



# Melanin

## What is it?

Melanin is a chemical, made up of subunits of chemicals which are influenced by enzymes (protein molecules used to digest food, produce energy, and purify the blood) to build a stable and resilient compound. This compound is distributed through the body of pigmented people (Kittles 1995).

This stable and resilient compound gives many benefits to the body of melinated people.

The importance of melanin is hidden all too often for a variety of reasons but it is fundamental we can identify where it resides in us and why this extremely precious chemical makes us so unique.

Melanin can appear in a variety of different colours but is predominantly black or dark in colour and is found in the earth as well as throughout the human body.

Melanin is in all of us and is situated in many areas such as:

Central Nervous System

Autonomic (Automatic) Nervous System

Peripheral (outlying, surface) nervous System

Diffuse Neuroendocrine (Glands) System

Visceras (Major Internal Organs)

African (Black) people tend to have more organs that contain high concentrations of melanin. It is fundamental to remember melanin is a gift responsible for many of our capabilities.

Melanin is the basis of pigment and even in the first stages of human life as an embryo melanin is present as the body forms in a variety of essential regions such as the brain, hair, skin, eyes and genitals.

It is important to recognise the immense strength of melanin which appears to be a substance that is almost indestructible. Studies illustrate that when exposed to 600° c melanin still retains nearly 50% of its original properties, it has a strong resistance to decay and can also be found in 1,000 year old mummies.

## What does it do?

Melanin is used by the body for the conversion of energy and protects cells from toxins (Moore 1995).

The importance of its colour is fundamental because it is the dark skin or substance which absorbs. Melanin is black in colour because its chemical structure does not allow any energy to escape once it has come in contact with it (Barnes 1988).

Energy such as the light from the sun or vibrations from sound travels until it makes contact with melanin found in our skin or other areas. Once contact is made the melanin will absorb this energy.



We can see practical examples of this even in clothing as we avoid wearing black in the summer because it absorbs too much heat.

Melanin is a dark substance that is essential for us to absorb from our environment, the psychological processes such as sensation and perception are very dependent on how our melanin functions.

### **Protection**

In the skin melanin protects from the weather conditions, and the healing of wounds shows evidence of melanin activity too. Damaged cells turn dark as the melanin works to prevent further damage and stimulates healing, similar to when a cut fruit is exposed to air.

For our protection melanin is able to accumulate several compounds such as drugs that can be held in melanated regions in the body for long periods in time. The melanated (type of melanin in the brain) protects cells with pigment by keeping hazardous substances bound and released slowly in a low, non toxic concentration (Moore 1995).

It is argued by people such as Barnes (1988) that this would mean the affects of drugs on the body have a higher potency in highly melanated people because the binding process of the harmful substance cause worse drug addictions to the detriment of the black community. The protection trait of melanin is so much so that it can absorb too much leading to toxic conditions. In some cases this could mean neurodegenerative disorders in the brain like Parkinson's disease.

The power of melanin to absorb is huge and for this reason melanin can be a blessing but can also work against us too, as it is able to take in the very good but it also absorb the very bad things too. Smoking, drinking and drugs all have a more intense and in many ways worse affect on us because we consume so much through our melanin.

### **References**

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