

The Accidental Ergonomist

Power not pain with Tim Finucane



Sitting 101

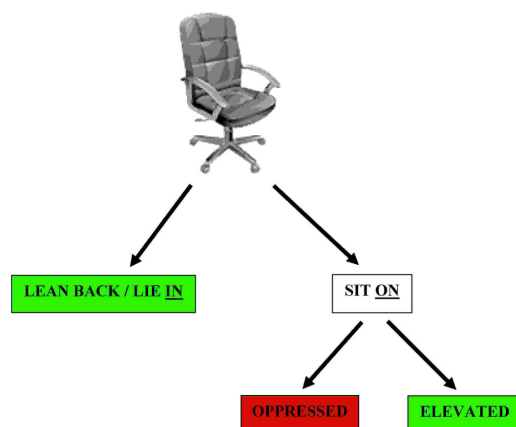
Tired of sitting and aching? Tired of trying to sit straight? Tired of being told to keep your back straight? Then stop trying to keep yourself 'properly aligned' and learn instead to balance your body *correctly* - so that sitting becomes easy!

I'm kicking off this blog with sitting because **sitting comfortably (in any chair) really is very, very easy** - once you sort out the confusion that causes us to struggle.

Much of the struggle we have with sitting can be directly related to **the way we are taught to use the body** - most often in a **stiff and unnatural manner** involving various ways of keeping the back straight or body statically aligned, that actually **weaken and de-stabilise** the body instead of strengthening it.

This struggle **is easily resolved** if we dare to break with conventional thinking and instead organise **the way we think about the way we use chairs** into:

- **elevated sitting - OK**
- **oppressed sitting - NOT OK (avoid at all costs!)**
- **leaning or lying - OK**



Elevated sitting means sitting **correctly balanced** (not using a backrest), so that the body is automatically held up and so that no extra conscious effort is necessary to 'keep the back straight' or the body (plumb line) aligned. When you sit **correctly balanced** the weight of the upper body is directed towards **the front of the pelvis**. This keeps the spine free from unnecessary pressure, allowing it to relax and remain flexible, even when sitting still. It also keeps the thorax open so that the diaphragm can move freely and deeply. When **correctly balanced** the body is **automatically pushed up**, rendering all habitual attempts to 'hold the body up' or 'straight' **completely unnecessary**.

Elevated sitting is easy to find:

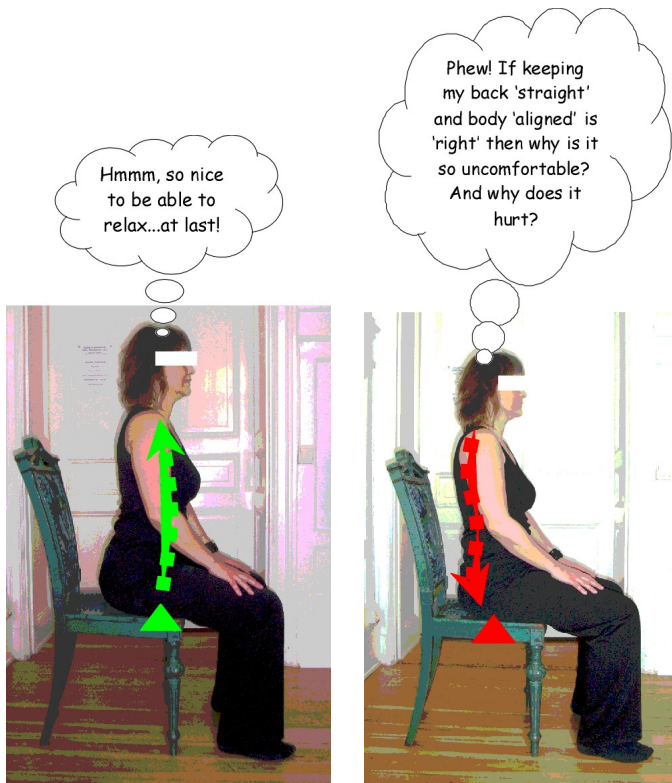
- 1) start by sitting on your sitting bones
- 2) tip your whole upper body forwards, so that your upper body weight **shifts onto your thighs**, just in front of your sitting bones
- 3) stop the moment you feel the pressure on your sitting bones ease off
- 4) don't try and 'improve your posture' by straightening your back, pulling back your shoulders, pulling in your stomach, etc. This will just mess things up. Just sit still and relax without collapsing.

If you find the right position (point of balance), you will find that elevated sitting is very restful. You will be able to sit still and remain calm because your body, being light, won't disturb itself.

Oppressed sitting means sitting **balanced incorrectly**, i.e. with your upper body weight **on or behind your sitting bones**, so that the lumbar spine flattens and the upper body starts to collapse into the all familiar C-shaped posture that many people display in their daily lives (with rounded shoulders and head thrust forwards). This collapse has to be counteracted using **conscious physical and mental effort** to help 'pull the body up'. Oppressed sitting is oppressed because the upper body **bears down upon itself** - even when this is 'corrected' by consciously pulling the body up. Oppressed sitting not only puts a strain on the spine, neck and shoulders, but also restricts the function of the inner organs and diaphragm.

Oppressed sitting is also easy to create:

- 1) balance yourself **on or behind your sitting bones** and notice the way your body 'wants' to move downwards
- 2) try 'sitting up and keeping your back straight' and after a while you'll notice how you gradually let go as you get tired or get involved in your work, only to find you have collapsed again. Then you'll have to pull your body up again...and then...



TRUE elevated sitting - created often intuitively using RIGHT CHOICE of balance and NOT trying to keep the back straight or body aligned!

Oppressed sitting - created ironically by WRONG CHOICE of balance AND trying to keep the spine straight or body 'correctly aligned'

Leaning or lying means using the backrest to support the upper body. We know that this works, but still some people feel guilty about doing it (because they had 'sitting up' drummed into them). Interestingly, **recent research** confirms that **135 degree** leaning is best for the spine. The same research concludes too that good old **90 degree** sitting upright puts the **greatest strain** on the spine¹. This research does not however differentiate between sitting upright elevated and sitting upright oppressed.

If you try elevated sitting as I have described above there is a good chance that you will feel it is **too far forwards**. As a result you may be tempted to correct this by pulling your body backwards until you find the balance that you are **familiar** with. If you succumb to this 'correction' then nothing will change and there will be nothing new for us to discuss. So, for the time being, just sit still and give your body a chance to 'try on' this posture, even if it does feel a bit strange.

¹ Read more about this at <http://news.bbc.co.uk/1/hi/health/6187080.stm>

Because it may feel 'wrong' I recommend **testing the function of the posture**, by subjecting it to a **physical loading test**². This is more reliable than judging 'straightness' (which really doesn't tell you anything useful) because it evaluates your ability to maintain the **mechanical cohesion** necessary for maintaining **comfort and natural use** over longer periods of time (which is what most of us are looking for).

In this particular exercise you can ask a friend to push you from the front, **while you remain focused on sitting still** (i.e. not focused on wilfully pushing back). The push should be made against the top of the breast bone. Make contact first, then push and feel the response by maintaining contact (i.e. don't shove or prod).

If you are seated correctly and if you are not trying to 'keep your back straight', then when you are tested you will feel immediately that **this posture works very well**. I.e. you will feel, despite the force in the push, that you can **easily keep your posture** and that it feels **immensely stable and strong**, and yet at the same time **very relaxed and calm**. Don't be surprised if you start smiling while you are being tested - the **unified response** you are experiencing is usually perceived as very positive. If you then do the same test when seated on your sitting bones and/or with your back straight (stiffened), then your friend will be able to push you backwards - even if you make additional effort to prevent this from happening.

A second test, administered from above onto the shoulders (the person testing stands behind), will also reveal that elevated sitting is structurally very stable (strongly held up) and that oppressed sitting is weaker (i.e. less able to carry the load).

If you do not have the opportunity to test in this manner, then for the time being trust that what I am saying really does work. Give it a chance and do your best. Find the correct balance, relax your back and upper body and sit still for a few minutes. Give your body time to get used to this position so that you can evaluate it more thoroughly. Sitting 'more forwards than usual' when sitting elevated is not unlike driving a car on the other side of the road in a foreign country. **It's right to drive on the 'wrong' side** and that's why it feels wrong - until a few days have passed, when it stops feeling wrong and starts to feel right!

Until next time read more about elevated and oppressed sitting at the Power Ergonomics website³. See then if you can work out **what you need to do to avoid oppressed sitting**. If you crack this then you will be well on your way to making sitting a thousand times easier than you could ever have imagined!

Tim Finucane. 'The Accidental Ergonomist'
Power Ergonomics from Sweden
www.powerergonomics.com

² Read about **MUBA** at <http://www.powerergonomics.com/page6.html>

³ <http://www.powerergonomics.com/page17.html>