

## Boost Energy And Stimulate Healthy Hair, Skin, And Nails With Vitamin Biotin

Biotin is one of the B vitamins, known as vitamin B7 and also, for some reason, vitamin H. If you have a deficiency of this vitamin you will know about it because it makes you bald. So keep up your vitamin B7 intake girls!

However, this should not be difficult since it is contained in cooked egg white (not raw), tomatoes, chard, onions, cabbage, strawberries, walnuts, halibut, carrots, liver, brewers yeast and cucumber to name but a few of the many sources. It makes sense that it has so many sources because biotin is essential for many of the biochemical reactions that take place continuously in your body.

It is contained in raw eggs, but is bound too tightly to the protein to be available to your body. It has to be cooked before the bond is broken sufficiently to render it bioavailable.

Included in these is the all-important Krebs cycle that releases energy from food. It is necessary for the growth of your body cells, for the metabolism of the fats you consume and for the biosynthesis of the fatty acids that are eventually converted to proteins and then the DNA that is essential for life. In other words, without biotin we would not be here.

However, do not get overly worried about the necessity of biotin in your diet, since the same applies to all of the other vitamins you consume. That is what vitamins are chemicals that have been identified ages ago as being essential to life. Without vitamins we could not survive which is why the vitamin supplement industry is so strong and healthy.

So, what does biotin do specifically, other than being necessary for some of the essential biochemical processes in your body? These tend to look after themselves, so what are the physical attributes that biotin provides for you? The name should give you a clue. In fact it should be familiar since it is one of the more commonly mentioned ingredients of hair care products: "Biotin for Healthy Hair" - ring a bell?

Although a deficiency of biotin is rare with a healthy balanced diet, it can happen, and when it does your first sign might be your skin drying out, your cholesterol levels will increase, you will feel continually tired and depressed with a poor appetite and you will be nauseous. You will also frequently vomit, which puts the icing on the cake of a set of very undesirable symptoms. It is important, then, that you do not suffer from a deficiency of biotin, vitamin B7 or vitamin H, whatever you want to call it, and is why many people take a supplement just to make sure.

This is normally taken as part of a general B complex supplement or even a general multivitamin supplement, since almost everybody has no idea what this vitamin is and why it is so necessary for your continued health. So let's have a look at why biotin is so important, with specific reference to your hair, skin and nails. However, we shall also examine its deeper biochemical uses and explain why it is such an essential vitamin.

With regard to biotin supplements in hair preparations, it benefit's by helping one grow thicker hair, symptoms of a deficiency is brittle hair. If you are deficient, you will lose your eyelashes and eyebrows in addition to your hair, depending on the severity of your deficiency. As stated, however, that is particularly rare. The biotin content of shampoos is likely useless since it is not absorbed through the skin.

What it does in the diet, however, is to thicken the nails and also the hair fiber giving it a fuller appearance, so that you appear to have more hair than you actually have. It also increases the flexibility of the hair, skin and nails rendering them less brittle and less liable to breaking and scaling. However, as previously stated if you eat a good balanced diet you should avoid these problems, although a vitamin B complex supplement will do the job just as well.

So what else does vitamin B7 do for you? Lots in fact, so let's have a look at the more important of them starting with the function of your body cells in the production of energy. Biotin takes part in the Citric Acid Cycle, otherwise known as the Krebs Cycle, whereby energy is created by the conversion of carbohydrates, fats and proteins into carbon dioxide and water. It is one of the essential metabolic pathways of life, and biotin is needed to recharge the Krebs cycle with metabolites when mitochondria become deficient in these essential components.

Without them you would begin to feel tired and lack energy, and this would get increasingly worse without a biotin supplement. It is amazing that your energy is created in the mitochondria which are a part of the tiny cells that make up the tissue of your body, and equally amazing that it depends upon, among other substances, a vitamin of which very few people are even aware of.

In spite of any other effect biotin has on your body, including providing healthy hair, skin and nails, its primary role in your body is in the metabolism of proteins, fats and carbohydrates into a form that can be used by your body for the production of energy. Biochemically, it functions as a coenzyme, which is a molecule needed to help an enzyme do its work. In fact an alternative name give to biotin is Coenzyme R.

It helps in the biochemical conversion of sugars to energy, and is a component of enzymes such as pyruvate carboxylase. That enzyme is protein contained within the mitochondria that contains a biotin prosthetic group, without which it could not function to help the body to generate energy during exercise. Suffice it to say that without biotin you would find it difficult to generate energy, especially when the demand for it is at its highest.

Biotin's biochemical role is not restricted to energy production however, and it is involved in the biochemical synthesis of amino acids and also of glucose from other sugars. Glucose is the main blood sugar that is manufactured in the body from the other saccharides that you eat, such as fructose.

A reasonable level of supplementation to ensure that you do not suffer from a deficiency is around 100 micrograms daily, although up to 5 milligrams (5000 mcg) are safe for the treatment of brittle nails or hair loss. Much depends on age and it is best taken as a vitamin B complex supplement, since the B vitamins appear to give best results as a team!

So, while you can have healthy hair, skin and nails with biotin, without it you will have no energy and likely have no need for your hair, skin and nails!

### About the Author

More information on the [Vitamin Biotin](#) is available at VitaNet &reg;, LLC Health Food Store. <http://vitanetonline.com/>

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