry, damaged hair.

There are several shampoos with built-in conditioners on the market. How effective are they?

Personally, I advise against using them. Shampooing and conditioning are two distinct steps in hair care and should be treated as such. I believe that they have two different purposes and by combining them, you lose the effectiveness of both.

Can I use a massage brush while either washing or conditioning my hair?

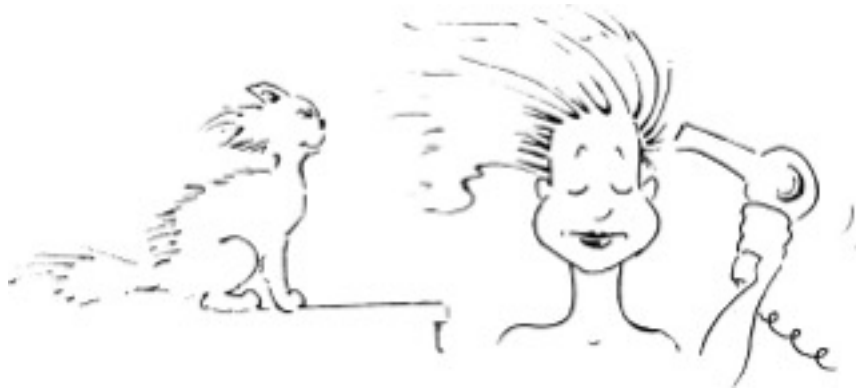
Ouch! No, no, no - Never! Such instruments can only break and tangle the hair, as well as scratch the scalp. You should only use your fingers and palms of the hands while shampooing or conditioning the hair. Remember that a massage brush is for the body - keep it off your hair and scalp!

A Look at Safe Methods of Hair Drying

We have now mastered washing and conditioning and are ready for the next step of drying the hair. Drying the hair the right way is important. If you have the time and your hair has been cut to a style that arranges itself, indulge yourself in the easiest and best method of hair drying: good, old fashioned air.

Air-drying only requires a little patience. After patting (not frantically rubbing) your hair dry with a towel, comb it out gently. Next wrap a fresh towel around your hair for 10 minutes or so. Comb it out again. Then just leave it up to the air to do its work.

Of course, sometimes we just don't have the time for air-drying or we're trying to create a certain style, which can only be accomplished through blow drying. Let's look at the pros and cons of artificial hair drying techniques.



What should I look for in a blow dryer and how do I correctly use it?

It is advisable to use a dryer with power less than 1000 watts. Make sure the dryer has at least two heat levels. A hair dryer with a wider nozzle diffuses the heat more and is thus safer for your hair.

When your hair is still very wet, start off with the highest heat level. As the hair becomes damp, you can set the heat at a lower level. Remember that you have better control in preventing damage when the heat is lower. Hold the blow dryer at least 6 inches from the hair; never use it closer than that. Keep the dryer pointed in one place only for a few seconds. Use the dryer on the hair, not the scalp. The proper procedure is to direct the air over and through the hair. The nozzle should never be directed toward the hair roots. Dry the back and sides of your head first, and then work towards the front.

The following two questions about hair drying are probably the ones I've heard most often.

Can blow-drying damage my hair? And How Do I know if I'm overdoing it?

Blow dryers damage the hair only when you overdo things or use them incorrectly. You may be surprised to hear that blow-drying, if done properly and in moderation, can actually benefit the scalp and hair.

Blow-drying can increase blood flow to the scalp and thus improve circulation of vital nutrients to that body area. When you finish shampooing and conditioning with that last cold rinse, you have also restricted blood flow to the scalp. By using a warm blow dryer, you help raise the temperature of the scalp and help restore circulation. If you wish to get the full benefits from your blow dryer, remember to keep the air moving over your head and not to leave it in one spot too long. Also, maintain the 6-inch limit – make sure the dryer stays at least that distance from your head.

On the other hand, there is no question that improper uses of dryers can wreak havoc on both the hair and scalp. At worst, you can singe your hair and injure the scalp. Less severe damage includes hair stripped of all its moisture, leaving it lifeless, frizzy and very vulnerable to breakage. People with over dried hair may appear to be cousins of the Strawman in the Wizard of Oz - their hair is so damaged and dry that it looks like straw.

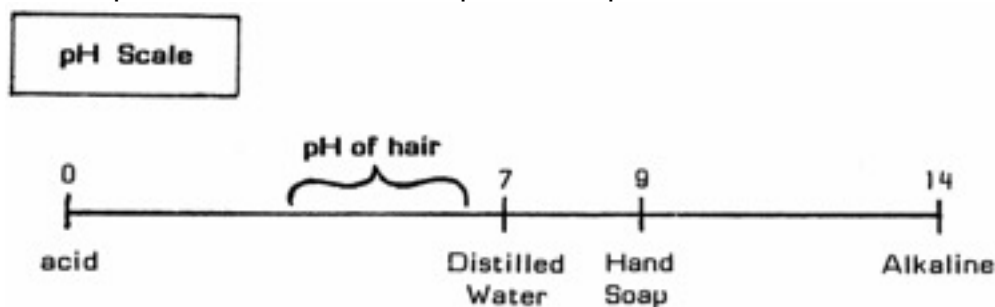
To best avoid these headaches, the best rule to follow is: **TURN THE BLOW DRYER OFF WHEN YOUR HAIR IS STILL SLIGHTLY DAMP.** That way you can be assured that you have left moisture in your hair, while reducing the risk of damaging it.

Is it okay to brush my hair while I'm drying it?

Preferably not. But, if you do, try to use a wide toothed comb or brush, the wider the better. When brushing your hair, be gentle and don't overstretch it. It's desirable to bend forward when you dry your hair. By doing so, you bring more blood back to the scalp, while minimizing the risk of tangling.

All about pH

pH is a scale chemists use to measure acidity and alkalinity. The scale ranges from 0 (very acidic) to 14 (very alkaline). The mid-point 7 on the scale is equal to the pH of distilled water.



The “natural” pH of hair and skin is between 5 & 6: in other words, slightly acidic. The surface of the skin and hair, known as the acid mantle, is, as its name implies, slightly acidic. Both a highly alkaline or extremely acidic substance will damage your hair and skin. A shampoo should have a pH of between 4 & 7, which is within the normal pH range of the scalp.

Add the Finishing Touch

A conditioner is intended to “rejuvenate” and improve the general fitness of your hair. Good conditioners enhance the appearance of hair by coating the hair shaft, thus making it less porous. The conditioner also reduces static and counteracts dryness, while restoring softness, shine and manageability. A conditioner is necessary to maintain healthy hair and should be used as part of a regular hair care regimen.

Blow Dryers can Actually Help

Blow-drying, if done properly and in moderation, can actually benefit the scalp and hair. Blow-drying can increase blood flow to the scalp and thus improve circulation of vital nutrients to that area. When you finish shampooing and conditioning with that last cold rinse, you have also restricted blood flow to the scalp. Using a warm blow dryer can help raise the temperature of the scalp and restore circulation. To get the full benefits from your blow dryer, remember to keep the air moving over your

head and not to leave it in one spot too long. Also, make sure the dryer stays at least 6 inches from your head.

Natural Ingredients

The ideal formula is strong enough to clean without irritating the scalp, yet mild so as not to penetrate the hair shaft and leech out the oils. Some commercial shampoos are too strong and don't discriminate between the natural oils that belong in the hair and "dirty" oils that need to be removed. Some mild shampoos simply don't get the hair clean.

Natural shampoos and conditioners are your best bet. Ingredients to look for are Jojoba Oil, Aloe Vera, Polysorbate 80, Panthenol (Vitamin B5) and Rosemary.

Every hair has its own life cycle: firstly, it is "born", then it has a six month period of growth followed by a three-month rest period, at the end of which it dies and falls out to be replaced by another hair. On average, each hair grows about half an inch every month during the growth period, and shedding takes place during the resting phase at the rate of between 30 - 150 hairs per day. On average, at any one time 85 per cent of hairs will be in the growing phase, and the remaining 15 per cent in a resting phase.

Facts About Shampoos/Conditioners

Everyone these days shampoos their hair, yet so very few of us actually know the effect shampoos can have on our hair and scalp.

The correct purpose of a shampoo is to cleanse the hair and scalp. The use of the correct shampoo is essential for healthy hair and scalp. Shampoo removes sebum, day-to-day soil, and residues of styling products (see appendix I).

On the market today are a number of products, which if not used properly, can virtually destroy hair and the hair follicle.

For this reason, it is extremely important for us to fully understand the types of shampoos, which are right or wrong for our particular requirements, some alkaline-based shampoos actually create heat and burn the skin. Our skin has a pH of 4.2 to 6.5 and the hair and nails have a pH of 4.5 to 5.5.

When we use products on our hair and scalp that are not within our pH factors, we are to some degree destroying the hair and skin.

For example – you may have heard advertising companies say that a certain shampoo will give your hair more bounce and body. Actually, on many occasions what they are really saying is that the shampoo is Alkaline based. Alkaline causes the hair to become stiff and brittle and promotes the illusion of extra hair volume. It even removes some colour in hair if it is very high in Alkaline.

In this situation in order to achieve more "bounce and body" it is essential to also ensure that all products applied to the hair e.g. shampoos, hair moisturizers, mousses, gels etc are acid balanced pH 4.5 - pH 5.5.

The correct shampooing procedure should take at least five minutes and should not be thought of as something that can be done in just "any old way". A good shampoo should be conducted with firm

massaging technique (see Part Two) and should not only leave the hair clean and healthy looking but also the scalp "tingly" and revitalized.

If your hair is naturally dry you will not need to wash it as often as someone with normal or oily hair. Normal discharge of Sebum, the hair oil from the Sebaceous glands is beneficial for the health of your hair. Over shampooing causes the hair in some cases to become "fluffy" and of flyway appearance.

On the other hand, do not allow your hair to become so oily that it looks unkempt. When it is necessary to wash your hair always use a pH-balanced shampoo. After washing, dry the hair by letting the towel soak up the moisture rather than vigorous towelling. If using a hair dryer, always make sure that you use the cold - medium setting and not the hot setting.

Never concentrate the dryer in one place for too long.

After washing your hair you may comb but should never brush wet hair. Wet brushing can create too much strain for the hair and can cause breakage.

The properties of a good shampoo are it is of:

1. A consistency that allows for effective distribution and provides a rich lather – concentrated formulas avoid waste.
2. Acid balanced – this means it is in the pH range of 4.5 – 5.5.

The action of a conditioner is to close the cuticle layer and maintain the four natural balances (as previously mentioned and further referenced in the appendix section) needed for healthy shiny hair. Obviously damaged hair or chemically treated hair requires more intensive treatments.

The properties of a good conditioner are:

1. To seal in moisture and enhance sheen.
2. Maintain the natural balance of the hair at pH 4.5 - 5.5
3. Contains hair Keratin protein to help fill, seal and strengthen the hair fibre.
4. Has anti-static properties that prevent frizzy and flyaway hair and leaves hair manageable and easy to comb.
5. Provides a protective layer on the hair and replaces the natural oil component that the shampoo has taken away.
6. Has a regulating effect on the Sebaceous gland and helps to calm excessive oil production.

All shampoos and conditioners used should be:

- a) Natural based
- b) Biodegradable
- c) Use no animal derived ingredients
- d) No animal testing

What Ingredients to Look For in a Thinning Hair Scalp Formula

Polysorbate 80 – Researched at Helsinki University, this hair-growth-stimulating compound is approved by the FDA as an emulsifying agent in shampoos and lotions. Polysorbate 80 works in at least three different ways:

1. Removes dihydrotestosterone (DHT) & cholesterol from the scalp.
2. Releases histamine (a growth factor) in the scalp.
3. Removes excessive body oil & dead skin cells around hair follicles.

Biotin – This new breakthrough was developed by endocrinologists to reduce excessive hair loss & revitalize new hair growth. In tests conducted, as many as 70% of all cases obtained results. Their conclusion is that Biotin is a basic nutritional factor in hair growth & in the control of hair fallout.

Panthenol (Vitamin B5) – Studies have shown that topically applied Panthenol has the ability to thicken & repair damaged hair. Panthenol is a relatively small molecule that can penetrate the hair shaft & hold moisture there, to provide pliability from the inside & lustre on the outside.

Inositol (a B-Vitamin) – An anti-oxidant, which has a protective effect on hair follicles, perhaps by protecting them from membrane damage caused by oxidized cholesterol in the scalp.

Jobba Oil – It is remarkably effective against sebum, which is the fatty substance secreted by the sebaceous glands of the scalp. It frees the scalp of flakes & dirt – encourages hair to go on growing.

Nettle/Rosemary – A mixture of these herbal extracts helps the active ingredients penetrate deep in the hair follicles.

Salicylic Acid – Eliminates seborrhea & dandruff.



Horsetail – One of the most silicate-rich plants, Horsetail contains about 7% silicic acid. Since tissue-strengthening and resistance-promoting properties (especially for the connective tissue) are ascribed to silicic acid, horsetail extracts are an important ingredient in strengthening hair lotions.

Coltsfoot – Has long been used against skin eruptions, pustules and acne. The effect observed derives from its high content of sulphur, which aids in the care of scalp and hair with a tendency to greasiness.

Oils need to be removed. Some mild shampoos simply don't get the hair clean. Natural shampoos and conditioners are your best bet. Ingredients to look for are Jojoba Oil, Aloe Vera, Polysorbate 80, Panthenol (Vitamin B5) and Rosemary.

2. Scalp Stimulation

Massaging Your Scalp...The Best Thing You Can Do for Your Hair Growth

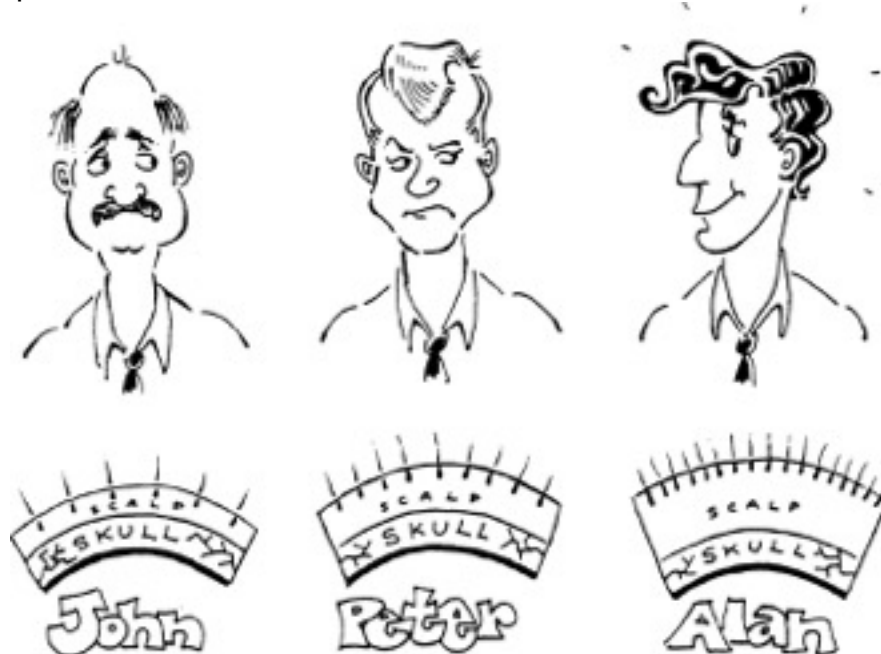
"Circulation-stimulating" massage is a crucial part of the Hair for Life program. Massage should be done daily to improve circulation, help nourish the scalp and keep the skin loose, thus allowing the blood to flow easily to the roots of the hair.

The skin at the top of the scalp is tighter than at the sides. If the top is not kept loose, the skin actually seals up the scalp, cutting off that very important lifeline of blood, which leads to hair loss. Another benefit of massaging your scalp is that you feel relaxed afterwards and any tension you had in the head and scalp will be diminished.

Different Types of Scalps

There are three essential components required by the scalp to maintain vigorous growth and healthy hair. They are:

1. Scalp with a plentiful network of blood vessels
2. Loose scalp
3. Thick scalp



Let's explore this further. Here we have three fellows, each exemplifying a different kind of scalp. Poor old John has a thin scalp and would probably become bald in early adulthood. Peter, the gent in the middle, has a scalp of average thickness and is typical of most people. If Peter practices a conscientious program of hair and scalp care, he could expect to produce a decent growth of hair for most of his life. Alan is the lucky one. He demonstrates a scalp of unusual thickness and high vascularity. Hair loss should not be a problem for him.

Here's a word of caution! Having a thick scalp will not necessarily guarantee healthy hair. Other factors must be considered. For example, a thick scalp could also contain a high proportion of connective tissue. If this is the case, the blood vessels could be constricted by the pressure of the connective tissue on them. This pressure and the subsequent constriction reduce the efficiency of the blood vessels and decrease the delivery of nutrients to the hair follicles.

How can you tell if you have this particular scalp condition? Such a scalp may be recognized by its unusual firmness and immobility - it feels tight when massaged. Therefore, what is desirable is both a loose and highly vascular scalp. If one of those qualities is missing, circulation to the scalp will be impaired. The end result is malnourished hair follicles resulting in disappointing hair growth.

Exactly How to Do a Proper Scalp Massage

Like most skills, there's a right and wrong way to massage the scalp. So, let's learn how to do it right.

First we'll dispense with all the "don'ts", and then move on to the "do's".

- 1) Do not ever use your fingernails (ouch!) when massaging -ever!
- 2) Do not use a plastic brush, or any other implement of destruction!
- 3) Do not use the whole hand. Some people massage their heads as if they're polishing their sterling silver cutlery. Even though your head may be filled with sparkling, brilliant ideas, there's no reason

you should massage it like you would a shiny spoon! In other words, don't place your hands flat against your head and then start rubbing.

4) Another no, no - don't randomly move your fingers through the hair. The correct massaging technique employs fingertips not fingers - and has a definite pattern of movement.

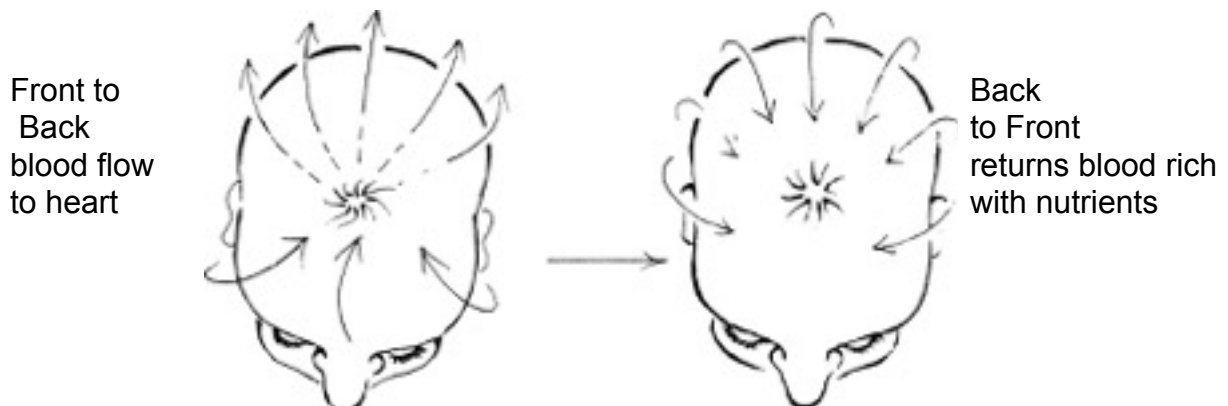
Okay, enough of this negative stuff. Let's get on with the positive and do it right. Remember that the purpose of massaging is to exercise the scalp, not the hair.



Now, imagine yourself kneading a lump of dough. Place all ten fingertips (not fingers!) firmly on your head. Arch your hands and make sure the palms aren't touching the scalp. Remember only the pads of the fingers should be pressing against the scalp. Keep the fingernails out of this!

Stay in this arched position and push the scalp by drawing your fingers together. Hold for 5-10 seconds and then push the fingers apart. Think of this whole exercise in terms of flexing and un-flexing the fingers, while the fingertips are in a resting position on the scalp.

Proceed by systematically moving the fingers to a different position on the scalp and repeating the technique. You must work on the whole scalp, always massaging from front to back, then back to front. In other words, start with the forehead and the sides. Next, proceed over the crown and end up at the base of the neck. This path follows the natural route of the blood flow to the heart. When massaging from back to front, you help the flow of fresh blood to the hair follicle being rich with nutrients.



After doing my Hair for Life Fingertip Massage, your scalp will feel tingly and refreshed. It should feel looser than before. That's a good sign, since this looser scalp should reduce your chance of hair loss. Massaging should be a relaxing, enjoyable part of your daily routine.

Massaging should be done whenever and wherever possible. It is especially valuable when your scalp feels tight, or when you are under stress, feeling nervous and needing to relax. Try to include massaging as part of your hair washing program too. Since you don't need any special equipment to do it, you can give yourself a scalp massage wherever you find yourself - at home, in an empty elevator (do it in a crowded one only if you dare!), or while sitting in front of the television.

If you have the problem of dry hair, massaging is especially beneficial for you. Since massaging stimulates the output of oil from the scalp's sebaceous glands, it can actually help correct the cause of dry hair.

On the other side, massaging is also important if your hair is too oily. The scalp massage is useful in dislodging oil and dead cells, which form a film on the scalp and therefore impair circulation to the area.

For those of you with shiny domes, remember to include your bald spots in your massage routine. In dealing with bald areas, continue with the fingertip massage technique outlined earlier. There is one slight difference - try to work the fingertips into the scalp, rather than over it. In other words, attempt to form the skin into wrinkles held between the fingers. If this wrinkling is done vigorously all over the scalp, circulation in that immediate area can be increased enormously. The outcome can be permanent improvement in the strength of the hair roots. Just one last "Beware": make sure you avoid rubbing the area. A rubbing motion could break hairs at the surface and traumatize the follicles.

Sometimes people ask if they should get their spouse or lover to participate in this daily massage program. Yes, yes, by all means, yes! Have you ever massaged someone's head or had another person massage yours? If you have, you know the pleasure and benefits each party derives from those delightful sharing moments.

As we all know, hair is a secondary sexual characteristic: for many people, touching and stroking the hair has an aphrodisiac affect. So, absolutely get your loved one involved - you'll improve more than just the health of your hair!

Hair for Life Hair Massage Techniques

Having explained the basic fingertip massage. I would now like to show variations in body positions that can be integrated into your massage program. Try whatever positions that appeal to you and feel comfortable with. Change them when you're feeling bored or just want to do something different. While some head massages are better than others, they all work toward the same result: increased blood supply to the scalp and a healthy head of hair.

The Slanting Upward Massage

You can do this one alone or with a partner. In order to practice this technique and the "Slanting Downward" massage, which will be described on the next page, you will need a long solid board. A piece of plywood should work out; make sure it's wide enough for you to lie down comfortably. What you're constructing here is your own slant board, like those you've seen in exercise rooms for doing sit-ups and other abdominal exercises.



Take your board and place one end on a chair or other piece of furniture, thereby creating a raised slant. The effectiveness of this massage is directly related to the angle of the slant. You will get better results by keeping the board at a higher angle. This position is useful in creating improved blood flow to the head, penetrating even the smallest capillaries that nourish the hair roots.

Now that your board is set up, all you have to do is lie flat on it, with your head at the bottom, facing the ceiling. Rest your head on a pillow and relax. Lie like this for two to three minutes, so the head is fully supplied with blood. Next, start massaging.

If you want, use water, oil, or your favourite hair tonic to aid in the massaging. Wet the fingers and place them on your scalp, just above the forehead. Proceed with the correct massaging technique described earlier. Don't forget to massage the whole scalp, starting from the front and sides and working towards the crown. Massage for 3-4 minutes.

The Slanting Downward Position

You should now feel delightfully relaxed. It's time to turn over and lie flat on your tummy for the "Slanting Downward" massage. Start massaging where you left off – in the centre of the crown of your head. In a kneading motion, continue massaging from the crown down to the neck, behind the ears and to the base of the skull. You can also add on a head and shoulders massage using one hand at a time. If you're fortunate to have a loving volunteer around, recruit them for this. Don't you feel terrific? Continue massaging for about three minutes.

The "Head Over Bed" Massage

This method is very convenient, especially when you're climbing into bed at night or first thing in the morning. Lie on your stomach across the bed, with your head down over the side. Make sure your head hangs as far down as possible. Ready? Start massaging using the tried and true Hair for Life technique.



Try doing this twice daily until you start getting positive results. Then you can reduce it to once a day. You will find that the longer you work on the massaging it will eventually become easier to get the blood flowing into your head. In time and with diligent massaging, you will get that blood moving right to your head by simply bending over and massaging.

The "Friendship" Massage

This one should be done with your favourite 'friend'. Find the most comfortable chair in the house, sit down and relax. Clasp your hands in your lap and cross your feet at the ankles. Close your eyes and concentrate on breathing slowly and evenly.



It's important to use this time as a way of putting aside the problems of the day. Forget about work and world affairs. These few minutes are for your relaxation. Concentrate on feeling peaceful and in harmony with yourself.

As you quietly sit there, your masseur (masseuse) should stand behind your chair. He/she should moisten their hands with your favourite hair tonic, or vitalizer. The masseur should then proceed with the massage using the method outlined earlier.

This massage includes the neck. Once he/she reaches the centre of the neck, drop your head forward. The masseur/masseuse should then place the ball or pad of the thumb against the centre of your neck, about two inches below the skull. Then he/she should gently, but firmly rotate the thumb against the neck for 2-4 minutes. The massage is completed by light stroking of the hair. Who said massaging isn't fun?

The "Elevator/TV" Massage

This is the one to do during those solo flights on elevators or while "veg-ing out" in front of the tube. Use the fingertip massage method. If you want to massage but don't want to mess up your hair - bend over and touch your toes, thus allowing the blood to rush into your head. What a simple way to get your |

The "Shower



You can even incorporate the fingertip massage into your hair washing routing.

As you can see, there are lots of ways to incorporate a quick and pleasant head massage into your daily life. Be inventive - you'll find the times and places that suit you best.

Compressing – Keep That Scalp Snuggly Warm!



As you've seen, massaging is an excellent way to increase blood circulation to the scalp. Now let me tell you all about Scalp Compressing.

A scalp compress is a little extra bonus that can be added to your massaging program, giving additional benefits to your hair and scalp. It's purpose is to induce a lasting moist warmth, which will help relax the nerves, thus providing the necessary environment for healing and repair.

Let's look at how a compress works. While it may sound peculiar, by bathing your head in a cold compress, you actually create a prolonged feeling of warmth on the head. This can last for several hours, or until the moisture evaporates. Compressing is beneficial because it creates a warm environment in which extra blood will flow to the scalp.

So how do you compress your scalp? It's really very easy. First, dip your head in cold water, and then partially dry the hair. Next, pull a woollen cap over the head. A single wool beret is generally not quite thick enough to conserve the warmth adequately, so cover it with a second, larger beret. Now you've created a funny looking, but effective compress.

A compress can be kept on overnight, provided that it does not return to cold. Remember, while you have it on, except for the initial coldness of the water, you should be feeling a pleasant warmth. Compressing is quite useful if done on a regular basis, usually 2-3 times a week.

Brushing and Combing – Your Lucky Strokes!

While I briefly touched on this subject in the hair washing section, I want to take a few minutes and expand on several thoughts here. Let's quickly take a look at commonly asked questions on combing and brushing. You'll see how easy it is to develop a "real stoke of genius" when it comes to this important aspect of hair care!

What about the old "100 Strokes a day" for beautiful hair? Is it beneficial?

No. Too much brushing can harm the hair. If you want to brush your hair, do it gently and in moderation. Brushing the hair is useful for:

1. Removing dust and dirt that settles in the hair;
2. Removing tangles and styling the hair;
3. Spreading oils from the scalp along the hair shafts, thus keeping the hair more pliable and adding to its sheen.

How should I choose a brush?

As you know, brushes come in a wide variety of forms and bristle strengths. Hair also varies in density and texture. The best rule is to use a brush that will give you the desired cosmetic effect with the least damage to your hair. Hair can be damaged during brushing when the hair is pulled or the scalp inadvertently gets scraped.

Why is it best to use a natural bristle brush?

This kind of brush is made of natural keratin, like your hair. It catches dirt and debris the same way your hair does. As you gently stroke your hair with the brush, the dirt gets absorbed by the bristles and is thus removed from your hair. Oxidized fluids from the scalp, meaning oil, perspiration and other glandular discharges should be removed by daily brushing. While you use your natural bristle hair brush and see it getting dirty, you know the brush is properly doing its "dirty work". A nylon bristle brush just can't do the job.

Furthermore, a natural bristle brush is easy to clean. When it gets dirty, all you have to do is simply scrub the brush on a dry towel.

Another advantage of natural bristle brushes can be observed in the construction of the bristles themselves. Natural bristle always has rounded ends. This "rounding" seems to treat the hair shaft more kindly than the sharp bristle found on nylon brushes. If you're going to use a nylon brush make sure the bristles are rounded at the ends. This kind of brush could be used for wet comb outs.

Is there a correct method of hair brushing?

Of course there is! It is important to start the procedure at the roots of the hair. By doing so, you evenly distribute the oil throughout the hair strand, right down to the ends. Remember to complete the stroke in one movement.

If you have long hair, divide the stroke into two parts. Stroke halfway, then hold the hair with one hand and complete it with the other hand holding the brush. The



problem with using one continuous stroke on long hair is that too much stress is placed on the hair root, which can be an invitation to trouble. When you are brushing to distribute the oils and clean the hair rather than styling or simply "fixing" your hair, it's a good idea to bend over and keep the head down. This helps to thoroughly cleanse the hair shafts and stimulate the scalp.

A light brushing can be done at any time to smooth out tangles and make your hair appear orderly. However, in order to achieve deep, scalp-stimulating brushing, work on your hair twice daily. Once in the morning, particularly if that's when you wash your hair, and again in the evening, to clear out dust and tangles before you drift off to dream land.

Remember: be gentle and only brush for a couple of minutes. Let's briefly turn to combing and several commonly asked questions about that subject.

What is the benefit of combing one's hair?

Aside from the obvious role combing plays in putting hair in order and general styling, it is important for other reasons. Combing also helps remove tangles and matted hair, thus allowing air to circulate across the scalp. This in turn allows the skin on the scalp to "breathe".

What is the best way to comb the hair?

Hair on the scalp grows at an angle to the skin. Adjoining hair grows at a similar angle. So, if you comb "with the grain" you continue this parallel arrangement and do not damage your hair. By "teasing" or back-combing, the natural "fall" of the hair is disrupted. While teasing can add body and create a certain style and desired "look". it also can tangle the hair and cause broken shafts.

3. Hairobercise

The Natural Prescription For a Healthier More Gorgeous You From Hair to Toe!

Congratulations! You are now at the halfway mark on your journey to having more beautiful, stronger hair. You have seen that it is possible, by conscientiously following my Hair for Life Program to really improve your hair, and thus, your overall appearance.

If you were to ask me which part of the Hair for Life plan is the most important. I would have to reply that no single aspect of the program, by itself, could get you the results you want. It's a total hair renewal program that can easily be adapted to your personal lifestyle.

Whether we like it or not, our general state of health has a direct affect on the condition of our hair. If someone is out of shape, has a poor diet, or is suffering from a mental or physical illness, the hair will indicate that something is wrong.

Conversely, by following a daily exercise program and eating sensibly, our hair will shine with health and tell the world how good we're feeling.

Think about all the time we waste watching TV or doing other sedentary activities after spending our workday chained to a desk. For the past several years, we've all heard the message to get moving and turn our flab into muscle tone. Millions of people have taken up the challenge. You've seen them on the street - looking and feeling great.

If you haven't as yet started on some kind of regular, moderate exercise program, ask yourself why not. It's so simple - exercise will improve your entire state of health. It will show all over your body, from the look of your hair to the glow of your complexion. You'll also feel better about yourself as you improve your appearance. So, forget TV for a half-hour three times a week - you won't be sorry.

The Role of Stress in Hair and Scalp Disorders

You'll recall from the section on massaging that stress plays a critical role in causing hair and scalp disorders. One could go as far as to say that stress is the major cause of unhealthy hair. Fortunately, there are several inexpensive and easy remedies for stress.

Massage is one wonderful method for getting out tension and worry. Exercise is another "cure" for alleviating the effects of stress. If you combine a regular massage and exercise program and add them to your day-to-day life, you're on the road to eliminating dandruff, baldness, thinning hair, and other distressing hair problems.

As most of us are only too well aware, modern life is very stressful. Stress affects our bodies and our minds - tightening muscles, causing skin problems, like eczema and disturbing our hair follicles. How does this happen? Tension automatically reduces the blood supply to the extremities, including the scalp. This is the result of the muscular contraction, which accompanies tension.



Stress is a culprit in causing hair loss for several reasons. First, stress causes **constriction of the capillaries** feeding the hair follicles. When this happens, the amount of oxygen and nutrients nourishing the hair are dramatically reduced.

Next, stress causes excessive sweating. Think about the last time you felt anxious and tense - the sweat just poured from your body, right? Well, this abundant perspiration combines with airborne debris and pollution to lower free circulation over the scalp.

Stress affects the arrector pili muscles. These muscles are located in the same place where hair grows out of the scalp. Under stress, the arrector pili muscles contract and pull the hair - your hair looks like its "standing on end". If the stress is prolonged, the resulting decrease of blood flow to the scalp will encourage hair loss.



Although women have been protected by heredity from baldness, stress pays no attention to gender when it comes to adversely affecting hair. In other words, stress can create real problems for women and their hair, creating hair loss that usually is only found on men. Frequently, women under stress will lose hair on their heads, while at the same time, grow it in undesirable places, like the chin and upper lip.

Under normal conditions, the testosterone level in women is sufficient to allow production of hair in the pubic areas. But women also have hair follicles on the face, just waiting to be triggered by an extra little shot of testosterone in the blood. Remember from the first chapter that a woman's adrenal glands produce testosterone, plus other important hormones which are part of the "fight or flight" reaction we all feel when we are anxious or afraid.

In a stressful situation, the pituitary glands transmit a single chemical message called ACTH. That ACTH is a kind of S.O.S. to the body, telling it to step up production of all hormones. Consequently, more testosterone races through the blood, resulting in visible hairs jumping out of the upper lip and chin, while hair is disappearing from her scalp!

Nine out of ten women complaining of diffuse hair loss turn out to be under severe stress. Hair loss is becoming more prevalent among younger women and stress is believed to be a major factor. This hair loss is often found amongst career oriented, high achieving women; the women who are now exposed to the pressures men have been subjected to, seem to suffer similar consequences, including hair loss.

There is one additional problem at work here - a kind of vicious cycle often gets triggered: A person under stress begins to lose his or her hair. This hair loss causes more anxiety and worry, thus causing more hair loss and making a bad situation worse. Sometimes the person can't even remember which happened first.

Stress has a similar debilitating effect on a male's flowing locks as it does on a woman's. When a man is under pressure, his adrenal glands speed up their production of adrenaline, which serves as a powerful coping mechanism. In addition to releasing the incredible energizing hormone adrenaline, the adrenal glands also produce "androgenic sex hormones". And herein lies one problem for men. These other hormones can actually anesthetize your hair follicles, thus causing the hair to fall out.

Combating Hair Problems Related to Stress Through "Hairobercise"

As was stated earlier, physical activity in the form of sports, exercise, dance or just walking will help your hair. Why? It's quite straightforward; by moving your "bod" and getting going, you reduce stress and increase the blood flow to the extremities, including the head and scalp.

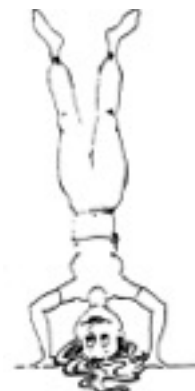
Let's take a look at several Hair for Life exercises designed specifically to improve circulation to the head. Try to do as many of them as possible. They don't have to be done in any particular sequence. If you can, just integrate them into whatever daily exercise program you're already following. And, if you haven't gotten on a regular program yet, what's stopping you!!??

Exercise One: The Headstand

This is one of the most effective exercises you can do for your hair. In this surprisingly relaxing inverted position, which you can easily master with a little practice, the blood has no choice but to rush straight to the scalp.

Use the slant-board from the massaging techniques for this one. Lift your legs up high while keeping your elbows on the sides of the board. At the same time, support your back with your hands.

If you are particularly flexible and supple, go directly into a handstand against a door or wall. Remain in this position for three to five minutes. This exercise is very beneficial if done



twice daily, once during the day and once at night.

Exercise Two: Toe Touch



This exercise is useful in improving circulation to the head, as well as strengthening the back and leg muscles. Get into a comfortable stance, with your feet shoulder-width apart. Bend the knees very slightly to maintain balance. Now exhale and bend over slowly, reaching for your toes. Do not bounce or go further than what feels comfortable. In time, you will be able to bend lower. Keep your head down for 15 seconds, and then slowly return to your standing position. Inhale as you come up. Repeat this three to eight times.

Exercise Three: "Sit-Ups"

This exercise increases blood flow throughout the body, as well as strengthening particular muscle groups.

Lie flat on your back. Bend your knees and keep your feet close together with the soles flat on the floor. You can have your arms flat at your sides or put them over your head. Now exhale and sit up, reaching for the toes. Make sure you use your breath to help you with this one - always exhale on effort, inhale while you are returning to the starting position.



Here is an alternate exercise. Lie flat on the ground, with your legs stretched out and feet close together. As you exhale and sit up, bring your legs up into a tucking position, bending the knees. When your legs come up and bend, hug them with your arms. Inhale on the downward movement.

Repeat the different variations on sit-ups at least 10 times. As you progress, increase the number of repetitions.



Exercise Four: Jogging in Place

Jogging is good for your heart and circulation, so you can be sure it's also good for your hair. Put on your favourite upbeat music and jog in place, starting out slowly and then picking up the tempo. Get your heart but don't overdo it. Try this exercise for minutes, and then increase the time, as you stronger. If you get tired of doing this and at the same four walls, put on the appropriate outdoor clothing, tighten up shoelaces and take a spin around the block.



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Exercise Five: Walking

Walking is something most of us do throughout the day. We consider it "real exercise". Well, walking is definitely the thing" and is an excellent way to improve your circulation. easy - you know, the old "left, right" routine. Walking isn't the knees or jarring to the joints and can be done alone or with a companion. If you get lonely or bored, pack one of those portable tape recorders along and get your feet briskly moving to the sounds that make your heart beat faster. As long as you dress properly, you will benefit from walking regardless of the weather.

Exercise Six: Head Rolling

This is a great way to get the kinks out and relieve stress not only in the neck, but in the shoulders too. Relatively inconspicuous, you can do these neck exercises while at work or riding the bus. Whenever you feel "a pain in the neck" developing, just slowly roll your head in a complete circle. When circling forward really drop the head and stretch the back of the neck. On the backward movement, reach as far as you can, pointing your chin to the ceiling. Make sure you circle both to the left and the right. A variation on the circling is to drop the head forward, tucking the chin into the upper chest. Hold that position for several seconds; now, pull the head back and reach for the sky with your chin. Doesn't your neck feel better after doing these?

Exercise Seven: Deep Breathing

Correct breathing is very important for your body and your hair. If you want to dispute this statement, just stop breathing and wait for the results! But seriously, folks - deep breathing truly is important in boosting the supply of oxygen to your body. It aids in increasing the blood flow, as well as purifying the blood. More oxygen in the system means the brain is better nourished and you feel more alert.

On the flip side, normal shallow breathing generally slows you down and adds to a dragged out, tired feeling. Less oxygen in the system actually makes you old before your time - this will show up in the way your hair looks and feels.

My advice: add some deep breathing exercises to your daily routine. If you are unsure of how to do them correctly, consult any one of the useful books available at your bookstore or public library. You might find a basic yoga course invaluable in teaching you skills in deep breathing.

Sex and Hair: Now I've Got Your Attention!



Many people are curious about the correlation between sex and hair. The very popular Broadway musical "Hair" glorified the benefits of having an abundance of hair. Face it - at some level, for each and every one of us, hair is sexual. After all, why else would we obsessively spend millions of dollars annually on hair care products and services?

Hair is technically a secondary sexual characteristic. It's one of the only ones we're legally allowed to display in public. A lot of people see hair embodying both masculine strength and feminine beauty. No wonder we all want to have beautiful hair to make us look our best!

So let's get down to the basic question you're all just itching to ask: Does sex help hair grow faster? The answer: you could go bald without it! If exercise stimulates the blood flow and increases the health of hair, sex, as one kind of active physical "exercise" should accomplish the same thing. If you've read some of the articles about the number of calories that can be burned up doing that very popular indoor, bedroom sport, you'll agree that sex is definitely exercise and therefore, will make

your hair grow faster.

Sexual abstinence, like living in a cold climate, retards hair growth. So, if you don't have a regular lover, you may want to move to a warm climate where hair automatically grows faster! In a more serious vein, sexual dysfunction can also lead to severe scalp and hair problems.

Now don't misunderstand me, when I refer to "sex" I'm including a myriad of activities that include caressing and massaging, as well as good old-fashioned lovemaking.

Summary on Stress and Exercise

Just to reiterate an important point made earlier: even when you religiously carry out your fitness program and actively reduce the stress and tension in your life, don't expect your hair to improve overnight.

In the same way that it takes months for hair to show the damage caused by stress and trauma, it will take months to heal and regrow. Most of the damaged hair will have to fall out before new and healthy growth becomes obvious.

But, if you don't really work at the total plan in this program, improvement will be more difficult to achieve.

Anyway, you're almost there. After exercise, we have one last area to address: diet and nutrition. So on to my Hair for Life diet plan!

4. Hair Nutrition

Another example of "You are what you eat"

Diet and the kinds of food we eat play a major role in determining our physical and emotional make-up. Nutrition intrinsically affects our very existence. Its influence can be found in our general state of health, as well as our ability to work and be a productive part of society. When we consider the plight of countries with massive malnutrition problems, this point becomes only too clear. In those societies, the effects of poor nutrition profoundly influence both the health of the individual and the health of the country as a whole.

What do I mean by "nutrition"? Nutrition involves food and the nutrients contained therein, as well as the functions of these nutrients within the body. A diet that is nutritionally sound also takes into consideration the requirements of the body for a particular nutrient. There is absolutely no question that what we eat affects the growth and health of all body parts, including the hair.

Massaging the scalp, proper washing and conditioning and regular exercise will not, by themselves, restore glowing health to your hair. In fact, the Hair for Life program described to this point is only effective in overcoming hair problems if it is combined with a diet plan, which provides adequate nutrition.

One of the most important ingredients necessary for healthy hair is a well-balanced, vitamin and mineral enriched diet. Too often people ask me why is it that their hair problems have worsened over a two or three-month period. They express surprise when asked if their eating habits have changed. Often these same people have recently changed employment or accommodation and for one reason

or another they have been neglecting their diet, eating irregularly or of meals not nutritionally balanced but replaced with fast convenience food. Further to this we are increasingly becoming a fast, instant, no-time-to-waste society, evident by the appearance of take-away outlets on almost every street corner. And then we are surprised when our health and hair breaks down.

Conversely when we choose to adopt a nutritionally balanced approach to dietary matters we feel better. The Hair for Life Diet is designed not only to greatly benefit and improve the condition of the hair and scalp but also to promote a general increase in overall health and vitality.

You might recognize this diet as a modified balanced diet and in many respects it is, but it is adapted from dietary needs that prevent degenerative aging and breakdown, thereby revitalizing and strengthening the condition of the hair and scalp from within.

Grace Slick, the vocalist from that popular sixties rock band the "Jefferson Airplane" made the line "feed your head" famous. While Grace and I probably have disagreements about what exactly we'd "feed our heads" with, I believe that certain foods are particularly nutritious for the hair.

Protein and Hair Growth

As already mentioned in chapter one, hair consists primarily of protein. In order to grow hair, the diet should therefore include adequate amounts of protein. Proteins work to maintain and build new tissues in the body, and therefore new hair follicles.

What are good sources of protein? These include eggs, poultry, fish, meat, and dairy products as will be described in my Hair for Life Meal Plan later. Vegetarians who avoid all animal products need to take special care in obtaining adequate protein, since the protein quality is generally poorer in vegetable products. The key is to eat legumes at the same meal as grain products or seeds, e.g. bean curry on rice. If you are a vegetarian who regularly uses dairy products and eggs, as well as a variety of legumes and nuts you should have no difficulty obtaining enough protein.

It is believed that hair loss in individuals sticking to low nutrient diets is caused by inadequate protein in their food intake. There is medical documentation showing that patients following severely restricted diets show signs of hair loss or weakened hair a diet that is low in protein actually makes it easier to pull hair from the scalp.

You can include in this pool of nutrient deficient people many North Americans who religiously follow a weight reduction diet that is both low in calories and deficient in protein. Dry, colourless and sparse hair is several of the common traits found amongst people following these kinds of diets for extensive periods of time.

Will a high protein diet promote hair growth?

Excess protein unfortunately will not make hair grow faster. In fact most North Americans actually have an overabundance of protein in their diets already. If you are physically active, the extra protein calories will be converted to energy and be burned off. However, if you do not engage in exercise, they will be converted and stored as fat. Thus, too much protein is a two-sided villain, thickening our waistlines while making our wallets thinner as we spend money on food that is unnecessary. Try to eat enough protein - not too little, but also not too much.

Vitamins, Minerals and Hair

Vitamins and minerals are essential for good health and for growth of all new tissue, including the hair follicles. If the cell lacks these nutrients, it eventually shrivels up and atrophies.

Since hair consists mainly of protein and some minerals, it may seem curious that vitamins are also recommended to improve hair quality. The fact is that the metabolism of the hair follicle is dependent on a complete and balanced source of all nutrients, with special emphasis on protein, minerals and vitamins. It is a deficiency of these nutrients in particular which might show up in the hair.

How do I obtain adequate vitamins and minerals?

The most efficient and natural way to get adequate vitamins and minerals is to eat enough of each of the basic food groups listed in my Hair for Life Meal Plan described in this chapter.

However there are special circumstances for which supplements might be recommended, to ensure your hair the best opportunity for growth. If the diet you follow is less than 1200 calories or if it is unbalanced compared to my Hair for Life Meal Plan, you would be well advised to take a multi-vitamin and mineral supplement, including the **vitamin B complex**. Distinctive abnormalities of the hair have also been associated with various disorders of vitamin and mineral metabolism [e.g. biotin, copper, vitamin D], Individuals with these problems would need more specific supplements, but they would be part of the doctor's prescription for treatment.

"Now, what's this about too many vitamin supplements you've been taking?"



If some minerals and vitamins are good, is much better?

This is a common misconception. Just because a substance is required for normal growth, it does not follow that more of it will be more beneficial. Several instances have also reported of illnesses caused by individuals taking mega-doses of supplements. Furthermore, the increase of one mineral or vitamin sometimes aggravates the need for others, creating a deficiency, which was not there in the first place!

So, use mineral and vitamin supplements with discretion. Treat them as if they were another kind of medication - do not self-prescribe. If you have any concerns about your personal vitamin and mineral requirements, consult your health practitioner.

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Sugar could cause baldness!!!

Sugar is entirely lacking protein, minerals, vitamins or dietary fiber and therefore has no positive nutritional attributes. The answer to the startling growth of Baldness in the last several decades is the diluted, refined, preserved, over-cooked foods whose value to the human body has sharply reduced.

Whilst there is very little direct evidence that excessive sugar intake is detrimental to hair health it must however surely be seen as commonsense conjecture, that our purpose of obtaining optimum hair health is greatly diminished by loading our blood supply network with such high levels of a zero nutritional substance.

Salt can harm hair growth

There is no doubt that too much salt has a harmful effect on hair. Salt when taken in excess is one of the most deadly known dietary substances. It has been recognized for many years that the level of salt in the diet contributes to the level of blood pressure (BP). By eliminating all added salt in the diet, hair loss can significantly be reduced. Salt has not only been associated with hair loss but also other hair and scalp conditions, such as dry hair and dandruff. Whilst the body needs some salt to provide Sodium and Chlorine, we can safely throw away the salt shaker without any harmful effects as we obtain many times this required amount through our daily diet without any added salt at all.

For the sake of your hair and your health I repeat my advice –throw away the saltshaker and watch your dietary intake of salt.

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The four groups



Using my Hair for Life Meal Plan as your guide, make a special effort to include a member of each of the food groups as a dinner guest at each meal.

And Now, the "Meat of the Matter"

The Hair for Life Meal Plan

The Hair for Life meal plan has been designed to give you:

- 1) All the nutrients you need to maintain a healthy body and give your hair the best opportunity for growth.
- 2) A wide choice of foods.
- 3) A calorie level that you can adjust to achieve your ideal weight - the healthy way.

How I set it up

My Hair for Life Meal Plan has been set up using a portion system. Although it may seem a bit more complicated in the beginning you will find that it is really much easier than counting calories, proteins, minerals or vitamins. So, put away your calculators and long note pads. You won't need them. My method ensures good nutrition for healthy hair and does all the counting for you.

The portion system divides the food into the groups illustrated above according to their calorie and nutrient content. By knowing how many portions you can have from each group every day, you will automatically meet your required nutrient level. Voila! Simple n'est-ce pas?

Which calorie level should you choose?

Most people strive to reach their ideal weight for aesthetic reasons. However there is a more important reason to strive for this ideal - it is the healthiest state to be in. I find that most women can obtain a healthy diet and lose weight following my 1200 calorie diet, and can maintain that ideal weight on a diet approximating 1500 calories; most men [those lucky guys!] can lose weight on a 1500 calorie diet and can maintain their ideal weight on a diet of 1800 calories or more. These figures do not, however, take into account levels of physical activity or individual metabolic rates. They are simply a general guideline.

The Hair for Life Meal Plan

<u>Food Group</u>	<u>Number of Portions Allowed Daily</u>		
	<u>1200 calories</u>	<u>1500 calories</u>	<u>1600 calories</u>
1. Meat and alternates	6	6	8
2. Bread and cereals	4	7	8
3. Dairy products	4 [skim]	4 [2%]	5 [2%]
4. Fruit and vegetables	6	6	6
5. Fats and oils	3	4	4

All you have to do is I) select how many calories you need to eat daily, II) note how many portions you are allowed from each of the food groups and then III) select from the following list the portions that you choose.

Portion Choices

One Portion Equals...

Meat and alternates

1 egg (poached, boiled or scrambled)
 30gm fish [1oz] (salmon or tuna)
 30gm lean meat [1oz]
 30gm chicken [1oz]

Important: Trim all visible fat from meat. Remove skin from poultry and fish. Roast bake, broil or boil - do not fry. An average serving of fish, meat or chicken is 90 grams [3oz]



Fruit and vegetables

- 1 small orange, apple or pear
- 1/2 small banana or grapefruit
- 1/4 cantaloupe
- 2 plums, apricots, prunes
- 1/2 cup grapes or cherries
- 1/2 cup unsweetened fruit juice
- 1/2 cup carrots, peas, beets
- 1/2 cup squash, turnip

Remember – eat a wide variety of fruit and veggies.

Bread and cereal

- 1 slice bread-preferably wholegrain
- 1 small muffin
- 1/2 roll or bagel
- 1/2 cup unsweetened breakfast cereal
- 1/3 cup cooked rice

Use wholegrain breads and cereals, including brown rice. Choose a variety. Read labels, avoid products with added sugar.

Dairy products group

- 1/2 cup skim or 2% milk
- 1/2 cup plain yogurt
- 1/2 cup buttermilk
- 30gm cheese (fat reduced) or cottage cheese

Fats and oils

- 1 tsp oil, butter or margarine
- 1 tsp mayonnaise
- 2 tbsp low cal salad dressing
- 1 tsp Flax Seed oil

It's important to use polyunsaturated oils and salad dressings.

Bonus: You can eat as much as you want of the following: lettuce, cucumber, celery, onion, radish, cauliflower, asparagus, mushrooms, sprouts, zucchini, cabbage, and vegetable marrow.

Tips and Advices on using the “Hair for Life” Diet

If you're trying to lose weight, it is more effective to distribute your food into small, frequent meals than to have one large evening meal at the end of the day. Why is this so? Your blood circulation is more efficient during the day when you are generally more active. It's a good idea to follow that old adage and "eat breakfast like a king, lunch like a queen and supper like a pauper."

I've included "fat" as a food group only because our taste buds like foods better with a shot of oil or butter. Fats do contain essential nutrients, but North Americans tend to go overboard on fat consumption. Excessive consumption of fats can lead to heart disease and other problems related to high levels of cholesterol. So limit your intake, read labels carefully and choose products high in polyunsaturated fats.



- Drink at least 8 glasses of fluids daily. Avoid high calorie soft drinks. Your best bet is crisp, cold water, or bottled mineral water, if you prefer "a little bubbly". Water regulates body temperature, serves as a lubricant, aids digestion and helps in the elimination of toxic by-products.
- Avoid refined sugars: Alas for all of us with a sweet tooth! These are only empty calories, with virtually no redeeming value. They taste great, but do nothing to nourish our bodies.
- Limit your alcohol intake: Forget the old happy hour! What may appear "jolly" is simply more imbibing of high calorie sugar, with a drugging effect to boot. We all know that alcohol in excess can be very harmful.

The direct effect that refined sugars and alcohol have on our hair is still somewhat speculative. However, one thing is conclusive. If they make up a major part of the diet, they will displace other nutrients, which are essential for hair growth. I recommend that you approach these foods and drinks with caution and consume them only in extreme moderation.

Some commonly asked questions:

Will greasy foods cause oily hair?

No. The amount of oil you eat has no bearing whatsoever on how oily your hair will be. An oily scalp condition is usually indicative of an imbalance in the body's hormonal system. Too much oil, however, can affect your skin, to say nothing of your waistline.

Will additional fibre in my diet have an affect on my hair?

Fibre, once called the forgotten nutrient, has finally been rediscovered by our modern, refined foods society. Fibre is the part of food that is not absorbed by the human body. Its job is to hasten the transit time of food through the system, by creating bulk and stimulating the bowel. This is important in ridding the body of toxic substances and wastes.

Scientists are finding definite links between diets low in fibre and incidences of certain illnesses, such as cancer of the bowel, hiatus hernia, heart disease, obesity, diabetes, hemorrhoids, and constipation.

When someone eats a diet low in fibre, the undigested food remains in the system longer than is necessary. This causes bacterial changes, which could affect the nutrients entering the blood stream. Since the hair follicles are so dependent on the nutrients they receive via the blood supply, it has been speculated that a low fibre diet may adversely affect hair growth due to the effect on the blood.

In any event, I strongly advise you to eat foods high in fibre for general well-being and comfort. When you want a nibble- reach for wholegrain breads and cereals, raw, unpeeled fruits and veggies, nuts and legumes.

Summary

To give your hair the best opportunity for growth, you should:

- 1) Make the Hair for Life Meal Plan your preferred diet for life!
- 2) Eat adequate amounts of protein, minerals and vitamins.
- 3) Drink at least 8 glasses of fluid daily - preferably water.
- 4) Limit your intake of sugar, fat, alcohol and salt.
- 5) Increase your intake of high fibre foods.

If you commit yourself to this meal plan, indulging in the incredible variety of foods available to you, your hair and general health will be the reward for your efforts. What more could you ask for? The principles of **The Hair for Life Diet** when incorporated with all components of **The Hair for Life Program** will improve the health of your hair whilst also greatly enhancing overall vitality and well-being. Correct nutritional activity accelerates the growth rate and strength of each hair follicle and within two to four months great results should be noted.

Follow these diet rules for healthy hair and scalp

1. Eat lots of fresh fruits and vegetables. Do not overcook your vegetables as many valuable vitamins and minerals are destroyed or lost in cooking.
2. Eat foods rich in B vitamins: liver, wheat germ, nuts, peas, and whole grains. Fortify your diet with natural vitamin B-complex.
3. Avoid the excessive intake of animal fats and refined carbohydrates: white sugar, white flour, and foods made from them. Replace animal fats and hydrogenated fats in your diet with unsaturated vegetable oils: corn oil, safflower oil, wheat germ oil, olive oil, etc.
4. Adequate amounts of protein in the diet work to maintain and build new tissues in the body, including new hair follicle. Research has shown that people who follow a low protein diet have displayed signs of hair loss.
5. Avoid smoking. Smoking constricts the arteries and the small blood capillaries, while slowing down blood circulation.
6. Reduce coffee and tea to a minimum. Rather use herbal teas such as peppermint or chamomile.
7. Take B-Complex to include biotin, Inositol, cysteine and all B vitamins (50-100 mg). Zinc will be a good mineral to add.

Foods that are good for you, and bad for you!

Healthy hair foods include such things as Salmon, cold-water fish, sardines, Eggs, Lentils, Wheat bran and germ, spinach, Cantaloupe, Blueberries, Citrus Fruits.

Good snacks for super hair include foods such as Almonds, Walnuts, Sunflower seeds, Figs, Apricots, Bananas, Raspberries or strawberries, Oranges, Raisin, Prunes, Skim milk, soy latte decaf, or 4 oz frozen or regular low-fat yoghurt, small box whole-grain cereal or whole-grain snack bar.

Foods that seem to help hair shine include Ground flax seed or oil, Walnuts, Sunflower seeds, Olive oil, evening primrose oil, Apples, Chickpeas

To Eat or not to Eat? That is the Hair-Raising Question

With the confusing array of nutrition information available, it is not surprising that many people are at a loss as to how to plan a balanced diet.

A balanced diet is one, which contains all the nutrients in the correct amounts needed to maintain health and activity. It is a diet, which builds and repairs tissue, while enabling you to achieve your ideal weight and stay there.

In order to be most effective, nutrients should be combined to complement each other and maximize their potential effectiveness. In spite of claims you may hear from time to time, no one food is "the miracle food", containing everything people need for growth and health. Therefore, eating systems have been developed to correctly combine foods so all the nutrients are provided.

Foods are divided into four food groups, bread and cereals, meat and alternates, milk and fruit and vegetables with each group providing a different set of nutrients. The simplest way to get a balanced diet is to eat a variety of foods from each of these groups. Let's visualize these food groups as being parts of a circle that link together. This circle is an appropriate symbol, since the food groups are interdependent and no one of them is nutritionally complete on its own.

Herbal and vitamin supplementation - The best-known herbs to help hair grow

Silica – One of the best herbs to help encourage healthy hair growth. It stimulates hair cell metabolism and acts as a strengthener of connective tissue.

Fo-Ti – For centuries the Chinese have known of a natural herbal formula and its ability to grow back lost hair and in restoring grey hair to its natural colour. This time-tested 100% natural hair nutrient is derived from the Chinese herb "He Shou Wu", also known as Fo-Ti.

Stinging Nettle – A powerful plant extract, which stimulates blood circulation, improving the blood supply to the hair follicle thereby increasing the potential for new hair growth.

Kelp – A seaweed which is dried and ground into powder. It is rich in vitamins and minerals, especially iodine. Iodine is considered to be one of the best ingredients to improve the quality of hair and better hair growth.

Saw Palmetto – Is an excellent blood purifier that specifically assists the body to replace the nutritional reserves used by the body following periods of stress. Recent scientific studies show that Saw Palmetto nutritionally promotes the inhibition of the enzyme 5-alpha-reductase. Studies now suggest that inhibiting 5-alpha-reductase is important. This is because of its ability to convert testosterone to DHT (dihydrotestosterone). Research indicates that men with hair loss have an increased concentration of reductase and increased activity of DHT. Reducing DHT can reduce hair loss and nutritionally promote healthy hair growth.



Hair Analysis

Is It a Gimmick or Can My State of Health Really Be Diagnosed by It?

Analysing the mineral content of hair is a relatively new test many people are using to diagnose health problems or determine deficiencies in their diet. While hair analysis is becoming an increasingly popular procedure, it is also controversial. In case you have never heard of hair analysis, let me briefly describe it to you.

Hair analysis is a simple test that involves examining a sample of hair to determine the concentration of trace minerals and heavy metals in body tissue. The test is conducted by asking the patient to cut hair from the scalp at the base of the neck and send it to a laboratory. The results are analyzed and printed out by a computer. They are then returned to the patient, with a list of observations and suggestions about what mineral supplements should be taken to correct supposed abnormalities.



Don't get me wrong if I'm sounding a bit negative. I thoroughly believe that hair analysis is a valuable tool in certain situations. It has been proven as a useful forensic tool, measuring such things as toxicity and poisoning.

Hair analysis can reveal poisoning long after a crime has been committed. For example, analysis of Napoleon's hair about 100 years after his death revealed that he had been poisoned by arsenic. No wonder we have pictures of Napoleon standing with a pained look on his face, clutching at his heart!

Hair analysis is also used in monitoring pollution from toxic heavy metals, such as lead, cadmium, mercury, and arsenic, found in the environment and at some work sites. It has even contributed to the diagnosis of many illnesses, when used as a complementary tool with other diagnostic tests, including urine and blood analysis.

However, I believe the commercial use of hair analysis to assess the mineral condition of an individual is invalid. Why? Quite simply, at this time, I think there is incomplete information concerning what exactly influences the concentration of metals in the hair. In addition, there is currently no standardization at the laboratories for collection and methodology of hair analysis. To my thinking, the analysis of human hair is still only an experimental technique. It may have clinical promise in the future, but until more conclusive research is done. I question its usefulness.

Drugs and Hair



Do Drugs Get Your Hair "High"?

While commonly prescribed medications may cure what ails you, they aren't necessarily so terrific for your hair. Many drugs prescribed by your doctor or bought over-the-counter at the pharmacy can dull the hair, inflame the scalp or make it itch. They may even make the hair fall out!

How do drugs affect the hair? The growth of hair depends on cell structures actively dividing. If a drug interferes with this crucial cell division, it will have an effect on the hair. Some drugs, like birth control pills, for example, disrupt the hormonal balance in the body. Since hormones influence hair growth, these drugs can also affect the hair.

Let's look at several commonly prescribed drugs to find out the effect of that particular drug on your hair.

Aspirin

If you take aspirin in moderation, for the occasional headache, you shouldn't have any problems. Some researchers claim, however, that if aspirin is taken over a long period of time, in large doses, it will cause scalp and skin disruptions, itching, and scaling.

Birth Control Pills

The birth control pill is composed primarily of the hormone estrogen, along with other hormones. These hormones influence the hair in such a way that fewer hairs are in the "resting phase". This means that less hair is falling out, as it would if the normal growth cycle were being followed. A sudden decrease in female hormones can cause a great deal of hair loss. This may occur after discontinuation of the oral contraceptive or after pregnancy. This, however, is only experienced for a short while, generally 3-4 months.

Antibiotics

These drugs may cause hair loss, redness of the scalp and some tenderness in that area. Since antibiotics decrease the B-vitamins in the blood, your hair can become dull looking. It's a good idea to take a B-complex supplement while on antibiotics.

Cortisone

This drug is a two edged sword. On the one hand, it has been known to cause hair loss. On the other side, it can also be used as a topical preparation to encourage hair growth. Cortisone is often used to reduce inflammation of the scalp. If used sparingly and for a short period of time, all will probably be well. However, prolonged use can thin the scalp tissues and affect the hair follicles.

Thyroid Medications

Many people with under-active thyroids may experience some kind of hair loss. Treating this thyroid imbalance may cause more hair to fall out. Your doctor may be able to re-evaluate and adjust the dosage of these medications to minimize the hair loss.

Barbiturates/Sedatives/Tranquillizers

Over a long period of time, they too can cause redness on the scalp or scaling, as well as hair loss.

Nasty, Unnecessary Non-Prescribed Drugs - Both Legal and Illegal

Many of us put all sorts of drugs into ourselves even when there is no need. A lot of these drugs can be called another name - a bad habit.

Cigarettes

Some people suffer temporary hair loss when they take up smoking. Others temporarily lose some hair when they quit the habit. Even if cigarettes aren't bad for the hair, we all know what they do to the lungs. So, why do something so unhealthy and expensive? Besides, cigarettes make your hair smell terrible. Yech!

Alcohol

Alcohol, if consumed in moderation, can be good for your hair in as much as that a drink or two relaxes you and thus, reduces stress. However, alcohol abuse will damage the hair and scalp, to say nothing of the rest of your body, mind and general life.

Street Drugs

Cocaine and other street drugs quicken the metabolism. This change, counterbalanced with the sluggishness experienced in the "coming down" phase can also cause hair loss.

So the general verdict on all drugs, prescription and otherwise, is to take them only when absolutely necessary. Let nature take care of things uninterrupted by these other chemicals if at all possible

Hair Trivia & facts you never thought of!



We have a lot of Hair Follicles on our body!

Depending on the individual, approximately 5 million hair follicles cover the surface of the body at any given time.

Of that total, there are about 100,000 to 120,000 strands of hair growing on the head. All those millions of hairs are developed and in place before a baby is even born. Biologically, it is impossible to grow more hair after birth. All the hair you are ever going to have is already there when you arrive. Surprisingly, blondes usually have more hair on their heads than those with red or darker hair colors like Marigold.

The thin & thick of hair diameter!

What is even more surprising is that even though a single hair has a thickness of only 0.02 to 0.04 millimetres, it is remarkably strong, with a tensile strength equivalent to that of a thin strand of wire. Why, then, does hair seem to be so fragile? According to a March 1988 article in *Cosmetic Dermatology* by Dr. Zoe Draelos, hair easily stretches (unlike wire) and can do just fine when extended to 30 percent of its length. However, once it exceeds 30 percent, damage is certain, and at much past 80 percent of its original length, the hair shaft fractures. (Hair becomes even more vulnerable to breakage when the hair shaft is damaged, but more about that later.) This explains why the tension placed on hair by pulling it down with a round brush during blow-drying – or by tying the hair up tightly in a ponytail – can be so damaging.

Shaving one's head will cause hair to grow back thicker? No!

Shaving one's head will result in ... a shaved head! Triggered by stress, hair that is lost in alopecia areata will sometimes grow back after the stress disappears. In other cases, treatment is necessary. Complete baldness is rare. The psychological damage associated with alopecia areata is the most damaging aspect of the condition since it is sudden and unexpected. Alopecia areata tends to appear in families with a history of asthma, eczema, or autoimmune disorders, such as rheumatoid arthritis or lupus erythematosus. It can be treated with cortisone injections, topical minoxidil (Rogaine), or other medications that stimulate hair growth.

Male hair loss is genetically passed down from the maternal side of the family.

Hair loss is certainly genetic, no question about it, but not necessarily only through the mother's side. It comes from both sides. That's clearly established.

Female hair loss is genetically passed down from the male parent.

It's an equal myth. Hair loss is obviously from both sides of the family. We still don't know exactly what gene causes it. We think it's probably several genes, and it's a combination from both sides of the family that creates each individual's unique hair loss pattern, so it's not either the mother or the father, but a combination of generations together making up each person's hair loss pattern.

Hair colorings, hair spray or excessive washing can cause hair loss.

There's no problem washing, combing, dyeing, and shampooing your hair. I think a lot of people when they lose hair really have stress about washing their hair, because they see the hair in the sink, they see the hair in the comb. In fact, we lose hair every day. We always have. Anyone with a full head of hair loses 40 - 70 hairs a day. That's normal. The problem with hair loss is not the hair that you're combing out or shampooing out. The problem is it's not being replaced normally. What you should be careful with -- you should be careful about using excessive chemicals, relaxants, hot combs. There are things that can burn the hair out and pull the hair out. But everyday shampooing, combing, blow-drying is not a problem.

Hair that you see in the drain or in the brush, will that usually grow back -- is it cyclical?

It does grow back. The problem is, it's not growing back as it did in each cycle. Hair normally cycles, just like the way we cut our nails because they're constantly growing. Hair is constantly turning over, too. What happens is, it's replaced, but it doesn't grow out to the same length or to the same width it used to, so it gets shorter and shorter and shorter each cycle over months and years to the point where it just doesn't grow anymore, and it gets finer and finer. That's why someone who has male or female pattern hair loss will often complain that his or her hair just doesn't have any luster. It's very dead looking. It doesn't have any sheen to it because it's getting thinner and thinner. So that's what happened. It actually does get replaced when it falls out in the comb or in the sink. It's just, each time a little bit less.

Using a hair dryer a lot will 'blow the hair right out' of there.

There's no evidence that shows that use of a hair dryer causes you to lose hair. That said, if you have an excessively hot hair dryer that is beyond the standard or norm, you can damage skin and damage, theoretically, the hair follicle, so you should hold the hair dryer at a comfortable length from your scalp and assume that you're doing no real damage.

Hair loss only happens when you reach the age of 50 or older.

It often starts quite a bit earlier than that. Men, even in their late teens, early 20s, can begin to experience hair loss. And of course it continues throughout life, and it's not really hair loss, exactly. It's a process of miniaturization, where the hair changes through each cycle as it grows back in a smaller form, so it's not exactly you lose a hair and it doesn't come back. It comes back but it's thinner and it's a different quality, so it's perceived to be that you're losing it, but it's actually just coming back in a less robust form.

Wearing a hat for long periods of time lead to hair loss.

Hats do not cause hair loss. That is a myth, and I think it may have come from the fact that often people try to wear hats or do things to try to camouflage, actually, and the process is a continual process that goes on, so while you're trying to camouflage it with a hat, you notice the hair keeps thinning, so you make a conclusion that it might be the hat. It's not. It has nothing to do with the hat.

Unusual Facts About the Hair

- The diameter of a strand of hair ranges from 1/500 to 1/140 of an inch. In terms of texture, blonde hair is most fine, while black hair is the mostly coarse.
- The scalp contains about 120,000 hairs, or 1000 hairs to the square inch. Blonds not only have more fun, they also have the most hairs on their pretty heads - averaging 140,000. On the other side, redheads have the least - about 90,000.
- Women generally have more hair per inch than men.
- Hairs live, on the average, two to six years. Hair will be replaced at least 12 times during a normal lifespan.
- Hairs on the scalp grow about 1/100 of an inch per day, or, one inch every three months.
- Contrary to popular belief, hair does not grow faster when it is cut. The rate of growth, however, may be influenced by hair length. Growth may slow down once the total length exceeds 10 inches.
- Hair shine depends on the smooth scales of the cuticle that forms an even surface on the hair shaft and reflects light. When the hair is damaged, the scales pull away from the shaft and no longer reflect the light; hence, the hair appears dull.
- Hair never seems to grow past your shoulders. Individual genes determine the length of the hair's growing phase and the rate of growth during that phase. These factors control the length hair can reach, and this varies from person to person. So, if the growing phase is short and you get regular trims, you'll probably never have really long hair.
- Hair will never grow more than 2 1/2 feet. After 2-6 years the growth phase comes to an end and the resting phase takes over. The strands stop growing and eventually fall out.
- Washing your hair won't make a cold worse. Water from a shower isn't going to make you ill or aggravate a cold. Viruses, contracted from others who have them, are the bad guys.
- Hair never grows on the palms and soles. These are the only areas with no hair follicles.
- Shaving the head does not make hair grow back any thicker or courser. A short stubby hair always feels thicker and stronger than a longer hair, but it isn't.

HAIR FOLLICLE STATISTICAL DATA

The average number of hair follicles:

on the scalp	100,000-150,000
all over the body	Estimated 5 million

In adults:

Percentage of hair follicles in anagen phase	80%-85%
Percentage of hair follicles in telogen phase	10%-15%-18%

In children:

Percentage of hair follicles in anagen phase	95%
Percentage of hair follicles in telogen phase	5%

Rate of hair growth:

on adult scalp @ 1 cm/month	0.37 -0.44 mm/day
all over adult body and beard	0.27 mm/day

FOLLICULAR DENSITY (number of follicles grouped together)

At birth	1135/sq cm
At one year	795/sq cm

At fifteen years	615/sq cm
At thirty years plus	485/sq cm
At eighty years	435/sq cm
Mean adult scalp hair shaft diameter	70 microns

Quick Tips for Healthy Hair Growth

Tips for Well Nourished Hair

Drink at least eight glasses of water daily. Water regulates body temperature, serves as a lubricant, aids digestion and helps eliminate toxic by-products. Avoid high calorie soft drinks.

YES, TRY & DO AS OFTEN AS YOU CAN

NO, TRY TO AVOID
(Reduce as much as possible)

- B-complex supplement daily
- Lots of fresh fruits and vegetables
- 8 glasses of filtered water
- Yogurt everyday
- Herbal supplement daily containing Silica, Kelp, Nettle, He Shou Wu and Saw Palmeto
- Conditioners and Leave-in Conditioners with built-in sun protection
- Use natural bristle brushes
- As much scalp massage as possible (whenever and wherever possible)
- Daily exercise routine, focusing on increased blood stimulation to the scalp
- After rinsing out conditioner end up with cold water
- Relax the mind. Less stress= better hair
- Hair care products with Sodium Lauryl Sulphate, Cocamide DEA or Sodium Chloride (Salt)
- Salt
- Sugar
- Soda / high calorie soft drinks
- Alcohol
- Coffee and tea
- Dry cereals and cake
- Candies and gums
- Fats and fatty fried foods
- Swimming pools (chlorine) – wear cap
- Ocean swimming – wear cap
- Excessive sun
- Salt water (ocean)
- Smoking (or being around someone who smokes)
- Using nylon brushes
- Too much heat from blow-dryers being too close to hair and scalp
- Hot curlers and crimpers
- Tight hats
- Chemical treatments including colours, perms, tints and bleaches

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The “Hair for Life” Program “Losing it & Growing it”

Discover the hair loss secret that is helping men & women
grow thicker, stronger and healthier-looking hair!

Hair is the crowning glory of both men & women. We annually spend millions of dollars on hair styling, colouring, as well as shampooing and conditioning products to get that desired “look”. When experiencing thinning hair or hair loss, we even go as far as to attempt painful implants or other surgical procedures. Others, not wanting to think of surgery as an option, use harmful chemicals on their scalp to no great success-and to possible harmful side effects. There are, today, several natural alternatives that are neither painful nor harmful.

In my **Hair for Life Program**, I will tell you everything you need to know about how to not only improve upon the quality of your hair, but also slow down hair loss and grow back hair naturally. By utilizing all the information in this will be able to create the ideal environment for healthy hair growth. With patience and daily care, you will finally see your hair growing back- thicker, stronger and healthier than ever before.

Despite a nearly 10-fold increase in the rate of hair loss in the recent decade, doctors have had little to offer but some prescriptions drug products with little results and unwanted side effects.

Now there is hope for those who have this common problem. My systems, along with breakthrough hair & scalp formulas, have been used by thousands of men & women all over the world, including as far as way as Singapore, Hong Kong, Kuwait, Australia, Saudi Arabia, South Africa, Korea, Taiwan, Malaysia, Lebanon, Canary Islands, Jamaica and many more!

My interest in the hair loss industry began many years ago, when my father, also a Pharmacist discovered the ‘secrets of the plant life of East Africa. It was seeing the amazing results people all over the country were receiving, that I became fascinated at how natural remedies can help slow the rate of hair loss as well as in many cases help the hair to grow back naturally.

The new
Hair for Life
program will show
you everything you
need to know and
exactly what you
need to do!

My focus for the last 22 years of my career has been to improve on his original discovery and blend what he discovered with other ingredients, making this a true blend of science and nature. I made use of the latest in modern hair care technology. As you do this program you will see how much sense it makes and how easy it is to carry out. Finally, you will be delighted with your ‘better than ever’ hair! If you have any questions or comments I would like to hear from you. ***Hairs to your health!***

I am interested in your progress. Please email me
Or call anywhere in North America toll free
1-800-663-2285

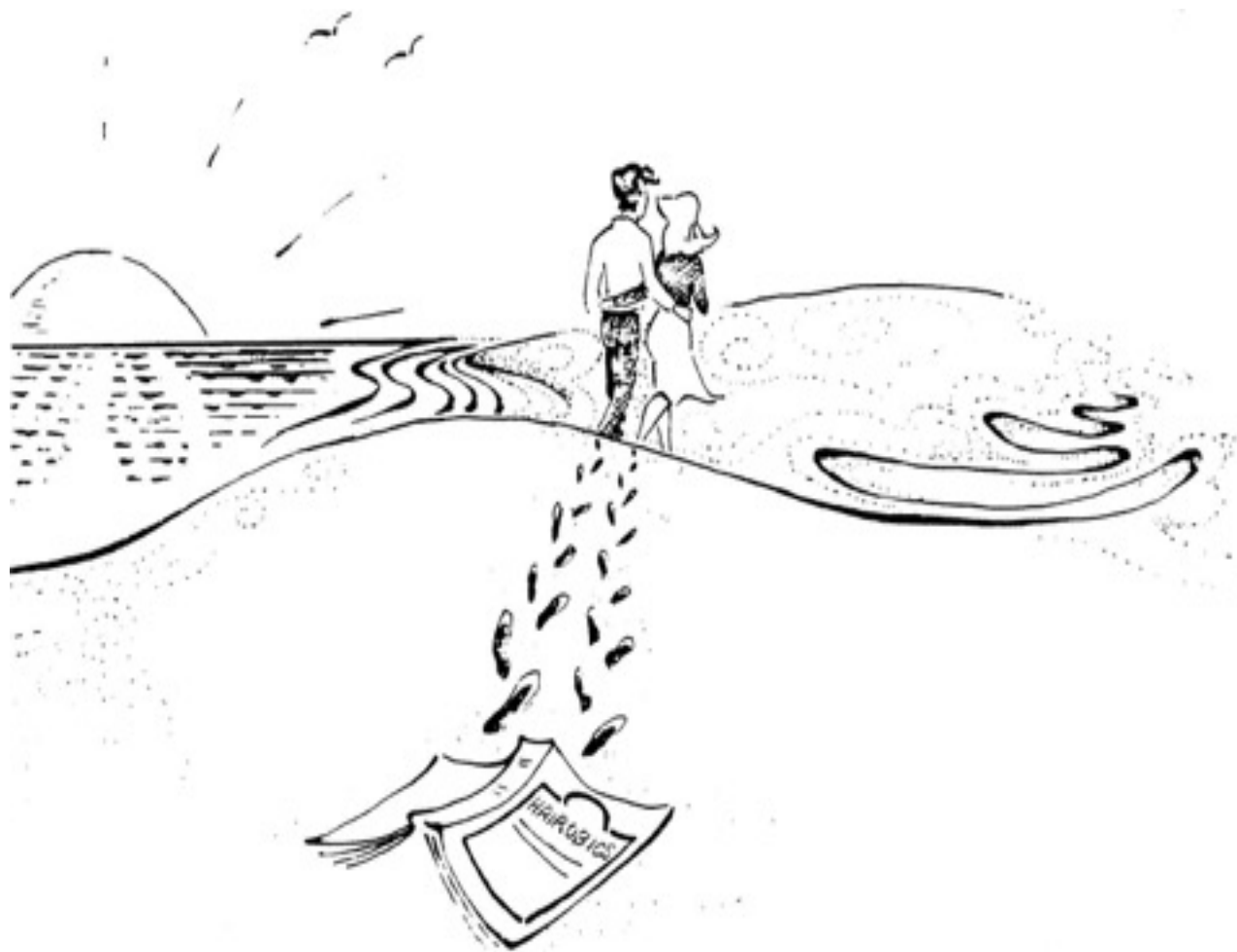
D.R.Segal



at drsegal@segalshaircare.com

“It’s not true to believe
beautiful hair is an
accident of birth ...

Everyone Can Have It”



Healthy,
beautiful hair
is now
within your
reach ...