The Placebo Effect

There are many amazing stories about people making recoveries from terminal illnesses, or simply healing from disease or injury in way that doesn't seem to make sense. We probably all know somebody who by sheer willpower has been able to overcome seemingly insurmountable challenges.

In his book 'You are the Placebo', Dr Joe Dispenza describes many instances of amazing recoveries. This includes his own recovery from a disabling spinal injury, where he used the power of his imagination to inform his brain about how his back should be. Having programmed his subconscious mind in this way, his body got on with the healing and he made a full recovery without surgery.

When we cut our finger, we may use antiseptic cleaner and put a plaster on it. A few days later the wound may be healed. What created the healing? It wasn't the antiseptic or the plaster. It was the body's own intelligence. So if we can plug into this natural healing capacity, we can do much more than mend a minor injury. The key question then is how do we enhance this process, from the inside out?

The healing process starts with the recognition by the body that something is wrong. In the case of trauma or injury, there is a disruption of normal cellular function which triggers the beginning of complex physiological repair processes. Inflammation is the first response, attracting white blood cells, and it also triggers immune cells to respond. Platelets in the blood release chemicals that initiate the process of healing, which may include producing specialised cells and large amounts of collagen.

In the same way, the body recognises pathogens or foreign bodies and immediately sets about the business of fighting them, through the complex network of cells, chemicals and proteins that make up the immune system, supported by the lymphatic system, the spleen and the bone marrow, and antibodies which remember and recognise foreign elements in the body. Stem cells may be sent from the bone marrow to form themselves into perfect new replicas of the lost or damaged tissue.

This miraculous process is driven by our genes once signalled that action is needed. Humans have just over 23,000 genes, which work in cooperation with each other, enabling an amazing capacity to supervise the production of about 40,000 regulatory proteins, depending on the state of the body and what its needs are at any one time. An amazing discovery is that as little as 2% of our genes are actually active; the rest lies dormant most of the time.

So the next question is what kinds of trigger influence which genes are expressed, and which are down-regulated? It's here that we can make a difference to our own healing capacity, through the power of the mind, and in particular the subconscious mind. This is where the placebo effect comes in.

When pharmaceutical companies trial a new drug, the standard process is a double-blind procedure whereby some patients are given the drug and some given an inactive placebo.

To a large degree, the success of the drug is judged by its performance compared to the placebo. If there is significant difference, as well as efficacy, the drug might make it through to the next stage trials. Many potentially useful drugs may fall at this hurdle. The placebo effect is dismissed as an indicator of failure.

However, there are many examples and research studies that show how the placebo effect in its own right, and brain programming, is a powerful therapeutic intervention. Its efficacy varies, but for some issues, such as pain management, it is highly effective. It has even been found to work when the patient *knows* that what they're taking is just a placebo!

In one study, doctors gave Parkinson's patients a neutral saline injection, telling them it contained a dopamine-enhancing drug. Patients experienced a reduction in symptoms, and scans showed that more dopamine was actually being produced. The body was creating dopamine because it believed it could. Patients then act as if they are recovering, which further enhances the subconscious belief system.

I will not list other examples here, but suggest that you read Dr. Joe Dispenza's and Dr. David Hamilton's books, which illustrate this process convincingly. In some cases the placebo works just as well or even better than the drug. Both these authors have made careers and helped many people, by working with this phenomenon. More conventional researchers suggest that the power of the mind to influence the DNA is unproven, and that the science of epigenetics is in its infancy.

But what we do know for sure is that placebos are powerful interventions, that generate measurable changes in physiology. This also works where learning new skills - just by mentally rehearsing them, such as visualising playing scales on piano - turns out to be as effective in terms of learning, as actually playing the piano.

So let's go back to gene expression, and how certain genes get triggered to do certain tasks. It's important to recognise that this process is going on all the time anyway, driven largely by subconscious embodied information, in response to environmental triggers. This is the emerging science of epigenetics.

Since conception, the same DNA has been expressing itself in different ways, forming ears, toes and all body components from the same gene pool. The differentiation happens as a result of the genes which get expressed and set about forming the appropriate proteins. Epigenetics is the influence of the environment on gene expression. Some of this is very about lifestyle such as exercise and diet, whilst toxins various kinds can distort this process. There is also a significant influence on gene expression as a result of mental processes, of which the most obvious is stress.

In **one study***, for example, researchers measured telomere length in recovering breast cancer patients who participated in mindfulness-based therapy. Telomeres are the protective end caps on chromosomes. Shorter telomeres have been linked to tumour growth and disruptive changes in gene expression. The study found that those who participated in the mindfulness-based therapy maintained their telomere length. Decreased telomere length was found in those in the control group.

*https://acsjournals.onlinelibrary.wiley.com/doi/full/10.1002/cncr.29063

What we believe to be true, affects how we think and how we act. It becomes a self fulfilling prophecy. If we can programme this belief system into the subconscious mind, we're working with something very powerful.

So what's the best way of feeding information into the subconscious mind so that the right messages influence gene expression? The simple answer is through meditation and visualisation.