**What is PAIN?**

**Frequently Asked Questions**

**\*\*WARNING: It may surprise you to read that the common understanding of how pain arises has recently been shown to be inaccurate!!!!**

THE NUMBER ONE MISUNDERSTANDING ABOUT PAIN IS: PAIN IS A FEELING

**Question: What does the latest research say?**

Pain is not a **feeling**; it is actually **created** by the brain. Research now shows us clearly that there are no 'pain receptors', no 'pain signals' from the tissues, no tissues ‘feel’ pain and there is no pain ‘in’ any part of the body.

**Question: Why is this an important differentiation?**

This differentiation allows us to better understand **what to treat to resolve pain the quickest**.

*Imagine the scenario of a car that is malfunctioning with a bright engine warning light on the dash.  Is it sensible to think that we can fix the problem by doing something to the warning light?  Or would it be more sensible to acknowledge the warning light and then check out every possible structure that could be causing a problem to the car’s engine – making the warning light come on?*

Recent studies teach us that **pain is constructed by the brains and in this example is the equivalent of a car’s dashboard warning light**.  A pain experience can be created by the brain anywhere in the body…it is just the brain’s way of telling you there is a malfunction somewhere. It’s then your physiotherapists job to find the malfunction….it does not necessarily have to be where you feel pain and symptoms.

*For example, if someone's right arm uses a mouse most of the day in an excessive forward-shoulder position and this creates a gradual build-up of strain in the mid-back; in some people the response by the brain is to create the experience of pain like it is 'in' the right arm.  Often this is also accompanied by muscles, nerves and joints suffering a condition (diagnosis) in the right arm also.   This usually has the desired effect of changing the behaviour (the purpose of the pain) to avoid the poor mousing position with the right arm, and thereby results in decreased strain to the mid-back.  When* [*effectively solved*](http://www.baroonaphysio.com.au/ridgway-method-pg9467.html)*with good physiotherapy; release of strain to the mid-back results in the brain ceasing creation of the right arm pain (and rapid resolution of the arm pain). Then changing the mousing position, or posture, to minimise mid-back strain results in the brain having no reason to create the right arm pain again.*

This way of thinking helps us understand why treating pain and symptoms is not necessarily going to solve dysfunction.  In the example above, treatment to the pain in the right arm would not solve the problem (mid-back overstrain), or gain a rapid and long lasting result.

**Question: So what is going on for the brain to create pain?**

We know that nerves carry impulses, or signals, from the body’s tissues that tell the brain about the state of the tissues.  Information such as excessive stretch, excessive strain, over-compression, tearing, bleeding, swelling etc. (both physical and chemical noxious signals) are transmitted to the brain indicating a ‘less-than-optimal state’, or an unhappy state.  This all happens in our subconscious.

Once the brain receives these signals then **the subconscious brain decides on best approach to protect the body**.

If the brain perceives these signals beyond a threshold and ‘bad enough’, then one of the brain’s protective reactions is to **create the experience of pain** and/or symptoms and make us conscious of needing to avoid damage.  Without this protective response we would be much more likely to do more severe damage to ourselves, and for this reason pain is a very successful protective mechanism.

This protective response **can be very different in different people**, even with the same unhappy (noxious) signals.  Experience tells us that our individual brains are so different they can choose to produce a protective reaction, such as the type and location of the pain that is individual to each of us.

On the other hand, if the brain perceives these signals are under the threshold and ‘not bad enough’ then we remain completely unaware of any problem.  This whole process occurs at a subconscious level – and this happens every day to all tissues in our body as a natural process.

**Question: How does this understanding help solve pain faster?**

Let’s go back to the example of the faulty car and the dashboard warning light.  How good would it be for **all the parts of the car**, which might relate to the [dysfunctioning engine](http://www.baroonaphysio.com.au/why-we-suffer-pain-pg6357.html), **to be tested** to see which ones are faulty?

How good would it be to **fix the faulty part**, and know how to **check this for yourself** at regular intervals in the future?  What might happen to the dashboard warning light if you took this approach?  Clearly, this would result in **the warning light going off and staying off**.  Plus, this would results in an **optimal performance** of the car.

This analogy fits the human body.  How good would it be if your warning signal, i.e. pain, alerted you so you got **every part of your body that might relate to your problem tested** to find out which ones might be faulty?

The next step is clear – **fix the faulty part** – and when the most significant fault of the problem is fixed...**the pain goes away!** The warning signal is no longer required to be ON. The bonus is that the body then functions at its **highest performance**.

The next step after that is extremely important.  Checking the faulty part in the future and ensuring it remains in good shape. This is the **key to preventing recurrence.**