The Hair Follicle Neogenesis Method

A powerful method for generating new hair follicles in the scalp and significantly increasing hair density using a Dermaroller and a super high strength hair growth stimulant.

June 2020 release
Important: Read this first

In 12 months I've transformed my hair. I've gone from almost bald on the top of my head, to having thick, healthy hair. I've grown **thousands of completely new hairs** – and my hair is constantly getting thicker.

How in the world did I do it?

Over the last twenty years I've tried just about every single different hair loss treatment in the world and I have never been able to regrow my hair.

Since I started using the method I'm about to show you I've grown **thousands of new hair follicles** at the **front of my scalp** and my hairline has grown forward about an inch. My hair is nearly as thick now as it was in my early twenties (15 years back).

Please understand this
If you **really** want to regrow your hair, you will have to use a method like this.

I know this because *I've already tried everything else*. I've been trying to regrow my hair for twenty years.

I wasted twenty years trying things that didn't work.

**Don't waste your life.**

Just use this method.

It works.

Please trust me on this. If you don't do this now, you'll just end up doing it in 2, 5 or 10 years anyway when you realize nothing else works and this is the only way.

It's very simple. It's easy. It takes minutes. It works.

Oh, and one more thing:

Please don't forget to take a good photo of your hair before you start!

You'll learn why later.
Step 1: The Hair Follicle Neogenesis Method: how to generate new hair follicles in your scalp

In the first step I'm going to explain how to use a Dermaroller and a super strong hair growth stimulant to generate completely new hair follicles in your scalp. By repeating this method daily for a year I've been able to generate **thousands of new hair follicles in my scalp**. My hair is around four times thicker and my hairline has grown forward about an inch.

When you roll the Dermaroller over skin, the needles gently create tiny, invisible wounds in the tissue. When the skin heals the tiny wounds it replaces the tissue with new, healthy tissue. As you repeat the process the old tissue is gradually replaced with new, healthy, functional tissue.

This is why Dermarollers are so effective at getting rid of acne scars and stretch marks.
Thousands of people all over the world use Dermarollers to heal their scars.

**Generate thousands of new hair follicles**

I'm going to show you how to use this healing mechanism to generate new hair follicles, by gently rolling the Dermaroller over your scalp.

Using the Dermaroller will not damage your existing hair follicles. The needle points simply slip past the low friction hair shafts in favour of the scalp tissue, where they momentarily embed.

The wounds you create are so small you won't even notice them. And it's completely safe to do at home.

It only takes a few minutes and you only need to do it once a week. A Dermaroller only costs about $10. So all in all it's an extremely cost-effective and easy way to regrow your hair.

**How to force the skin to develop new hair follicles instead of just new skin**

Using the Dermaroller alone unfortunately will not cause hair follicle neogenesis to occur. 'Hair follicle neogenesis' is the term used to describe the generation of a completely
new hair mini-organ (the hair follicle) in skin tissue. It's been observed in several studies: researchers noticed new hairs growing in and around healing wounds after the wounds were treated with 'growth factors'. Some researchers noticed this phenomenon and decided to study it to see which growth factors were required to initiate hair follicle neogenesis.

In addition to using the Dermaroller to create wounds and generate new tissue, we also have to increase several growth factors in the wounds. Don't worry, this is very easy.

In addition to the growth factors that make hair grow we have to reduce inflammatory cytokines, activate something called the Wnt-signalling pathway and open something called potassium-ion channels in the follicles. Again, don't worry, this is all very simple. You don't need any advanced scientific knowledge. I will explain everything simply.

**If you don't do this you will never regrow your hair**

I should explain at this stage; **if you do not do the things I have just mentioned, you will never regrow your hair.** It is absolutely essential you complete this simple procedure if you want to regrow your hair. I say this because some people think they can regrow their hair using some product they bought at their pharmacy or on Amazon.
They don't work. If you want to regrow your hair, you have to use a super strong hair growth stimulant containing very special ingredients like the one I'm going to show you.

To explain what we're going to do in a very simple, quick way:

Essentially we are:

- Reducing all the things that block hair growth (cytokines, TGFs, PGD2, DHT)
- Activating the mechanisms required for hair growth (Wnt-signalling pathway and potassium-ion channels)
- Increasing the things that make hair grow (certain fibroblast growth factors and amino acids)

Again, you don't need to worry about the full complexity of these processes. I have researched these mechanisms for twenty years. This guide does not dig deeply into the underlying science. It simply explains how to do it.

In a sense you can think of the procedure we're going to undertake as 'transforming your scalp environment from one that causes hair loss, to one that makes healthy hair grow'.

First of all you'll need a Dermaroller, or equivalent device. You can purchase these on Amazon for around £10. For that small price you will achieve more with the technique
you’re about to learn than you would spending thousands of pounds on equivalent treatments at hair loss clinics.

What Dermaroller Needle Size do you Need for Hair Regrowth?

The needle size you need is 1mm. 1mm is the size I suggest using in order to achieve the increase in cell production at the level we require. This is due to the thickness of the epidermis in the scalp.

Here's what one of the researchers at Dermaroller recommends based on their research:

After evaluation of all of the biopsies in Dr Schwarz's study, new collagen fibers were only found close to the corium and not deeper than 0.5 to 0.6 mm. Although the Dermaroller model MF8 has 1.5 mm long needles, no significant new collagen and elastin formation could be found in the sub-dermal tissue.

6 weeks after micro-needling, collagen and elastin fibers are increased by 1000% and to a depth of 0.5 to 0.6 mm.

Although we do not know much about the mechanisms of the Dermaroller and how its needles induce such a dramatic amount of collagen in a short session... ...we have scientific proof that the needling procedure triggers new collagen fibers, new melanozyts, stimulates re-vascularization, hair growth, evening in scars (Camirand), re-pigments stretch marks, fills depressed acne scars, softens scars and so on. Quality needles do not damage the skin in the sense of a classical injury. The pricking channels close within 60 to 90 minutes and infections therefore are unlikely.
Since the above research was released, a company called Follica (pioneers in hair follicle neogensis) studied the specific needle sizes that are most effective for hair follicle neogenesis. They agree that 1mm is the optimal length.

Incidentally, you can see how (based on the above) the Dermaroller is also an excellent anti-ageing tool for the skin, increasing collagen and helping reduce the appearance of wrinkles – it's therefore also great for use on the face – and I highly recommend it.

**Types of Dermaroller**

You can use any type of standard Dermaroller – titanium, stainless steel, gold – it doesn't matter, providing it's the standard Dermaroller shape as pictured above. There are lots of variations in materials and colours, but they all do the same thing.
There are also several other micro-needle devices that achieve similar results, including 'derma stamps'. Derma stamps are actually better because they're easier to use, create more wounds and most people prefer them, but they are more expensive. A normal roller device like the one pictured is absolutely fine.

You can choose any brand. Just make sure you buy the 1mm needle length.

How often should you use the Dermaroller?

For the first month: Once per fortnight
Start by using the Dermaroller once per fortnight. Do this for at least one month. You should see that your scalp heals within about an hour of using the Dermaroller. However, additional healing and tissue production will continue under the surface of the skin.

If you've used hair gel, hair wax or other styling products in your hair during the day, I recommend washing or at least rinsing your hair and scalp before using the Dermaroller. Make sure your hair is dry before using the Dermaroller.
After the first month: Once per week
After a month of using the Dermaroller once per fortnight, move on to using it once per week.

After two months: Up two once per five days
Dermaroller wounds generally heal within a few hours. However there will always be some wounds that take longer to heal. Up to a few days. I recommend waiting a full week between microneedling. However, as you get used to it you might consider microneedling more frequently. I would avoid microneedling more than once per five days.

Remember, it only takes about two minutes to complete this simple procedure, so you're only using up two minutes of your week to regrow your hair! I think it's worth it.

How to use the Dermaroller
In the evening before bed, roll the Dermaroller over your scalp several times covering all of the top of your scalp. Focus on the areas you're most concerned about.
Roll the Dermaroller over the areas of your scalp that are bald or thinning four times (as shown in the diagram above), making sure to cover all of the areas where the hair loss is occurring.

Move the Dermaroller at a rate of about one full roll per second. Go slow and steady.

**General movement**

Roll the Dermaroller at a steady speed. The aim is to create **clean needle wounds** without tearing or cutting. I have never torn or cut my skin using the Dermaroller but be careful to achieve precise hole punches. According to Follica's latest research, clean, precision pin holes are most effective for hair follicle neogenesis.

Consider using a Dermastamp for much better accuracy.
and ease of use. Search Amazon or Google for “Dermastamp”. These do the same thing as a Dermaroller but are more advanced.

How much pressure should you apply?

You need to apply enough pressure so that you create very tiny dots of blood: about 3 tiny dots for every complete rotation of the Dermaroller is a good indicator you're applying enough pressure. These dots should be so small you can barely see them – about the size of a pin head. In fact, most of the time you won't be able to see anything.

Your scalp should not be covered in visible wounds. You should expect to see about a total of 20 visible wounds over the whole of your scalp each time you use the Dermaroller.

Remember, these wounds heal within 90 minutes, so they will be healed by the time you wake up and any tiny visible blood will wash away when you shower. From time to time you will inevitably create slightly larger wounds that are visible for a day. This is fine. Remember they are very small.

If you can achieve that, you have the correct pressure. Remember, with every wound you create you are...
generating fresh new, healthy tissue and follicles. This is the only way to generate new hair follicles.

How to clean your Dermaroller

It’s important that you always keep your Dermaroller clean. Follow this simple cleaning procedure after using the Dermaroller:

1. Spray anti-bacterial spray or alcohol spray into the inside of a mug or glass and rinse.

2. Spray anti-bacterial spray all over the Dermaroller and place the Dermaroller into the mug (pins at the bottom).

3. Leave for 30 seconds for the anti-bacterial to kill any bacteria.

4. Pour boiling water onto the Dermaroller, swish it around in the mug and leave for a minute for the bubbles of air to release from the Dermaroller.

5. Remove the Dermaroller from the water and rinse thoroughly.

6. Then place the Dermaroller back in it's case.
The super-strength hair growth stimulant

As I previously mentioned, using the Dermaroller alone, will not make new hair grow. In order to generate new hair follicles you have to introduce specific 'growth factors' to the wound sites. And even doing this will not make new hairs generate every single time. Some people are very lucky and hundreds of hairs just start sprouting up everywhere. Other people have to wait longer. In my opinion, this is largely due to inflammatory cytokines. Once you've significantly reduced your scalp cytokines, you should start to see faster results. So for a period, you might have to wait until the cytokines have reduced enough that hair growth can begin again uninhibited. This is what happened to me and it's why I introduced powerful cytokine inhibitors to the hair growth serum mixture.

We're going to mix 10 ingredients together to make a super-potent growth factor serum. The ingredients we're using are quite remarkable in regard to the effects they've been shown to have on hair growth.

Below are the volumes of ingredients to be mixed into a 100ml bottle.
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Volume to add to a 100ml bottle</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure Minoxidil powder dissolved in propylene glycol/ethanol/water (PGEW) (20:60:20; v/v)</td>
<td>10 grams Minoxidil powder in 50ml PGEW</td>
<td>Increases VEGF, Opens potassium-ion channels: required for development of terminal follicles</td>
</tr>
<tr>
<td>Valproic acid</td>
<td>10ml</td>
<td>Activates Wnt-signalling pathway: required for hair follicle neogenesis</td>
</tr>
<tr>
<td>Sandalore</td>
<td>5ml</td>
<td>Increases IGF-1 and keratinocytes. Reduces TGFbeta2: required for hair follicle neogenesis</td>
</tr>
<tr>
<td>Peppermint oil</td>
<td>10ml</td>
<td>Reduces inflammatory cytokines and increases IGF-1</td>
</tr>
<tr>
<td>Castor oil</td>
<td>9ml</td>
<td>Increases PGE2</td>
</tr>
<tr>
<td>Magnesium oil</td>
<td>5ml</td>
<td>Reduces scalp calcification</td>
</tr>
<tr>
<td>Red Velvet Deer Antler</td>
<td>0.5g</td>
<td>Increases IGF-1</td>
</tr>
<tr>
<td>Taurine</td>
<td>0.15g</td>
<td>Reduces TGFbeta1</td>
</tr>
<tr>
<td>L-Carnitine Tartrate</td>
<td>0.12g</td>
<td>Upregulates proliferation of follicular keratinocytes</td>
</tr>
<tr>
<td>Cetirizine</td>
<td>0.01g</td>
<td>Reduces PGD2</td>
</tr>
<tr>
<td>Pure caffeine</td>
<td>0.01g</td>
<td>Reduces DHT</td>
</tr>
<tr>
<td>Tretinoin</td>
<td>0.01g</td>
<td>Increases effectiveness of Minoxidil</td>
</tr>
</tbody>
</table>

Please read

I know this looks extremely complicated. If you are experienced with these kinds of chemicals and how to properly mix them, please feel free to do so on your own. However, if this is daunting to you, don't worry, I have made pre-mixed solutions of these chemicals, mixed them
properly in safe lab conditions. You can get my pre-mixed solutions (which I also use) here:

**Order the super strength hair growth serum online**

The pre-mixed solutions I sell are the exact same solutions I have used to regrow my hair.

Many people have emailed me to discuss the 10% Minoxidil, asking whether it is really necessary. Here's my answer:

If you actually want to regrow your hair, use 10% Minoxidil. Otherwise you will try many other things for a few years, none of them will work and you'll eventually come back to using 10% Minoxidil. It is highly effective. Don't waste your time trying alternatives. No matter what companies say about Minoxidil alternatives in their marketing literature, believe me, they don't work. Minoxidil works. Life is too short to waste your time trying things that don't work. This works. I spent twenty years trying things that don't work. Believe me, just use the thing that works!

What about side effects?

Here's my answer to you:

Minoxidil has very minor side effects that are seen in a very small number of users. And they're not severe. One of the
side effects is unwanted hair growth!

Remember Minoxidil has been used by thousands of men and women for decades and is known to be safe.

10% Minoxidil is used by hair loss clinics all over the world.

I must reiterate this again:

If you actually want to regrow your hair, you need to do the things I've described in this PDF. If you don't want to regrow your hair, that's OK. You'll be bald. It's not the end of the world. This guide is for people who want to regrow their hair. Getting what you want can sometimes require working for it. It might require doing things you don't want to do. You have to choose. Do you want to use Minoxidil and a Dermaroller? Or do you want to be bald. Pick one.

I'm not saying that to be mean, I'm saying it to be realistic. How many people do you know who have regrown their hair using 5% Minoxidil? None. Because it doesn't work.

At the Belgravia Centre in London (one of the world's leading hair loss clinics), they use 10% Minoxidil. Why? Because it actually works. However they charge over £1000 for it. I'm going to show you how to get it for a tiny fraction of that cost – and the version I'll show you is far more effective.
Essentially what you're getting here is the equivalent of an extremely expensive and highly effective hair loss treatment, at a tiny fraction of the cost. And, it's extremely effective.

I cannot stress enough how effective this method is.

The mixture above is an absolutely potent combination of powerful hair growth stimulants. If you want to make your hair grow you need to use powerful, proven ingredients like this. I can understand however, why it might be daunting to collect all these ingredients, measure them and mix them. And it is quite difficult to get this right.

Fortunately I have access to two things that have enabled me to create pre-mixed solutions of the above ingredients, easily and effectively: I have access to a lab with the required mixing machinery for evenly mixing liquids and I am well acquainted with a major international chemicals supplier.

As a result, I'm able to obtain the above ingredients in pure form and effectively mix them correctly.

I have created the above mixture and bottled it in glass bottles with glass pipettes. I am selling these pre-mixed solutions at a fraction of the cost you would pay at hair loss clinics.
You can order my pre-mixed solutions online and I deliver worldwide.

Click here to purchase my pre-mixed solution online

£20 coupon

Because you have purchased this download, you can reclaim the money you spent and effectively get this download for free.
Use the code below in the checkout to get £20 off your order:

**MEMBERS20**

Copy this code and paste it when you reach the checkout.

[Click here to purchase my pre-mixed solution online](#)

You can use this £20 coupon for your first two orders, meaning you'll actually get a £40 discount. And I'm already selling my serum for a tiny fraction of the cost it sells for at clinics.

**Important: please read**

This serum is an extremely potent hair growth stimulant. I have been using this particular mixture for sometime now and my hair is regrowing at an extraordinary rate. However, I am used to these chemicals now. I recommend all new users start by using a small amount of the serum and building up gradually to larger and larger amounts.

Start with one or two drops, twice per day. After a few days, you can apply more drops. After a few weeks, consider applying the drops three times per day. Build up gradually.
Ingredients explained

Sandalore

Sandalore has hit major news headlines in the United Kingdom and has been hailed as the miracle cure for hair loss. And yet very few people know about it.

Please do not buy Sandalore until you read this

Sandalore is a potent hair growth stimulant. Believe me, I've been using it now for a year and my hair growth is mind boggling. However, what most people don't realise is that if you do a search on Amazon or Google for Sandalore none of the products that come up are the correct type of Sandalore. In fact it is quite difficult to be certain you have precisely the correct chemical that was found in research to stimulate hair growth. If you buy the incorrect chemical it will have no positive effect on your hair. In fact it could be quite damaging.

© copyright 2020. www.hairfollicleneogenesis.com
I have sourced my Sandalore in pure form directly from the original manufacturer here in the United Kingdom. **This is the only Sandalore that stimulates hair growth.** Please do not buy any of the products that come up when you search online.

Unless you are prepared to spend hours researching and making sure you have the correct chemical and the correct volume, please just follow my instructions or buy the pre-mixed serum I have made available on my website.

**How it works**

It’s already known that wounds heal faster under lab conditions when human skin cells are exposed to Sandalore. The odorant promotes keratin, a fibrous protein which forms the key structural component of the epidermis. Keratin also plays a crucial part in the wound healing process.

> This is the first time ever that it has been shown that the remodelling of a normal human mini-organ [(a hair)] can be regulated by a simple, cosmetically widely-used odorant.
> Professor Ralf Paus, a professor at the University of Manchester

So it wasn’t going to be long before somebody looked at how Sandalore might improve hair regrowth. The same keratinocytes found in skin are also present in hair follicles.
Keratinocytes are cells that produce keratin. Just as the (outer) epidermal layer of skin comprises 90% keratin in its structure, the cortex of the hair strand is almost entirely made up of keratin. This fibrous protein is what gives hair its strength and resilience. So the more keratin your hair follicles produce, the more hair you keep during its natural growth cycle.

The expressed olfactory receptor targeted by Sandalore is OR2AT4. This receptor does not ‘smell’ the chemical in the traditional sense, rather it sends out chemosensory signals. OR2AT4 receptors are found on the outer layer of the hair follicles. This places them in the front line for keratinocyte stimulation and the production of keratin. The Sandalore and OR2AT4 interaction also increases IGF-1 secretion, a growth factor found in the hair’s root sheath. IGF-1 is primarily manufactured in the liver and is an important requisite for human development and growth. The up-tick in IGF-1 when Sandalore is administered to the scalp suggests the perfume ingredient does promote hair growth.

**Valproic Acid**

VPA induced ALP in human dermal papilla cells by up-regulating the Wnt/β-catenin pathway, whereas minoxidil (MNX), a drug commonly used to treat alopecia, did not significantly affect the Wnt/β-catenin pathway. VPA analogs and other GSK3β inhibitors that activate the Wnt/β-catenin pathway such as 4-phenyl butyric acid, LiCl, and BeCl₂
also exhibited hair growth-promoting activities in vivo. Importantly, VPA, but not MNX, successfully stimulate hair growth in the wounds.

Department of Biotechnology, College of Life Science and Biotechnology, Yonsei University, Seoul, South Korea

The combination of Minoxidil, Sandalore and Valproic acid is the key to hair follicle neogenesis.

When I started using this combination on my receding hairline (in conjunction with the Dermaroller), within weeks I started seeing brand new hair follicles growing. Bear in mind that hair had not grown in my receding hairline for at least twenty years.

It was previously unheard of for brand new hairs to suddenly develop in regions of the scalp that had been completely bald for decades. This had never been achieved before by anyone, except in unusual circumstances. And it wasn't just one or two hairs. Soon there were hundreds of new hairs growing in my receding hairline. After several months of following the method and using this particular combination of ingredients I was able to consistently develop new hair follicles week after week.

**Minoxidil**

Minoxidil increases the growth factor 'vascular endothelial
growth factor' (VEGF). VEGF is a protein responsible for the stimulation of blood vessels formation: It's active during embryogenesis to induce vasculogenesis (formation of new vessels), and after birth, when it becomes the primary compound that stimulates angiogenesis (formation of new vessels from pre-existing vessels).

While VEGF is implicated in the pathogenesis of numerous diseases, the connection between VEGF and hair growth in alopecia areata (AA) was only recently established. As you may know, hair growth requires amino acids and oxygenation of the stem cells in the dermal papilla. These substrates reach the stem cells via blood vessels, which is why the protein responsible for blood vessel growth can induce hair growth.

Minoxidil also opens potassium-ion channels. For years, scientists noticed that potassium channel openers affected hair growth.

However, the mechanisms involved in this phenomenon were unclear until a 2005 study assessed the relationship between potassium channel openers and hair growth, using deer hair follicles.

Scientists found that potassium channel openers exert their action on ATP-sensitive potassium channels (KATP), which upregulate the biochemical and metabolic
processes of the hair follicle, resulting in substantial hair growth.

Researchers concluded their study by stating that “The results indicate direct actions of K(ATP) channel modulators within hair follicles via two types of channels, with SUR 1 and SUR 2, probably SUR2B, sulfonylurea receptors.”

In other words, pharmacological and non-pharmacological substances that directly interact with potassium channels on hair follicles have the potential to reverse hair loss and induce hair growth.

Unfortunately Minoxidil and Valproic acid are expensive and difficult to purchase in pure form. You need to buy these items in their pure form because if you buy them as pre-formulated products they contain large quantities of inactive ingredients that you don't want to use.

The Growth Factors serum I sell on hairfollicleneogenesis.com contains the correct amount of these ingredients in their pure form.

Click here to purchase my pre-mixed solution online
Peppermint oil

There is a distinct link between inflammation and hair loss and there are now hundreds of examples of individuals who have completely reversed their hair loss using anti-inflammatory topicals. A study in 2014 (Oh, Park & Kim, 2014) compared the effectiveness of peppermint treatment with 4 other treatment options (including minoxidil, the recommended treatment for hair loss) and found that peppermint exhibited significant increase in dermal thickness, follicle number, and follicle depth compared with other treatments. This has confirmed numerous anecdotal evidence of the usefulness of peppermint oil in combating hair loss.

I can personally attest to the effectiveness of peppermint oil. I've been amazed at the results I've seen with topical peppermint oil.

Red Velvet Deer Antler

In my opinion this is a fairly remarkable discovery in the field of hair growth science.
'Velvet deer antler' is quite simply the velvet that covers the antlers of deer. These antlers shed naturally and farmers are able to collect the antlers and extract the velvet, which is a potent source of the growth factor IGF-1 (Insulin-like Growth Factor 1).

By mildly damaging the scalp skin using the Dermaroller and then increasing IGF-1 levels in the scalp, we provoke an increased rate of hair regrowth during and post wound healing.

I have bulk purchase red velvet deer antler. Unfortunately deer antler is another one of the ingredients that's fairly difficult to get hold of unless you buy it in bulk or in a mixture. The mixtures you can buy in shops are nowhere near potent enough (such as the one pictured) They're fine for the purpose of increasing blood IGF-1 but we want to increase scalp IGF-1 and not blood IGF-1 so we need a much higher concentration to achieve the results from the study.

Here's an abstract from a hair loss study put together on this topic:

In order to investigate and evaluate the effects of red deer antlers on hair growth in the full-thickness wound healing model, Sprague-Dawley rats were given incision wounds through the full thickness of their dorsal skin and deer antler was applied for 40 days. [...]
At post-injury days 16, 32 and 40, longer and more active new hair appeared around the healing wound of antler-treated skin. Histological studies showed that the antler extract markedly increases the depth, size, and number of hair follicles. Expression of IGF-I (insulin-like growth factor) mRNA was detected by RT-PCR and real time RT-PCR. The result showed that the expression of IGF-I (days 16, 32, and 40) was obviously up-regulated in antler-treated skins compared to control skins. Similar results were seen in the ELISA analysis to quantify the IGF-I expression. These results support the notion that wound healing can cause hair growth by enhancing the expression of IGF-I. Deer antler extract appears to have the potential to promote hair growth and could be used in hair growth products.

Red Deer Antler Extract Accelerates Hair Growth by Stimulating Expression of Insulin-like Growth Factor I in Full-thickness Wound Healing Rat Model

Castor oil

Castor oil contains a high concentration of ricinoleic acid. This is the key to it’s effectiveness. Ricinoleic acid increases PGE2 in the scalp. PGE2 is a fatty acid, which seems to be
vital for hair growth. Therefore applying castor oil to the scalp should increase PGE2 and increase hair growth.

Accounting for more than 90% of castor oil’s constitution, ricinoleic acid is the single largest component. It's mono-unsaturated and features 18 carbons. What renders it different is that its 12th carbon comprises of a hydroxyl functional group. It is courtesy of this structure of ricinoleic acid that castor oil derives its polar nature and hence is chemically more nourishing for the scalp.

**Zechstein sourced magnesium oil**

Calcium deposits in the blood vessels and scalp may be a key cause of hair loss and removing those calcium deposits might in fact be vital for reducing hair loss.

Scientists have suggested that prolonged inflammation in the body may contribute to calcification. Persistent damage to the cell walls can cause them to calcify over time. It’s important to mention that there’s no research that suggests calcification is due to high dietary amounts of the substance. That’s a common misconception. In fact it results from inflammation, which
can be caused by high DHT levels and high cortisol (stress hormone) levels.

Calcium build-up in the scalp can be caused by inflammation as well. As a result, the healthy flow of oxygenated blood is diminished, and hair follicles begin to die. Hair loss then results.

Magnesium is a mineral that can be used to help with reducing calcium levels. Research has shown it can completely stop the production of calcium plaque within blood vessels. Supplementation with magnesium can additionally be used to reverse blood vessel calcification. Therefore, it is strongly believed that magnesium can assist with reducing calcium build up in the scalp.

I strongly recommend using the Zechstein source of magnesium oil. This is the most effective, healthiest form and is the form I use in the Hair Follicle Neogenesis Growth Factors serum.

Taurine

There are several studies showing the benefits of taurine on hair growth and overall health, as well as its connection with the hair’s
natural growth cycle.

Researchers studied the effects of taurine against hair loss that's been caused by various chemical stress agents. There was a positive response when taurine was added and it allowed better stress recovery.

Another study conducted in 2008 (Collin et al.) analyses taurine in relation to TGF-β1 – a transforming growth factor that causes hair follicles to stop growing. Taurine is involved in many physiological functions among which the immunomodulatory and antifibrotic functions. The researchers used taurine on in-vitro hair follicles. The observations concluded that taurine protects the hair follicle from the effects of TGF-β1 as well as promoting hair survival.

There is further research that shows how TGF-β1 is linked to androgenetic alopecia as an important factor in hair growth. This particular study concludes that TGF-β1 derived from DPCs mediates hair growth suppression in AGA. (Kim et al.,2013)

Taurine’s anti-inflammatory effect might also help reduce scalp inflammation, thus helping those with scarring alopecia as well as micro inflammation that's due to external factors.

There is significant evidence showing how taurine is linked to (TGF)-β1 and can be used in treatment of hair loss. One study on taurine deficiency further supports the link
between taurine and (TGF)-β1 (Hagiwara et al., 2014) while another study shows that taurine inhibits the expression of procollagen type I and type III in lung fibrosis, once again linking taurine to (TGF)-β1. (Gurujeyalakshmi, Hollinger & Giri, 1998)

Another study on taurine supplementation in the treatment of women with hair fragility shows the potential benefits of a systematic taurine supplementation. The study was conducted on 20 women with ages between 20 to 68 years who had fine hair and decreased hair thickness and shows that daily oral intake of taurine 150mg, Catechin 75mg and Zinc 15mg is beneficial to hair health. 11/12 women showed increased hair diameter from 0,040 to 0,045 μm while 6 other women showed an increase from 0,040 to 0,043 μm. (Tosti et al., 2007)

Cetirizine

RESULTS:
We found that the main effect of cetirizine was an increase in total hair density, terminal hair density and diameter variation from T0 to T1, while the vellus hair density shows an evident decrease. Vellus hairs are dormant. Terminal hairs are full grown hairs. The use of a molecule as cetirizine, with no notable side effects,
makes possible a good compliance by patients.

CONCLUSION:

Our results have shown that topical cetirizine 1% is responsible for a significant improvement of the initial framework of AGA.

Via PubMed

The authors evaluated the efficacy of topical cetirizine for treatment of androgenetic alopecia in 85 male and female study participants. Overall, 67 participants applied cetirizine 1% daily on the scalp, and 18 applied vehicle as controls. The treatment group showed increased total density, increased terminal density, and decreased vellus density after 6 months of use. Prostaglandin D2 has been implicated in baldness, and the mechanism of action is thought to relate to the anti-PGD2 effect of cetirizine.

The authors of this study suggest that topical cetirizine could be an emerging treatment for androgenetic alopecia.

Anna A. Wile, MD
Recently, advances have shown caffeine to have beneficial effects in patients suffering from AGA. The proposed mechanism which would counteract DHT-induced miniaturization of the hair follicle include inhibition of phosphodiesterase by caffeine, which increases cAMP levels in cells and therefore promotes proliferation by stimulating cell metabolism.

A study conducted by Fischer al. used hair organ culture model to investigate the effects of testosterone and caffeine on hair follicle growth stimulation. This in vitro study used scalp biopsy samples from male AGA patients which were cultivated using different concentrations of testosterone and/or caffeine for a period of 120-192 hours. Addition of caffeine in concentrations of 0.001% and 0.005% were found to counteract the suppressive effects of testosterone on hair growth, with a higher hair shaft elongation seen at 120h after caffeine administration, compared to control group. This in vitro study thus demonstrates that caffeine is a stimulator of human hair growth which may have importance in the treatment of AGA.
Brandner et al. proved by their double-blind placebo-controlled trial that caffeine application causes a substantial reduction in the transepidermal water loss in men compared to women, thus improving barrier function in men.

Regarding the route of delivery of caffeine, hair follicles are considered an important route for drug delivery. A recent study which assessed the follicular penetration of topical caffeine in hair follicles proved hair follicles to be faster route of drug delivery for topically applied drugs. An important requirement for the treatment of AGA is follicular drug delivery. A recent study assessed the follicular penetration of caffeine on topical application in a shampoo formulation for 2 min and showed that penetration via hair follicles was faster and higher compared with the interfollicular route and that hair follicles were the only pathway for faster caffeine absorption during the first 20 min after application.

The beneficial effects of topical application of caffeine in AGA can thus be attributed to inhibition of phosphodiesterase, improvement in barrier function, follicular penetration, stimulation and promotion of hair growth. Thus it appears to be a useful adjuvant in the management of AGA.
Acetyl-L-Carnitine

Research has conclusively shown that in balding areas of the scalp in both men and women, the membrane potential of the hair follicle is significantly diminished, in response to an androgenetically mediated reduction in potassium channel function within the hair follicle.

Mitochondrial membrane potential improves to some degree with supplemental Carnitine and even more so with Acetyl-L-Carnitine, which actually strengthens the functioning of mitochondria itself.

Dr. Thomas Whitfield, of Oxford University and Oxford BioLabs found that “L-carnitine stimulates energy production and cardiolipin synthesis within the cell membranes of hair follicles. It transports nutrients to dysfunctional potassium channels and helps to restore functionality.”
In a recent experiment with balding human hair at the University of Lubeck in Germany, Carnitine was shown to promote hair growth, stimulate hair shaft elongation and reduce hair cell death.

The authors of this study concluded, "Our findings suggest that Carnitine stimulates human scalp hair growth by up regulation of proliferation and down regulation of apoptosis in follicular keratinocytes in vitro. They further encourage one to explore topical and nutraceutical administration of L-carnitine as a well-tolerated, relatively safe adjuvant treatment in the management of androgenetic alopecia and other forms of hair loss."

Carnitine has been significantly upgraded in the last 2 years, resulting in forms that are more bio-available, even conferring documented cognitive benefits.

Acetyl-L-carnitine is the acetylated ester of the amino acid L-carnitine. Acetyl-L-carnitine is an endogenous mitochondrial membrane compound that helps maintain mitochondrial bioenergetics increasing Potassium Channel function and lowering the increased localized and systemic oxidative stress associated with aging. Although Acetyl-L-carnitine and L-carnitine are absorbed into the bloodstream
efficiently and are effective at carrying long-chain fatty acids across the membrane into the mitochondria where they are burned for energy production, Acetyl-L-carnitine also guards against oxidative damage. Acetyl-L-carnitine exerts protective effects against such neurotoxicity and oxidative stress.

Dr. Whitfield has had encouraging results in phase 2 trials (18 month point), released in October of 2011.

There were 59 participants, men and women affected by Androgenetic Alopecia.

Hair counts increased an average of 49.2%

Hair thickness increased 38.7%

Terminal hair change, (vellus to terminal) 36.4%

In all, 87% have reported cessation of hair loss.

Tretinoin and propylene glycol/ethanol/water (PGEW) solution

Minoxidil has to be absorbed by the scalp in order to be
effective. Minoxidil itself cannot penetrate the scalp. That is why a delivery vehicle such as propylene glycol (PG) is used. This mixture of PG, ethanol and water is essential for the delivery of the Minoxidil into the skin. Research has shown this combination significantly increases the effect of Minoxidil.

The addition of tretinoin (retinoic acid) can further help minoxidil penetrate the skin and reach hair follicles and thus enhance the effectiveness of minoxidil.

According to a study by Shin et al, when 5% minoxidil is mixed 0.01% retinoic acid (tretinoin), it can be used once a day and achieve equivalent results as 5% minoxidil twice daily usage.

Using the Growth Factors Serum

Before using the Growth Factors Serum all over your scalp, it is advisable to do a test patch overnight to see how your skin reacts. Apply a small blob of the serum on your skin and leave overnight. You should not experience any reactions to the serum.

The Correct Way to Apply the Serum
You could just apply the serum by dropping it onto your scalp using the pipette and rubbing it in with your fingers. However, I recommend using the following approach:

1. Shake the serum very well
2. Use the pipette to apply small drops sparingly along your front hairline and in your crown.
3. If you have hair longer than a few inches, part your hair in the middle and apply around 10 small drops along the parting.
4. If you have no hair or very short hair, simply apply drops all over the top of your scalp. Don't use too much. You only need 15-20 drops.
5. Your scalp should now be sparsely covered in small drops. If you are bald or almost bald, massage the drops into your scalp. If you have hair, don't rub the drops in with your fingers because you will get lots of it on your hair, which is a waste. Instead just leave the drops to naturally soak into your skin. It doesn't matter that you have not covered your entire scalp. It is better to get higher concentrations of the ingredients on your skin than to get half of it on your hair, where it will do nothing. This serum only works on your scalp. It has no effect on your hair, except to condition the hair and make it feel softer and smoother. The castor oil will also protect your hair from protein damage, which will reduce split ends.

In addition to the steps above I recommend using a hard
bristled boar brush to vigorously brush your scalp. However, only do this after the drops have had some time to spread and absorb into your scalp. Leave at least five minutes.

The action of vigorously brushing your scalp will exfoliate the skin while also rubbing the mixture into the scalp tissue, improving absorption. The mixture contains tiny particles of fine grit textured sediment – these are active ingredients. This will help exfoliate dead skin cells and sebum. The mixture also contains a special ratio of PG, alcohol and water, which was shown in a study to double the effectiveness of Minoxidil.

**Important: read before starting**

The Growth Factors serum contains quite a lot of peppermint oil. When you apply it to your scalp you might feel a cooling sensation (this is exactly what you want because it's designed to reduce inflammation) depending on how sensitive your skin is. However, some people find peppermint oil to be overwhelmingly strong. Just be careful. Do a test on a small patch of skin first. Most people don't notice anything at all, but some people are surprised by the cooling sensation.
Avoid getting the liquid directly in your eyes

Although the serum is not harmful and it won't damage your eyes, the peppermint oil will make your eyes sting. If you get it in your eyes, don't worry, just rinse thoroughly with warm water until the stinging goes away. It won't damage your eyes but it will make them water a lot.

How often should you apply the serum for maximum hair regrowth?

To some extent, the more you apply the Growth Factors Serum, the more hair growth you will see. However, I would recommend applying the serum to your scalp a maximum of six times per day.

But please start with a very small amount and build up to this.

Most people are used to using a serum like this twice per day: once in the morning and once before bed. However, if you have the time, you will see increased hair growth if you apply the serum 4-6 times per day. Remember, you don't need to apply a lot each time and you can focus
purely on your receding hair line for example.

I recommend applying more of the serum to the areas that have the worst hair loss. E.g. the receding hairline areas. Try to apply the serum to these areas 4-6 times per day if possible.

**Do not use the serum for 6 hours after using the Dermaroller**

You should not apply the serum to your scalp for 6 hours after using the Dermaroller. You can use the serum directly before using the Dermaroller, but then leave your scalp to heal for 6 hours before using it again. Use the Dermaroller once per fortnight for the first month and once per week after that.

**Talk to your doctor if you have a heart condition**

If you suffer from a heart condition, or have a family history of heart disease, consider limiting your use of the serum to twice per day. I recommend asking your doctor before using Minoxidil if you have a heart condition, have had a heart attack, a stroke or are at high risk of any of
these conditions. Although Minoxidil is sold at this strength over the counter and is considered safe for everyone to use, I still think this is a worthwhile precaution if you are in an at-risk group for heart disease.

**After applying the Growth Factors Serum**

After you have applied the Growth factors serum, apply a small amount of Voltarol gel along your hairline and/or in your receding hairline. Voltarol gel contains Diclofenac, which reduces inflammation and prostaglandin D2 (PGD2). PGD2 is found in high levels in balding scalps and low levels in healthy scalps that grow thick hair. Don't use Voltarol for 12 hours before using the Dermaroller or for 12 hours after using the Dermaroller. You actually want PGD2 to be a little elevated just after using the Dermaroller.
Step 2: Flood your body with hormone-balancing, anti-inflammatory, anti-oxidative super-nutrients

Here's a story about an American scientist called Dr Terry Wahls. Dr Wahls used to suffer from a disease called Multiple Sclerosis (MS). Her movement was extremely restricted, she was wheelchair bound, tired all the time and unable to live a proper life. Before long she was undergoing chemotherapy and it looked as though she may never leave her bed again.

But she had a lot of knowledge of medicine and nutrition. She studied her disease in detail until she understood the root cause. She asked herself, what precisely is it that's causing her brain and body to behave like this.

She discovered that the mitochondria in her cells were dying. So she set about healing them.

She worked out exactly what nutrients mitochondria need to be healthy and then she went on a mission to provide her body's cells with precisely what they needed to return to a healthy state. She flooded her body with those nutrients every day.

She experimented with various special combinations of nutrients that were designed to feed her mitochondria. Eventually she determined the correct combination of foods.

As time went by something incredible started to happen. Her cells began to heal. Her movement started to return. Her energy levels started to improve.

A year later she no longer needed a wheelchair. In fact, her health improved dramatically.
The improvement was so dramatic, she was able to ride her bike five miles to work every day and live a normal life again.

Within one year she had dramatically changed her life. And she did it without pharmaceutical medication.

She did it by healing her body at a cellular level.

You can watch Dr Wahls’ TED Talk here.

Why have I told you this?

What Dr Wahls did was remarkable. But it was based on simple logic. She found the root cause of her problem and she treated it. She gave her body what it needed to heal itself.

She didn’t attempt to constantly treat a symptom. She found the root cause and eliminated it.

Dr Wahls’ story inspired me. It made me think: If someone can understand the underlying cause of MS and figure out how to eliminate that cause, it must be possible to do the same thing for hair loss, which is simply a symptom if an underlying problem.

What is the root cause of hair loss?
We knew that a drug called Finasteride can successfully reduce levels of the hormone DHT in the scalp enough to prevent DHT from causing hair loss. So we knew there's a causal link between DHT and hair loss.

But why do some people display the symptoms of high DHT levels, such as extreme body hair growth, while not experiencing scalp hair loss?

It seemed a piece of the puzzle was missing.

So I examined every item of hair loss research I could find until I had enough pieces of the puzzle to form an overall picture clear enough to determine what was missing.

I'll explain more about the science behind this method later, but for now, let's get started with the basics.

**Flood your hair with hair growth nutrients and begin hormone balancing**

Before I developed this method I had an average diet: Toast or fruit for breakfast, a sandwich for lunch, meat and vegetables for dinner. It's probably similar to your diet.
That wasn’t the problem. In fact you could follow a terrible diet your whole life and not lose your hair. You can do just about everything wrong with regard to your health and still not lose your hair. That’s because there is a far more powerful force at work in your body: your hormones.

“This is the key to perfect hair, clear skin and calm focus”

The first step is to begin intensely nourishing your body: your skin, your hair, your brain, your circulatory system and your organs with a specially designed combination of nutrients, which will go to work helping your body rebalance and return to a healthy state – a state more like that of someone who has perfect skin, full, thick, healthy hair and a relaxed, focused mind.

But remember, diet is only going to give you a boost. There is a far more powerful force at work, which we also have to fix – we'll get onto that in the third step. For now though I think it’s worth intensely nourishing your body with super healthy, hormone balancing foods.

Let's get started.

Imagine if from now on you started consuming a large dose of the perfect combination of super healthy foods every day. The exact foods that heal your body, balance your hormones and feed your hair. Imagine if you could flood your whole body with super healthy nutrients all day and all night so they could feed and protect your cells, so your cells could go to work healing your whole body.

We’re going to start by drinking a special hair growth smoothie twice a day.

Ingredients

You’ll need:
A small bag of baby leaf spinach, watercress and rocket, like the one pictured (this is for minerals (particularly iron), antioxidants, enzymes, probiotics, fibre and vegetable protein). You can vary the greens you use, but start with this combination. You can also buy frozen vegetables, which is far more economical. From now on I recommend you consume a whole bag of this every day.

If you’re female and experiencing hair loss, drinking this smoothie every day may be all it takes to kick-start hair regrowth, just due to the nutritional content. Here’s an extract on a study that found a distinct inverse correlation between hair loss levels and iron levels -- in other words, the less iron found in the body, the more significant the hair loss. Note that “ferritin” is another way of saying “blood iron levels”.

The relationship between iron body status and different types of hair loss has been investigated in a number of studies, however, with relatively discrepant findings. Therefore we conducted an analytical case-control study to assess whether diffuse telogen hair loss in women of childbearing age (15 to 45 years old) is associated with iron deficiency. Using the analytical case-control methodology, we studied 30 consecutive women with documented diffuse telogen hair loss in comparison with 30 women without hair loss. Study subjects had no history of nutritional supplement intake or chronic underlying diseases, and had normal thyroid function and inflammatory profiles. Biochemical investigations were performed in all study women. The mean ferritin level and trasferrin saturation was statistically significantly lower in patients with diffuse telogen hair loss than in subjects without hair loss (16.3+/−12.6 vs. 60.3+/−50.1, ng/mL; P<0.0001 and 20.3+/−9.7 vs. 28.3+/−11.8 percent; P=0.006, respectively). Also, total iron binding capacity was significantly higher in patients than in control group (367.8+/−58.2 vs. 319.2+/−60.1 microg/dL; P=0.004). Of nine patients with
Several studies have shown a strong link between iron and hair loss. This is one of the purposes of the hair growth smoothie: We’re replenishing your body with all the nutrients it could be deficient in due to stress, hormonal imbalance or other reasons. Since research suggests links between specific nutrient deficiencies and hair loss, we’re eliminating that possible cause of your hair loss. As we progress through the program we’ll systematically eliminate all of the possible causes, one by one.

It’s important to note that poor diet is highly unlikely to be the reason some people have nutrient deficiencies that cause hair loss. It’s more likely that a hormonal imbalance or other reason (of which there are several) has caused the nutrient deficiency.

In this program we’ll be replenishing any possible nutrient deficiencies and removing the underlying problems that have caused the nutrient deficiencies. This is incredibly important if you want to reverse your hair loss and be healthy.

*Bergfeld has been doing this for years. And she’s finding that whatever the cause of hair loss – for both women and men – having too little iron in the blood makes it worse.*

Wilma Fowler Bergfeld, MD, via MPB Research

Next...
A handful of low sugar berries like cranberries, strawberries, blueberries and raspberries. I use a bag of frozen berries, which is quick and easy.

Cranberries and strawberries are some of the best sources of a micro-nutrient called **iodine**. Iodine is key for promoting healthy thyroid function. So by drinking this smoothie twice per day you're giving your thyroid gland the nutrients it needs to be healthy. A clear link between iodine and hair growth has been observed by farmers:

Sheep farmers noticed that iodine-poor soils produced iodine-deficient plants, which produced iodine-deficient sheep. These sheep, consequently, produced the least amount (and poorest quality) of wool. It stands to reason that human beings are just as effected by iodine-poor soil and plants as animals are. And hair loss may be related to this decline.

One 2001 study published in the Indian Journal of Dermatology, Venereology, & Leprology described the use of iodine as a treatment for patients with alopecia (hair loss), and found hair re-growth in a number of patients.

Dr. Edward Group DC, NP, DACBN, DCBCN, DABFM (2015)

As a scientist of hair growth the above observation is extremely useful.

Why?

It's very difficult to observe the causes of decline in hair growth in humans because there are so many variables to take into account. However, sheep exist in a very simple
environment: a field. Sheep go in. Sheep go out. Repeat. Repeat many many times. This experiment makes observations, such as decrease in iodine levels and it's effect on wool growth relatively easy to record. And therefore we can use this information to draw conclusions about nutrient consumption and keratin growth.

The low sugar fruits are also a good natural source of **antioxidants**.

Antioxidants are key for hair growth. It's vital that we protect the cells in your scalp from oxidative damage (free-radical damage).

---

**Studies have shown an association between oxidative stress and alopecia. Patients with alopecia generally exhibit lower levels of antioxidants in their scalp area as well as a higher lipid peroxidation index. Tocotrienols belong to the vitamin E family and are known to be potent antioxidants. Hence, a study was conducted to investigate the effect of tocotrienol supplementation on hair growth in volunteers suffering from hair loss. Twenty one volunteers were randomly assigned to orally receive 100 mg of mixed tocotrienols daily while 17 volunteers were assigned to receive placebo capsule orally. The volunteers were monitored for the number of hairs in a pre-determined scalp area as well as the weight of 20 strands of 1 cm length hair clippings at 0 (before supplementation), 4 and 8 months. The number of hairs of the volunteers in the tocotrienol supplementation group increased significantly as compared to the placebo group, with the former recording a 34.5% increase at the end of the 8-month supplementation as compared to a 0.1% decrease for the latter. Nevertheless, the cumulative weight of 20 strands of hair clippings did not differ much from the baseline for both supplementation groups at the end of the study period. In conclusion, this trial demonstrated that supplementation with tocotrienol capsules increases hair number in volunteers suffering from hair loss as compared to the placebo group. This observed effect was most likely to be due to the antioxidant activity of tocotrienols that helped to reduce lipid peroxidation and oxidative stress in the scalp, which are reported to be associated with alopecia.**

Effects of Tocotrienol Supplementation on Hair Growth in Human Volunteers, 2010
Lim Ai Beoy, Wong Jia Woei, Yuen Kah Hay.

---

A raw egg yolk...
A raw egg yolk (for vitamin D, biotin, other B vitamins, choline and other nutrients that support hair growth). This is one of the best natural sources of hair growth nutrients.

**Vitamin D stimulates hair growth:** Vitamin D analogs (D2 and D3 supplements) reversed hair loss in mice, and cancer patients who have lost hair due to chemotherapy reported significant improvements after the use of vitamin D supplements. Through their direct action on keratinocytes (the cells found responsible for inactive vitamin D receptors), vitamin D analogs stimulated hair growth in mice.

Bollag, W. B. (2012)

**Vitamin D** deficiency is likely to be one of the more common nutrient deficiencies among hair loss sufferers due to long periods of time spent indoors.

Another common, yet rarely considered vitamin deficiency is **B12**.

As this vitamin has a vital contribution in the making of new oxygen-carrying blood cells, the hair follicle isn't properly nourished in case of B12 deficiency (apart from oxygen, vital nutrients and minerals are also carried into the blood stream, straight to your body cells). This results in the gradual deterioration of the hair shaft, beginning
with loss of strength and possibly leading to the death of the follicle (root), which is the living part of your hair.

One egg yolk contains over 60% of your recommended daily Vitamin D intake and just over 100% of your recommended daily intake of vitamin B12. It’s also rich in biotin and choline.

Next: A scoop of branch chain amino acids...

Full spectrum BCAA powder (these are amino acids – amino acids are the “building blocks” of hair keratin). This is what your body will use to grow more hair.

There is a lot of strong evidence suggesting that supplementing your diet with amino acids (particularly cysteine and lysine) increases hair growth.
The amount of cysteine in a hair fibre is an indicator of the hair's health.

Cysteine is considered to be one of the main factors involved in hair growth.

In a paper regarding evidence based guidelines in the treatment of hair loss for both women and men, various amino acids are mentioned with a special mention for cysteine.

The paper cites a study in which there was a significant mean change of total hair count in both male and female patients after a treatment containing cysteine.

The participants had to take an oral supplement that contained cysteine, copper, zinc and histidine 4 times a day for 50 weeks and the treatment group had remarkable results with their anagen rate.

Another study regarding the influence of cysteine on hair growth showed very promising results. 48 volunteers with ages between 21 and 38 years old participated in the study. 12 of the subjects were asked to take a dietary supplement based on cysteine as well as a topical solution made with serenoa...
repens, also known as saw palmetto.

One group used both while the control group only used the lotion. At the end of the 50 weeks of treatment, the results showed an increase of hair mass from 20% to up to 30% as well as an increase in hair number up to 27%. The group that also followed the dietary supplement had a 50% increase in hair growth.

Chris Carter, advancedhairresearch.com (2016)

We're adding cysteine to the hair growth smoothie for these very reasons. It wouldn't hurt to do precisely what the participants did in the study cited above: by using a cysteine supplement. Cysteine is incredibly good for your body in several ways, including protecting cells from free radical damage (it's a potent antioxidant) and improving the health of the liver.

It's arguable that you would see faster and more significant hair regrowth if you added a cysteine supplement to your diet on top of the amino acid blend we're adding to the smoothie, but it's not vital.

Next, Gamma Linolenic Acid (GLA)...

2 GLA softgels (GLA is a natural "DHT blocker" and key for hormonal balancing). This will provide 300mg of GLA per glass of smoothie. You can also use pure borage oil or other cheaper versions of the above supplement. Aim to supplement your diet with approximately 300mg of GLA per day.
GLA helps balance women's hormones but it's also perfectly healthy to be used by men. This is one way in which we will help your body to naturally reduce excess blood DHT, which is the hormone that causes male pattern baldness. This is natural and free of side-effects — unlike the popular hair loss drug Finasteride.

Four middle-aged males with rapidly progressing baldness were treated orally with either 6g of evening primrose oil or 6g of a mixture of evening primrose oil and concentrated fish oil (20%) per day. The primrose oil provided approximately 90mg of 18:3n-6 (gamma-linolenic acid, GLA) per gram and the fish oil 180mg of 20:5n-3 (eicosapentaenoic acid, EPA) and 120mg of docosahexaenoic acid (DHA) per gram. After delays of 4 to 8 weeks, all four individuals reported unequivocal hair growth, with extension of hair growth to previously bald areas of the scalp, and a strengthening of growth in those areas where hair was present but thinning.

TREATMENT OF MALE PATTERN BALDNESS AND OF UNWANTED HAIR GROWTH

FIELD OF INVENTION patent.

A reasonable amount of research has been conducted on Gamma Linoleic Acid for reducing hair loss caused by DHT. There is strong evidence to support GLA reducing the action of the enzyme 5 Alpha Reductase (5AR), which is key for us because 5AR is the enzyme that converts testosterone into DHT, which is the most significant cause of hair loss.

Therefore by naturally inhibiting 5AR we can safely and effectively reduce DHT.

Although the androgens, testosterone (T) and its highly active metabolite dihydrotestosterone (DHT) play a role in the development and progression of prostate cancer, the mechanism(s) are unclear. Furthermore, 5 alpha-reductase which catalyze the conversion of T to DHT, has been a target of manipulation in the treatment of prostatic cancer, hence synthetic 5 alpha-reductase activity inhibitors have shown therapeutic promise. To demonstrate that nutrients derived from dietary sources can exert similar therapeutic promise, this study was designed using benign hyperplastic cells (BHC) and malignant tumorigenic cells (MTC) derived from Lobund-Wistar (L-W) rat model of prostatic adenocarcinoma to test the effects of gamma-linolenic acid (GLA), eicosapentaenoic acid (EPA) and their 15-lipoxygenase metabolites on cellular 5 alpha-reductase activity. Our data revealed: (i) that incubation of MTC with [3H]-T resulted in marked conversion to [3H]-DHT when compared to similar incubation with BHC; (ii) that DHT-enhanced activity of 5 alpha-reductase was inhibited 80% by 15S-hydroxyeicosatrienoic acid.
The study referenced above demonstrates that GLA can significantly inhibit the action of 5AR on testosterone. What does it mean for us? It means we can get similar results to the world's most effective FDA approved hair loss medication, Propecia, without the extreme side effects. And if you're a man you may also significantly reduce your risk of prostate cancer.

Next, curcumin...

Curcumin is not easily digested by the human digestive system. Therefore we need to use a “bio-available” version of standard curcumin. In doing so we can consume the equivalent of a thousand times more curcumin.

Curcumin is the active ingredient in Turmeric, a root, similar to Ginger and looks like
We’re using curcumin for its anti-inflammatory effect. I previously mentioned that the hormone DHT is by far the most significant cause of hair loss and by reducing DHT it is highly likely that an individual will see a reduction in hair loss.

We’ll be using several approaches in this program to reduce DHT. But DHT has knock on effects in the scalp, which increase the severity of the hair loss. It’s vital that we combat these knock on effects if we want to reverse hair loss.

DHT > Inflammation > Fibrosis

In step 1 of the program I showed you how to use advanced techniques to heal fibrosis (scarring) in your scalp. Several studies have shown a clear link between fibrosis and severe hair loss. In order to prevent further fibrosis and enable your scalp to begin to heal, we need to reduce inflammation.

Curcumin has been demonstrated to be safe in six human trials and has demonstrated anti-inflammatory activity. It may exert its anti-inflammatory activity by inhibition of a number of different molecules that play a role in inflammation.

Department of Stomatology, University of California (2003)
The last ingredient we need is a B vitamin called niacin...

We need 50-100mg of niacin – but don’t add this to the blender.

Niacin will cause your blood to flush to your skin. Then, using the inversion method, which I’ll explain shortly, you’ll force the nutrients to flood to your scalp, intensely nourishing your hair.

Twice per day; first thing in the morning and before dinner you’re going to drink the hair growth smoothie. Don’t eat anything for as many hours as possible before drinking the smoothie -- that's why first thing in the morning is an ideal time.

As a result you’ll be eating a whole bag of fresh baby leaf greens per day, 600mg of GLA, a raw egg yolk, the equivalent of 1000 grams of turmeric, all the amino acids your body needs to create hair keratin and a load of naturally derived antioxidants, which will be delivered relatively quickly to your bloodstream:

- making your circulation stronger everyday;
- your hormones balanced; and
- your body filled with nutrients that are incredibly good for your hair and skin.

This is incredibly good for you. It's much better than taking hair supplements. It’s loosely based on the method by Dr Terry Wahls used to cure her MS.

Now just think; if someone can use a strategic diet to cure MS, imagine what this method, based on the same principals, is going to do for your hair.

In essence, we’re taking everything your body has lacked for so long and the precise nutrients your body needs to heal and putting it all into one easy to drink smoothie.

How to make the smoothie
Get a blender, or even better a “Nutri-Bullet” style blender.

Take the bag of watercress, rocket and baby leaf spinach (approximately 60g or 2.2 ounces), and add the whole bag to your blender. Feel free to use more by the way. You can’t really eat too many greens! And feel free to use frozen greens to save money.

Crack open an egg and discard the white (you can use this later (cooked) but we don’t want too much raw egg white in the smoothie because it restricts biotin absorption). Add the yolk to your blender. Don’t worry if you get some egg white in there.

Add two GLA softgels. If you want you can use a liquid GLA supplement. I just find the softgels easier. If you choose to use softgels, make sure you blend the mixture very well, to make sure the softgel casings are disintegrated.

Add a scoop of the full spectrum BCAA powder. These are the building blocks of hair keratin. The BCAA powder will also make it tasty because it’s flavored using natural orange flavor.

Squash the ingredients down.

Add water to cover three quarters of the ingredients. This will make it easy to drink.
Blend it...
Put the mix into a bottle, or keep it in your Nutri-Bullet.

This is enough for two drinks: One first thing in the morning and one before dinner. It should be about enough for two medium sized glasses per day.

How to use it to feed your hair

As soon as you wake up, drink a glass of fresh water. Then go and drink your smoothie.
Drink half of your mix and take 50mg of niacin. You’ll have to get a niacin supplement like the one pictured and snap each tablet in half because the smallest amount you can get is 100mg.

Wait 15-20 minutes until you start to feel the “niacin flush”. Niacin causes your blood to flow to your skin. Your skin will start to feel hot. It might feel uncomfortable at first but you’ll get used to it. This is very good for your circulation, your brain, your cells and your mitochondria.

If you have pale skin it will go red in places. This is a good sign that the flush has worked.

If you don’t feel your skin get hot; increase your dose to 100mg when you drink your smoothie tomorrow. Experiment until you get the right amount for your body size. 50mg is a good base level to start at.

When you feel the flush, use the inversion method for two minutes or more. To do this you need to get your head low down so blood rushes to your head. You can do this anyway you like. For example, hanging your head off the end of your bed.

I use a yoga move called the Downward Dog. Try to hold it for two minutes, or longer if you’ve got time. If you’re watching TV on the sofa try putting your feet up so your blood flows to your head.

However you achieve the inversion method, make sure you feel your head fill with blood.
Now those nutrients are being forced into the blood vessels that connect to your hair. This is key.

Do this twice per day for the next 40 days – or, even better – do it for the rest of your life. It’s incredibly good for your hair, skin, hormonal balance, cells, brain and memory.

In the evening you’ll have to take a little more niacin to get the flush because there will be food in your system, which will reduce the rapidity of the niacin absorption.
You may think doing this for two minutes per day can't possibly be effective. But it is and here's why:

The micro blood vessels in the scalp of a hair loss sufferer are likely to be in very poor health because they are underused. Use of minoxidil shows us that improving blood flow to your scalp reduces hair loss and promotes hair growth.

To illustrate this, observe the picture below of a man who held his hand above his head for 40 years in dedication to his religion.

Notice that his hand looks dead due to lack of blood circulation. In fact he can no longer move his hand. It is effectively dead because it has been neglected by his body. It hasn't received a blood supply and therefore the cells have received no energy supply to keep them alive.

Now, imagine your scalp is that man's hand. It's been starved of nutrients for a long time. The blood vessels have become weak and unhealthy. High levels of the hormone DHT and low levels of the hormone IGF-1 are preventing full, healthy hair growth.

Now we're going to flood your scalp with hair growth nutrients twice a day. And in step 2 we'll reverse the hormone levels by decreasing DHT and increasing IGF-1.

By forcing nutrient fuelled blood into your scalp, we're essentially revitalising your scalp. It's like an exercise for your weak scalp.
The building blocks of hair keratin

The nutrients we've discussed so far, plus several others, support hair growth. In addition to these you have the branch chain amino acids (BCAAs). These are the building blocks of hair keratin.

So, in essence, you’re delivering the raw materials your body needs to grow hair, straight to your scalp, twice per day. You’re also flooding your whole body with a cocktail of super healthy nutrients. These nutrients are also very good for your skin. But don’t worry, they won’t cause body hair growth.

Reducing DHT and Increasing IGF-1: Isoflavones and Capsaicin

“In prior studies it has been shown that the oral
A combination of Soy Isoflavones Extract and Capsaicin, in the form of Cayenne Pepper, stimulated hair growth in 90% of both men and women with both hormone driven and autoimmune hair loss”
- MPB Research

There is strong evidence that soy isoflavones play a role in hair growth. A study on mice (Zhao et al., 2011) showed that dietary isoflavones increase insulin-like growth factor-I production and promote hair growth. In the study, which lasted 3 weeks, isoflavones were administered to mice; causing a significant increase in the immunohistochemical expression of IGF-I in hair follicle derma papilla cell. Hair regrowth, hair pigmentation and enhancements in the hair follicle morphogenesis were also observed suggesting that isolavones supplementation might promote hair growth.

Another study (Naoaki, 2007) showed that the administration of capsaicin and isoflavone promotes hair growth both in mice and humans with hair loss. The volunteers with hair loss who followed a capsaicin and isoflavone regime showed significant hair growth after 5 months of administration due to an increase of IGF-I production in the hair follicles.

The mechanisms by which Soy Isoflavones extract impacts Androgenetic Hair Loss are well established. The singular consumption of soy lowers DHT by 15%. The COMBINATION of Soy Isoflavones and Green Tea lowers DHT by 80% in animal models, and as discussed in a recent update, confers specific anti-inflammatory benefits on androgen induced inflammation. Soy Isoflavones also facilitate Equol production. Equol is, as you may already know, an anti-androgen that essentially handcuffs DHT, neutralizing its effects. A subset of the Asian population are genetic Equol producers, who not surprisingly, have no MPB. Studies have shown that the sole inclusion of dietary soy or Isoflavones will eventually after several months, turn genetic Equol non-producers into Equol producers.

The cosmetic benefits of Soy Isoflavone consumption don’t stop there. Recent studies have shown oral Soy Isoflavone consumption stimulates collagen production and firms facial skin.

- MPB Research (hairloss-research.org)
Step 3: Train your mind to relax your body and optimize your health

Take a look at this extract from the end of an infographic:

**COULD INCREASING STRESS BE A CAUSE?**

If hair loss is on the rise, what else could be changing that might be causal?

When I say to people that stress may be causing their hair loss they are sometimes dismissive because they don’t consider their lives to be particularly stressful. However, I’m not talking about ‘obvious stress’, such as that you might experience during a car...
As you can see from the infographic above, the volume of information being processed by our brains has increased dramatically in our short lifetimes. This is a phenomenon never before observed in human history. I suspect that there may be consequences to this increased brain work (or the stress involved in processing the extra information coupled with reduced rest time). Over the last century we have lost many of the stresses associated with dangers but we've gained a new stress: extreme information processing.

This increased brain work impacts mental stress. The reduction in 'down time' means the brain gets less rest and less time to process memories because it is so frequently processing new inputs.

A study conducted in 2003 found that laboratory mice that were subjected to higher than average stress levels suffered greater rates of hair loss than those under normal conditions.

Stress may seem to only effect the way you feel but it can also have an impact on your physical health. High levels of stress can cause increased production of adrenaline and cortisol hormones, which are designed to help you get through dangerous situations.

Over millions of years the human body has evolved some sophisticated ways of dealing with problems in life. In potentially dangerous scenarios, for example when hunting a large animal, the adrenal gland produces increased amounts of adrenaline. This helps the body react faster and produce more power in the muscles.

In stressful situations the heart rate increases and breathing gets faster in order to get more oxygen to the muscles where it is needed. These types of reflexes are remarkable and essential systems that have helped humans survive in the wild.

However, we no longer live in the wild. And society has developed faster than our body's have evolved to the changing environment. We live in a different world now. Instead of hunting for our food we work and buy our food from shops. However our body's still have the same systems in place for reacting to stress that have evolved over millions of years.

Now though, we experience the stress, but most of us don't get the release provided by the extreme exercise that the body anticipated was required from the stressful situation. The result is that the stress levels build up and may remain at a consistently elevated level.
How does stress cause hair loss?

Increased and sustained production of cortisol hormone in reaction to stress, without release (for example daily work related stress) drains the body of nutrients – particularly B vitamins. The sorts of nutrients that are used by the body to deal with stress are the same ones that are needed to maintain healthy skin and hair. This is why you can often notice when someone has been through a prolonged period of stress in their life: their hair will often look dry and brittle and their skin might be greasy or slow to heal.

Stress causes muscles to become tense – particularly the shoulders and neck, which are the avenue to the scalp. Once again this is caused by the feeling that there is a need to protect oneself from imminent danger. Tense muscles shield our vital organs and bones better than loose muscles. This drains energy and can reduce blood flow to the scalp.

Good blood circulation in the scalp is essential for hair growth, as new hairs require nutrients carried by the blood. If the blood flow is restricted this can have an impact on hair growth.

But most importantly of all, research has shown that stress increases inflammation. Ultimately, inflammation is what causes hair loss. Cytokines and PGD2 are released in the scalp when inflammation processes occur.

These substances have been shown to completely prevent hair growth. Cytokines and PGD2 are extremely damaging to the hair follicles. In fact, a type of drug called JAK inhibitors, which reduces scalp cytokines, can completely reverse hair loss very quickly.

However, if left for too long, inflammation causes fibrosis, which completely destroys the hair follicles. That's why we have to use hair follicle neogenesis to generate new hair follicles.

But we really need to prevent this out of control inflammatory process from occurring in the scalp in order to prevent future hair loss. Ad to do that we need to significantly reduce cortisol hormone.

What can you do to stop the stress?

You could stop yourself from feeling stressed by avoiding stressful situations, but that is not a good idea. By avoiding stressful situations you might reduce your stress levels in the short-term but in the long-term you will probably build up an increased fear of stressful situations. It's far better to train yourself to deal with stress in a relaxed and calm manner.
You can do this by altering your minds thought patterns, so that you react to stressful situations by being calm and confident. You can even train your mind to find stressful situations fun, exciting and something to look forward to. This is a far better way to deal with stress. Instead of avoiding stress you are changing the way your mind deals with stress.

How to reduce cortisol levels

It is possible to train your mind using the audio files that come free with this book.

By training your mind to think positively about stress, over time it's possible to change the way you deal with stress so that it no-longer causes such a negative reaction in your body.

An experiment conducted by NASA revealed something amazing about how the human brain adapts. We’re going to use exactly the same remarkable process to make your mind clear, focused and calm in any situation, so that stress no-longer negatively effects your physical health.

NASA needed to know if the environment of space would have some unexpected negative consequences that would endanger the astronauts or their mission. Would they black out and be unable to function? Would they experience some psychotic event that would leave them incapacitated?

NASA scientists outfitted each of the astronauts with a pair of convex goggles which flipped everything in their field of vision 180 degrees. In other words, their world was literally turned upside down. The astronauts had to wear the goggles 24 hours a day, 7 days per week– even when they were asleep.

Although they experienced physical symptoms of anxiety and stress initially – elevated blood pressure, respiration and other vital signs – they gradually adapted to their new “realities”. On the 26th day of the experiment, something amazing happened for one of the astronauts. His world turned right-side up again even though he continued to wear the goggles 24 hours a day. Between days 26-30, the same thing happened for each of the remaining astronauts.

Deb Cheslow, #1 International Best-Selling Author
Why have I shown you this story?

Currently your life is most likely a certain way. You get up, go to work, come home, have dinner, etc, etc, ... repeat. And your brain may have become very accustomed to this reality. Very, very accustomed. And this is natural human behavior – it is necessary for survival to adapt quickly.

Now we're going to use your brain's remarkable ability to adapt quickly, to change the way you think – and even to change the way you perceive reality. Why?

By being relaxed, your body will operate at optimum efficiency. It will devote its nutritional resources to keeping your body in great shape, meaning you will not age as quickly. Being in a relaxed state and being a relaxed person who allows worries and problems to calmly flow over him or her self is probably the key to being healthy. A healthy body starts with a healthy mind, so in order to make your body healthy you must first make your mind healthy. And in order to make your mind healthy you must first understand why it has become unhealthy, so that you can begin to reverse the process.

Why do some people deal with stress and other negative emotions badly?

Some people react more extremely to stressful situations than others. For example one man might get very angry if his football team loses, while another might be annoyed but the anger would pass without affecting his body particularly. In many cases this is fine. We're all different and we all react differently. However some people react too extremely or even irrationally to certain situations.

The problem is, those of us who react badly to stress and other negative emotions, have trained our minds over many years, to work in a negative way, which actually causes damage to the body that needn't occur.

In order to solve this problem you have to unlearn the negative thought processes and 'reprogram' your mind to make yourself react more calmly to negative thoughts. By doing so your body will operate in greater harmony with your mind – as a team, rather than as enemies.

Bad experiences and 'negative affirmations'

They say a comedian experiences about the same level of trauma during a live set as the
average car crash victim does during a car crash. Some comedians will be ruined by this stress and it may force them to quit at an early stage in the career, while others will get over this stress, until it hardly affects them.

When you experience something stressful, or a situation in which you did 'the wrong thing' in your judgement, you reflect on that experience and affirm (or reaffirm) a conclusion in your mind. Some people will conclude something like, “well I made a mistake, but I learned from it, so next time I'll do it better”. While other people will conclude something like “Jeez, I'm rubbish, I really can't do that very well. I better not bother trying that again”.

The first statement is the kind of statement made by someone who lets negative thoughts go by without paying too much attention (deals with them positively). The second is made by someone who is highly affected by negative thoughts, at least for that particular type of scenario (deals with them negatively).

The problem is, the more often you come to negative conclusions, the more affirmed they become in your mind until your mindset is negative with regard to that experience.

Some people might be extremely brave when it comes to life threatening situations, but the daily pressures of a work scenario may cause them terrible stress, or if not conscious stress, it may cause their body to become very tense. This is an entirely different kind of stress. It affects the body in a different way. It affects the hormones in a specific way, that for one reason or another leads to hair loss.

**How to change your mindset to make yourself a calm, relaxed person**

Because you have spent years thinking in a certain way, you may have affirmed some very negative thought patterns in your mind that make you deal with stressors badly. You need to change these thought patterns from negative ones to positive ones that make you feel good, calm and relaxed, rather than stressed, worried or angry.

These thought patterns can be expressed as statements. For example, one statement might be: “I hate talking in front of an audience”. This is the kind of statement many people (re)affirm in their minds. The result is that every time they're about to do a presentation they build up worry about it by affirming this negative statement until the event becomes stressful. You may notice other people, who don't mind performing presentations, will say things like, “I quite like presentations, I find them quite fun”. These are both self-fulfilling statements.
The more we make these kinds of statements, the easier or harder the experiences get. It's all based on past experiences and the way we come to conclusions about how we dealt with those experiences. We either affirm negative thoughts or positive thoughts that are strongly associated with specific experiences.

The great thing is, you can actually 'reprogram' your way of thinking by using positive statements, or 'positive affirmations'. And that is what you are going to learn to do now.

**Using positive affirmations to change your way of thinking**

If you are someone who deals with stress badly, for years you have thought and spoken negative affirmations to yourself – whether they have been expressed in words or not. Now you are going to repeat positive affirmations to yourself in concentrated doses, flooding your subconscious mind with healthy, positive thoughts. This will literally change the way you think and the way you react to stressful situations.

First of all you will flood your mind with positive statements that help release the old negative statements that have led you to deal with stress badly. Then you will flood your mind with new positive affirmations that will change the way you think, making you a calmer, more relaxed person that deals with stress and pressure calmly.

**Method**

In a moment you'll see a list of positive affirmations. These have been recorded into a MP3 files, which you can download using the links below:

**Theta wave: meditative state bio-rhythm**

You should listen to this file in the evenings or first thing in the morning when you're relaxing and doing nothing but listening to the audio file. This is ideal for when you want to feel calm and completely relaxed.

- Download the male voice version
- Download the female voice version
**Alpha wave: Relaxed, focused state bio-rhythm**

You can leave this file on during the day, while working, working out, etc. Listen to the audio file at low volume and leave it on repeat. This will keep you relaxed and focused.

- [Download the male voice version](#)
- [Download the female voice version](#)

**Delta wave: sleep state bio-rhythm**

You can use this audio before you go to sleep. The delta wave bio-rhythm will induce sleep. Try to follow the instructions, but don't worry if you fall asleep.

- [Download the male voice version](#)
- [Download the female voice version](#)

Download the MP3s to your phone or computer. Listen to them before you go to sleep and follow the instructions. Try to listen to the recording again on your way into work or first thing in the morning when you wake up. It's OK if you fall asleep listening to it.

Try to listen again on your way home from work or when you get home.

After a week or so of doing this you should get pretty familiar with the statements, but they probably won't be second nature yet.

Remember the astronaut that started seeing reality upside-down? Think about him while you're going through this process.

Try to think about the affirmations whenever you can and repeat them to yourself in your head throughout the day (whenever you're walking somewhere, in an elevator, driving, or doing anything that doesn't require your complete attention).

Your aim is to make yourself start saying these statements to yourself in your head without realising you're even doing it. This will take a little time – maybe a month. But believe me it's worth it when you laugh to yourself because you've just realized you said one of the statements because you truly believe it, not just because I've told you to say it!

In a month from now you'll be walking down the road or driving your car or something, you'll breath out, relax your shoulders and say something like, “I'm so completely relaxed, calm and in control.” That's when you know it's working.
How to use the audio

Put your headphones on. Relax. Take a few nice slow deep breaths. Consciously relax your muscles as you breath out. Get as relaxed as possible.

Step 1: Clear your mind

Empty your mind completely. Just look at the back of your eyelids – look into the darkness. Think about nothing.

Thoughts will creep into your mind without you realizing. That's fine. As soon as you realize you're thinking about something, stop thinking about it and focus on nothing – just the darkness of the back of your eyelids. Tell yourself, “my mind is clear”, if it helps. Keep repeating, “My mind is crystal clear and I am completely focused”, if it helps you to stop thinking about things.

Try to clear your mind of all thoughts for at least ten minutes. The longer the better.

Step 2: Imagine your perfect life

Once you've cleared your mind completely, start imagining yourself in your perfect life. Imagine you have a perfect full head of hair. You're perfectly healthy. You feel great. The sun is shining. There's a perfect breeze. Everything you ever wanted is yours right now. You feel amazing. Try to really imagine how great it feels to have a full head of thick shiny hair. Run your fingers through it and smile. Try to imagine this perfect scene as clearly as you can and in as much detail as possible.

Step 3: Listen and repeat the positive statements

You'll hear the positive statements spoken on the audio track. Listen to them and repeat them to yourself in your head in the gaps between the statements. Try to say them to yourself as convincingly as possible – say them like you truly believe them.

While you're repeating the statements, continue to imagine your perfect life – a life in which all of your dreams are true.

7. I feel great
8. I feel amazing
9. I feel superb
10. I feel absolutely brilliant
11. I'm on top of the world
12. Life is getting better and better everyday
13. Everything is coming together
14. I can do anything I put my mind to
15. I am a magnet for positive energy
16. Positive energy fills my whole body
17. Positive energy is flowing into me from all over the universe
18. Every cell in my body vibrates with positive energy and health
19. Today, I am brimming with energy and overflowing with joy
20. My ability to conquer my challenges is limitless; my potential to succeed is infinite
21. Today, I abandon my old habits and take up new, more positive ones
22. My future is an ideal projection of what I envision now
23. Obstacles are moving out of my way; my path is carved towards greatness
24. I wake up today with strength in my heart and clarity in my mind
25. I am fearless
26. All fear is released from my body
27. I feel great
28. My mind is at peace
29. Calmness washes over me with every deep breath I take
30. Being calm and relaxed energizes my whole being
31. All negativity and stress are evaporating from my body and my mind
32. I feel my body and mind filling with positive energy
33. Every day I am more and more at ease
34. All is well in my world. I am calm, happy, and content
35. I breathe in relaxation. I breathe out stress
36. Every time I breathe out I feel myself relaxing further
37. I am in complete control of my body and mind
38. My mind is at peace
39. My mind is calm
40. My mind is crystal clear and focused
41. I am focused
42. I am in control
43. I feel great
44. I feel healthy
45. I think positively
46. I feel completely relaxed
47. My shoulders are loose and relaxed
48. My neck is loose and relaxed
49. I am composed and calm
50. As I breathe out I feel all my muscles relaxing
51. My stomach muscles relax as I breathe out calmly
52. I breath naturally and calmly
As I breathe out I feel all of my muscles relaxing from head to toe.

I am completely relaxed and feeling wonderful.

Nutrients are flowing to my scalp, feeding my hair.

My hair is growing thicker.

My body is getting healthier.

I feel my hair getting thicker and thicker.

I can feel the energy in my scalp, making more hair grow.

I can feel hairs reactivating in my scalp.

My hair is getting thicker everyday.

I am feeding my body with nutrients that make my hair grow.

New hairs are growing on my scalp every day.

Every day my hair is getting healthier.

I can feel the blood flowing to my scalp and feeding my hair.

Hair follicles in my scalp are reactivating.

My scalp is alive with energy.

I can feel my scalp tingling with energy.

Blood is flowing to my scalp.

I nourish my body with healthy food.

I am making myself incredibly healthy.

My body is healing, and I feel better and better every day.

With every breath out, I release stress in my body.

I sleep soundly and peacefully, and awaken feeling rested and energetic.

I am surrounded by people who encourage and support healthy choices.
76. Even when there is chaos around me, I remain calm and centred
77. A calm inner peace fills my mind and body
78. I am always in control of my mind
79. I stay focused and calm at all times
80. I am clear-headed
81. I focus on good
82. I am a good person
83. I always make the right decisions
84. I sleep well knowing that I'm a good person
85. I treat others with respect
86. I am the person I want to be

Step 4: Remember your life's greatest moment

After the statements have finished, continue listening to the MP3, but now think back to a time when you felt your very best. Perhaps it was after you landed a dream job, or maybe it was after winning a big game of football. Maybe it was after you proposed to your partner and he or she said yes. Whatever it is, try to clearly remember every moment of it. Remember how great you felt. While you're imagining this moment or scene, repeat the affirmations that you can remember to yourself over and over. Feel the moment. Try to remember it as clearly as possible. And every time you remember it, try to remember more details about how great it felt. Once you're reliving that moment in your head, tell yourself the affirmations you can remember in your head. Repeat them over and over for five to ten minutes.

Repeat the process outlined above every morning when you wake up, every evening when you get home and every night before you go to sleep. Leave the silent subliminal MP3 playing on repeat overnight.

That's it!

What's the purpose of all this?

© copyright 2020. www.hairfollicleneogenesis.com
Remember back to the astronaut again. After 26 days his reality changed because he continually pummelled his mind (both consciously and sub-consciously) with an altered perception of reality. You’re going to do the same thing.

As well as listening to the MP3 in the morning and evening, try to listen to the SleepOptimized MP3 while you sleep. This audio track optimize your sleep, helping you drift off into a deep, healthy sleep, then gently and slowly waking you up to natural noises 7 hours later.

Your aim now is to alter the way you perceive reality in the same way as the astronaut did. Within a month or so reacting calmly in stressful situations. Persevere with this technique. And use it for any other goals you have. Use the visualisation of your perfect life to imagine everything you want. Whether it's more money, your dream home, perfect skin... whatever it is, you can adapt this technique for any goal you want to achieve.

There are several other techniques I have researched for training your mind. I go into these in less detail below:

**The Emotional Freedom Technique (EFT)**

EFT can be used to reduce stress, anxiety, anger and other negative emotions. It's a very simple, quick and easy technique based on acupuncture and positive affirmations, which has been scientifically proven to improve both mental and physical health.

It comes under the less reputable branch of medicine known as alternative or holistic health. However, scientists have studied it and found that it works. Some people believe that it works because the person practising the technique simply believes that it will heal them, while others believe the technique does exactly what its creators say it does. It's probably a combination of both.

The developers of EFT are giving away an instruction manual on how to use the technique for free. You can download a copy [here](#).

They make their money by selling videos and training sessions, but you should find most if not everything you need to learn about and start practising the technique in the free manual.

**Fundamental practices that reduce stress levels**
Regular good quality sleep

You should aim to get 7 – 8 hours sleep every night. This is very important. If you can do that persistently it will help reduce stress levels. This is also very important for your health. Your cells regenerate at night time. If you don't give your body time to regenerate while you sleep, you will age faster. Furthermore your body cleanses itself at night while you're sleeping. If you don't get enough sleep your digestive system will become sluggish and your body will be less capable of absorbing nutrients.

Research conducted by Dr. Van Cauter, a professor of medicine at the University of Chicago, found that:

"Metabolic and endocrine changes resulting from a significant sleep debt mimic many of the hallmarks of ageing. We suspect that chronic sleep loss may not only hasten the onset but could also increase the severity of age-related ailments such as diabetes, hypertension, obesity, and memory loss" (Van Cauter, 1999)

It's not only important to sleep for the right amount of time, you need to sleep well. If you are struggling to sleep well it may be due to stress – and you can see how this can be a vicious cycle.

Researchers at Pennsylvania State University College of Medicine have found a reason why middle-aged men often struggle to sleep. It's not just because of what they worry about. Rather, it's due to "increased vulnerability of sleep to stress hormones," according to Dr. Alexandros N. Vgontzas.

As men age, it appears they become more sensitive to the stimulating effects of 'corticotropin-releasing hormone' (CRH). When both young and middle-aged men were administered CRH, the older men remained awake longer and slept less deeply. People who don't get enough of this 'slow-wave' sleep may be more prone to depression.

If you find it hard to sleep solidly for between seven and eight hours without waking up several times, try listening to the affirmations before bed and playing the SleepOptimized audio while you sleep. The delta wave bio-rythm will help induce sleep and the affirmations will infiltrate your subconscious further relaxing you.

In summary, it's very important that you:

- Sleep for a good number of hours every night (between 7 and 8)
- Consistently sleep in the same pattern (same times for the same amount of time)
Sleep deeply

If you are finding it difficult to consistently sleep well you need to change your habits. You need to wind down earlier, perhaps reduce your caffeine intake and get more exercise during the day.

If you are one of the people who finds it hard to sleep well, the audio files should help you a lot. Keep persisting with them. As you improve the way you deal with stress, you will also improve your sleep.

At Tel Aviv University, Dr. Avi Sadeh conducted a study of students. He found that those "who tended to focus on their emotions and anxiety during the high-stress period were more likely to shorten their sleep, while those who tended to ignore emotions and focus on tasks extended their sleep and shut themselves off from stress".

In other words, by improving the way you deal with stress as an individual (by not focusing on the negatives but instead being positive and focused on getting things done) you will improve your sleep.

Exercise

It goes without saying you should be doing exercise. But not just any old exercise. You must exercise when you feel frustrated, angry or worked up whenever possible. These feelings are interlinked with hormone production that makes you want to release energy and stress. The hormones are used by the body to improve athletic performance (to help you survive) and also to help attract members of the opposite sex, by making men more manly and aggressive (caused by elevated testosterone). You may be experiencing varying levels of both of these causes of excess hormone levels. Either way the result is the same. However if you do not act on the impulses your body and mind are giving you, the excess hormones must be processed and eliminated by the body, and you know what that means.

It's essential that you do at least twenty minutes of sustained, heavy exercise, three times a week. Remember though, the more you exercise, the more nutrients you will need to consume – particularly protein and B vitamins. Furthermore, be sure to replace water lost from sweating in order to keep yourself well hydrated.
The Hair Follicle Neogenesis Method

Summary

Use this summary every day as a simple way to follow the instructions.

First thing in the morning

**ACV drink + high strength cysteine supplement**
1 teaspoon lemon juice, 1 teaspoon ginger juice, 1 tablespoon apple cider vinegar (ACV), half pipette liquid vitamin D supplement. Drink this with one high strength NA cysteine supplement.

Shower and wash or rinse your hair. Ideally rinse your scalp thoroughly making sure it is clean. If you have long hair and don’t want to get it wet, don’t wash your hair, but try to wash your hair at least once a week.

**Apply Hair Follicle Neogenesis (HFN) Growth Factors serum**
Apply small blobs along your frontal hairline. Massage the blobs evenly along your hairline into your skin, covering the whole desired area. Part your hair in the centre and apply very small blobs along the parting and in the crown by pushing the end of the pipette into your scalp skin and gently squeezing the pipette. The blobs should be so small that they do not run. Leave them to absorb in on their own. You don’t need to massage them into your skin.

**Apply Voltarol 2.3% gel along your hairline**
Apply a very small amount of Voltarol gel all along your hairline, massaging it into your skin.

**Remember**
Do not use Voltarol or the Growth Factors serum for 12 hours after using the Dermaroller.

**Morning smoothie**
Blend green vegetables like spinach, broccoli, kale, watercress and rocket with low sugar fruits like strawberries, kiwi, blueberries, raspberries, cranberries and blackberries. You can buy frozen bags of these, which are very cheap. Add two scoops of vegan protein powder or BCAA powder.
and blend. Make enough for three glasses to save time. Drink one glass before breakfast along with a flush niacin supplement. Try 50mg niacin to start with. You’ll have to snap a 100mg in half as that is the smallest dose you can buy. If you feel the blood flush to your skin, that’s the correct dose. If not, increase the dose until you feel the flush. Niacin is non-toxic and safe at very large doses.

Scalp brushes
After the HFN serum has mostly absorbed into your scalp, brush your scalp vigorously in one direction 100 times with a hard bristled boar brush.

Mid Morning

Scalp brushes
Brush your scalp vigorously in one direction 100 times with a hard bristled boar brush. This is not essential but is beneficial. Do not use the boar brush if you have used the Dermaroller within the last 24 hours.

Lunch time

Apply the HFN Growth Factors serum in exactly the same way as you did in the morning.

Scalp brushes
After the HFN serum has mostly absorbed into your scalp, brush your scalp vigorously in one direction 100 times with a hard bristled boar brush. This is not essential but is beneficial.

After work

Apply the HFN Growth Factors serum in exactly the same way as you did in the morning.

Scalp brushes
After the HFN serum has mostly absorbed into your scalp, brush your scalp vigorously in one direction 100 times with a hard bristled boar brush.
Hair Growth Smoothie
Drink another glass of the Hair Growth Smoothie you made earlier today.

Before bed

Roll the Dermaroller over your scalp
Once per week, use the Dermaroller as instructed in the full instructions.

Apply the HFN Growth Factors serum in exactly the same way as you did in the morning.

Apply Voltarol 2.3% gel along your hairline
Apply a very small amount of Voltarol gel all along your hairline, massaging it into your skin.

Remember
Do not use Voltarol or the Growth Factors serum for 12 hours after using the Dermaroller. Do not do scalp brushes for 12 hours after using the Dermaroller.

Scalp brushes
After the HFN serum has mostly absorbed into your scalp, brush your scalp vigorously in one direction 100 times with a hard bristled boar brush.
The Legal Bit

These instructions are not intended for use by pregnant or nursing women, anyone with a serious health condition, or anyone under the age of eighteen. It is advisable to consult your doctor before beginning any new regime. These instructions are intended to be used for educational and information purposes only. The author does not advocate nutritional supplementation over proper medical advice or treatment and this sentiment will never be expressed through pages of the book or web pages hosted on hairfollicleneogenesis.com. If using any pharmaceuticals or drugs given to you by a doctor or received with a prescription, you must consult with the doctor in question or an equally qualified health care professional prior to using any nutritional supplementation. If undergoing medical therapies, then consult with your respective therapist or health care professional about possible interactions between your treatment, any pharmaceuticals or drugs being given, and possible nutritional supplements or practices described in this eBook or on hairfollicleneogenesis.com.

The author does not assume liability for any actions undertaken after reading this book or visiting hairfollicleneogenesis.com, and does not assume liability if one misuses instructions or supplements. The author does not ensure that unforeseen side effects will not occur even at the proper dosages, and thereby does not assume liability for any side effects from supplements or practices described in this book or pages hosted on hairfollicleneogenesis.com.