How does it work?

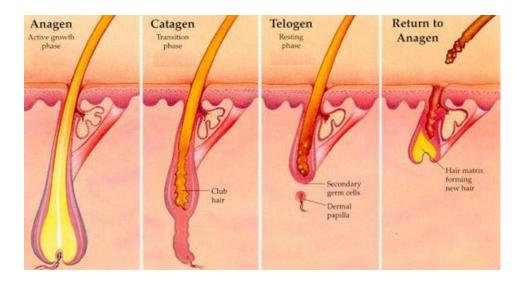
A wire coat and a spaniel coat are made of soft short undercoat that keeps the dog warm. It's protected by a harder topcoat/guard coat that stops the water and dirt from getting down into the body.

Dogs have many hairs in every hair follicle – a poodle has 28 and a husky 47! It's a mixture of hairs – short undercoat, longer topcoat and in some cases a less desired type of undercoat that gets really long.

The longer undercoat makes the dog wet and dirty because the topcoat can't protect it. It also steals nutrition from the other hairs .That's why we don't wont it...

Every hair is programmed to grow in a specific way. The length, color and type are pre determined by the dogs genes.

The programming of that can differ from dog to dog – that's why you see different coats on the same breed. It's also programmed when the hair follicle opens and let's goes of the hair (shed)



The life of a hair begins with the anagen stage, where the hair follicle is actively producing hair cells. This activity begins and continues in response to hormonal signals. Of the entire "life span" (hairs are dead material) of a hair, 80 to 90% of that time is in the anagen stage, actively growing from the hair follicle.

The next stage is called catagen, and occurs when new hair production ceases. This stage, too, is in response to signals, although in this case it is the sudden absence of the stimulatory signals that triggered the anagen, or growth, phase. This is a dormant stage for the hair follicle. The hair is not actively attached at the base of the follicle any more, but stays in the follicle due to friction. In this stage it is easily pulled out. These are called club hairs.

The last phase is a transitional stage called telogen. The follicle is reactivated out of the dormancy of catagen, and prepares for active production of hair in the anagen phase.

All of the hair follicles on a dog's body will be in any of these three stages concurrently. The amount of hair at any one time in the anagen phase (remember that 80 to 90% of the lifespan of a hair is spent in anagen phase), compared to catagen and telogen determines when shedding occurs, the length of the hair coat, and whether or not there is an undercoat present.

Different breeds have different lengths on their cycle. Some dogs have a long growth phase –like poodles and others have shorter growth phase and a longer rest phase.

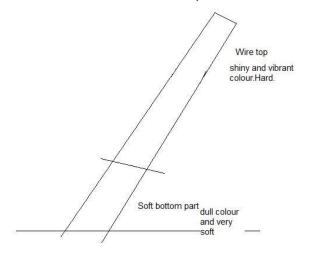
You can't do anything to change the programming with food or shampoos...but you can enhance it. That means that with proper grooming and feeding you can make things better....and on the other end you can ruin a coat with poor nutrition and bad grooming.

Diseases and some medications can also ruin a coat. Steroids are a typical wire coat killer Cortisol is a hormone that regulates a lot of processes in the body. And if you put the dog on cortisone you mess with the hormones that run the coat cycle. So a dog on cortisone –like Prednisolon – many times ends up with a coat that is hard to hand strip. And it can take up to 6 months before its back to normal again.

The opening of the hair follicle is also predetermined – it's runned by the hormones and daylight. That's why you for example see that some breeds only sheds 2 times a year – bitches always around their heat. And that is also why longhaired breeds start to matt when they are around 8-10 months. That is a big hormone period and that affects the hair also.

When you neuter a dog you stop the hormone circle that affects the hair and you get a much duller coat. In spaniels and dogs with similar coats (Newfoundland's, Belgian shepherds ex) you get an undercoat that goes wild....Suddenly the dog is a fluffy monster.... On wire coated breeds you often don't get the wild undercoat – but the topcoat gets thinner and duller and won't loosen. That's why it's hard to hand strip a neutered dog. You have broken the hormone circle and then the hair changes.

The topcoat hair is divided into different parts – A hard shiny top and then the softer less shiny middle and at the end the really soft and dull "dead" part.



What's happening when we handstrip is that we remove a hair and a new one with shiny hard top starts to grow. When it has grown to its pre decided wire length its ready to fall off – the hair follicle opens up....If it's left in the follicle the less shiny and softer middle parts starts to grow.

If you clip this hair you will take of the shiny hard top and leave the softer middle part...and the hair continues to grow and will soon start to produce the bottom part that is really soft and dull. The hair will still be in the follicle and continue to grow. And that also means that you don't give the signal to the body to produce a new hair – the old one in still in the hair follicle. It's when the old hair is removed that the body produces a new hair.

A clipped dog can grow new hard hairs if there is a "trauma" to the skin/hair follicle – then there is a signal to the follicle to start producing new hair and the circle starts from zero. Like if the dog gets a wound or scratch a lot.

If you have a clipped dog that you want to restore the coat on you can do that – but it takes time and a lot of effort and the dog will look stupid during that time.

You have to restart the whole process of setting new hair and that means that you need to take away all the old hair.

That is a long process – usually 1 year (remember that the hair growth circle is in 6 months phases) – every month you take away as much dead hair as you can – anything that comes off. Does a lot of carding – that stimulates the hair follicle to open up and makes space for a new hair as well.

With the furminator you can take away a lot of loose hair. And then use your fingers.

Be careful not to hurt the dog. If you try to remove hair that is in a closed hairfollice you will damage the skin and follicle and cause bruising and pain. You can actually do damage to the hair follicle and do more harm than good.

The dog will look stupid during this process – because it's not having a proper "haircut" – it will be messy with a mix of long and short patches... so if it's a client's dog you need to inform them and make them aware of it.

But sometimes we see dogs that are clipped and still have a nice coat?? That is because their coat is programmed to grow that way....so that is a really good coat to breed on....That means that the hair is programmed to be hard all the way. These dogs usually have a slow coat growth and less undercoat and less furnishing (legs, beards) – perfect for the pet owner but not liked by show people... *smile*

On the other hand we have dogs –like Dandie didmonts for example- that usually have a very short wiry top.

The more furnishing a dog have –the more undercoat is present. That means that a dog with a really good coat usually has much less hair on legs and face.

When choosing a pup this is what to look for – the fluffier the pup is – the more work you have to spend removing undercoat...