

## **UAT - The Weapon for tattoo artists against backpain**

If you tattoo regularly and keep dealing with back or neck problems, then this article is for you!

If you want to keep doing your job sustainably and for a long time, without your back destroying your work, then this article is for you!

By the way, this article will make much more sense if you read the whole thing. The pieces will slowly come together!

Why do many tattoo artists — or people who sit a lot in general — often struggle with back problems?

Most people would probably say ... big surprise ... because they often have to sit hunched over while sticking their needle into another person's flesh.

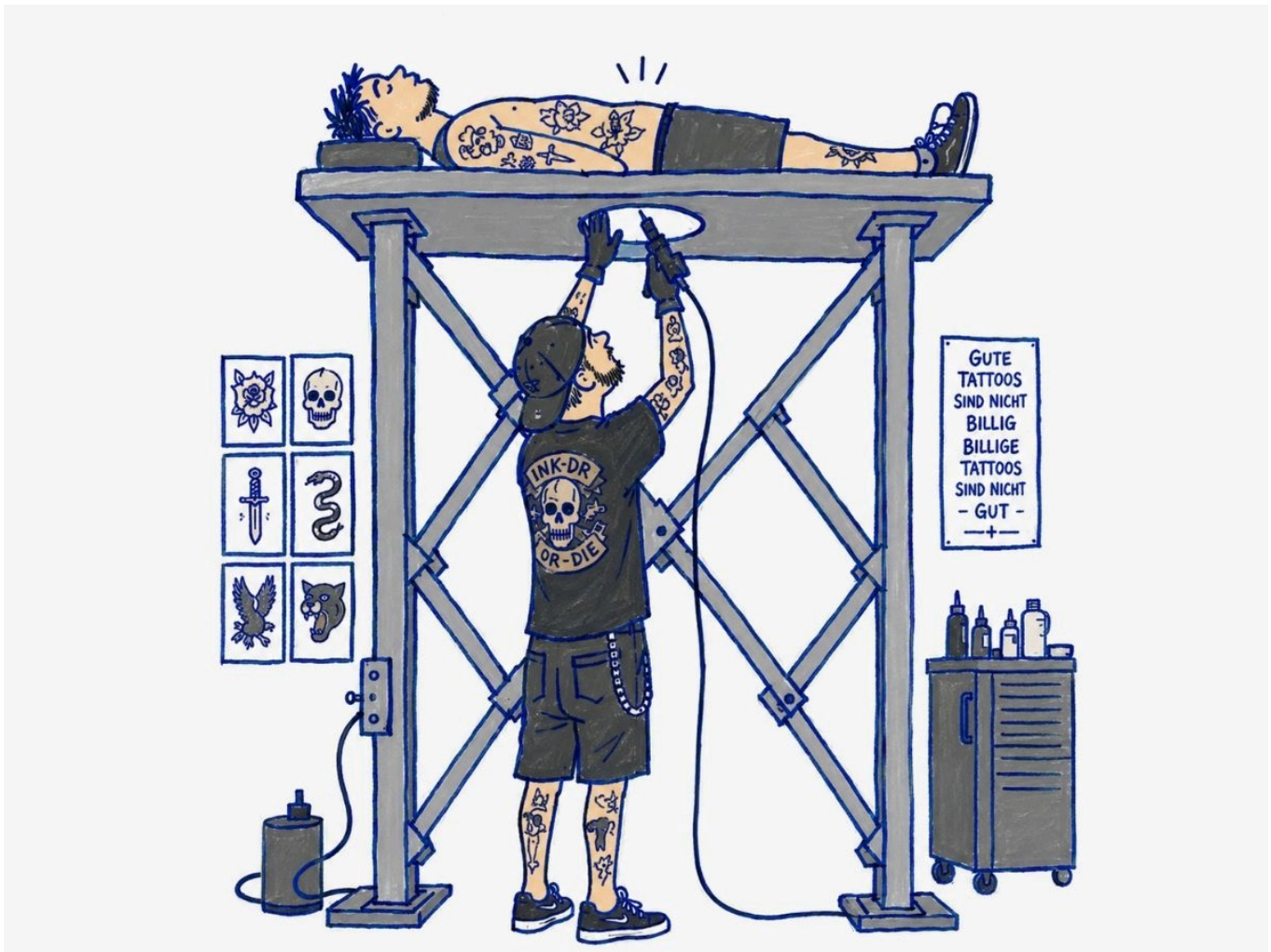
But that is an incomplete picture.

Today, let's look at the full picture and also see what you can do long-term.

Because as long as tattoo studios don't have height-adjustable lifting tables everywhere, it will simply remain the case that you often sit hunched over.

Just because it is your job, back problems do not have to be your destiny!

And the very first thing that will get you out of this cycle long-term is: understanding!



## How UAT gets you safely through your job

### U for Understanding:

A flexed posture is not a bad thing. Flexing your back is not a bad thing.

I even recommend consciously training flexion, just like everything else the back can do — side bending, rotation, extension — in order to build more resilience in those positions when we use them in everyday life.

But there is a difference between spending hours in that position every single day and deliberately going into that position during training from time to time.

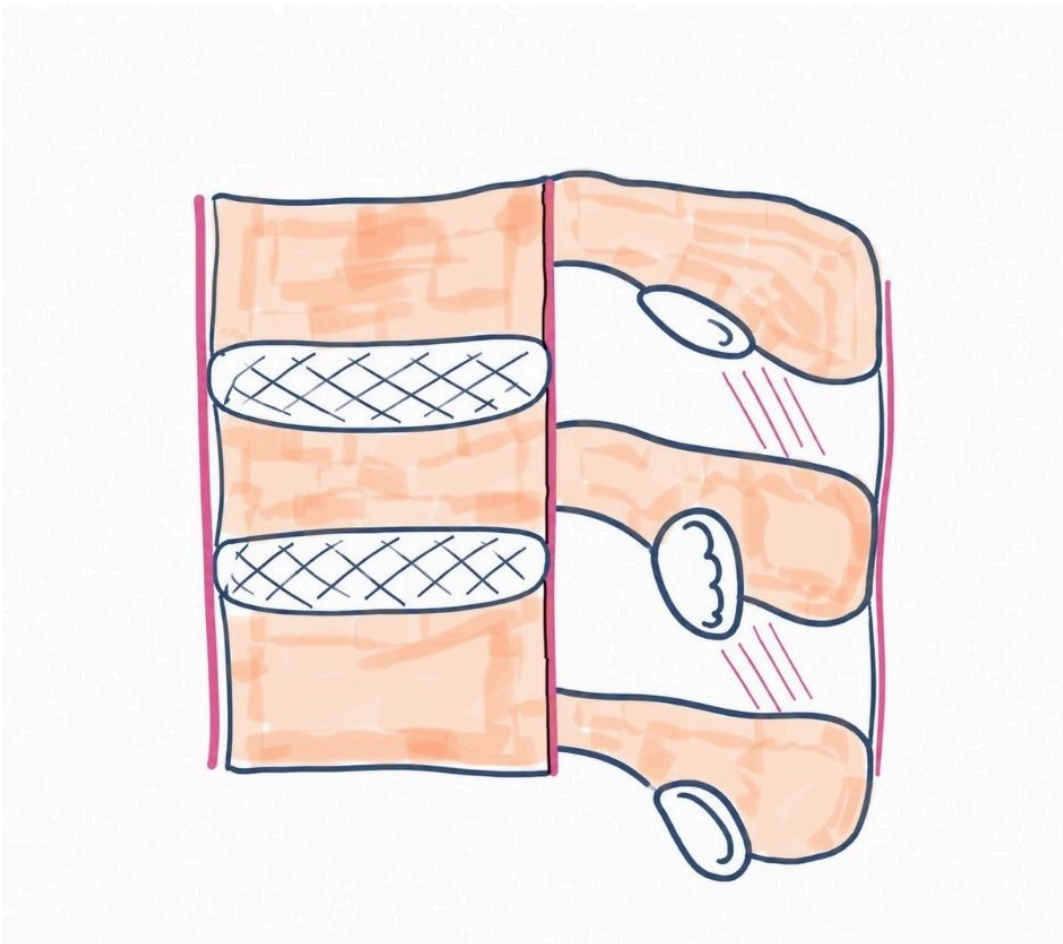
### Creep Effect:

The creep effect, or ligamentous creep, describes the phenomenon that occurs when ligament structures in the back are put under tension for a longer period of time.

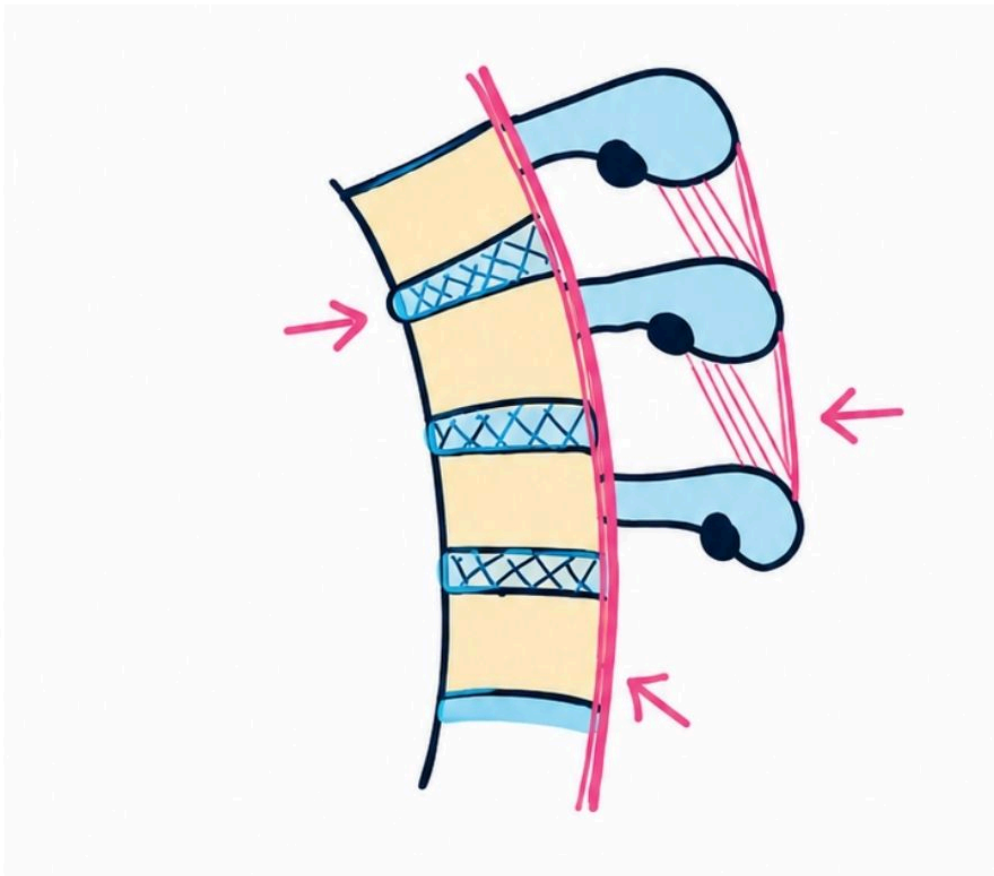
If the ligaments are held under tension long enough — sitting hunched over — their length increases, stiffness temporarily decreases, and tension in the tissue drops.

That is the creep effect.

Like a rubber band that you keep under constant tension until it no longer snaps back into its original shape.



No creeping here



Its creeping here

These effects are also used during stretching, for example. After 30 seconds, the first “creep effects” can already be observed.

But don't panic: these changes are not permanent, and your ligaments return to their original state after some time.

It is not the one-time thing that can become the problem, but this:

What happens if I provoke this ligament tension through crouched sitting for several hours a day, 5 days a week, over months and years?

Now add to that the fact that your back has very low tolerance in this position because you either never train or train stupidly.

The road to your back problems is paved.

Your life shapes your spine. Your body adapts.

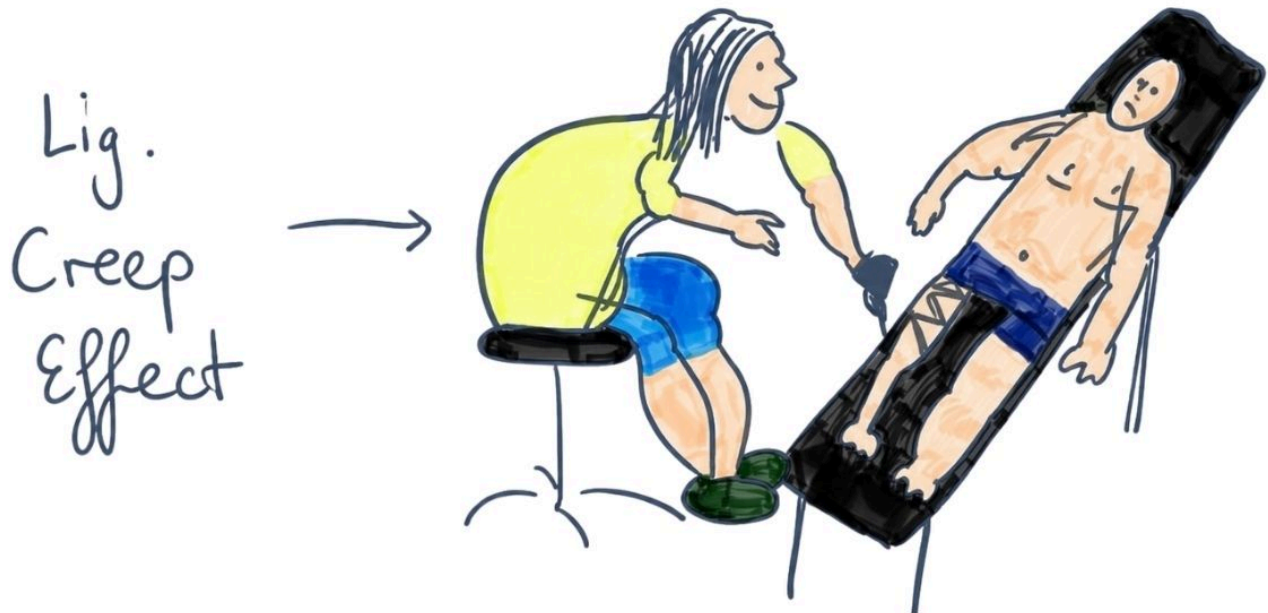
Do you hang around all day? Then you become a hanger.

And don't forget: What do you regularly do when you are not tattooing?

Do you drive home in your car and then collapse onto the couch?

Probably not the best idea, and that will only feed further into this whole creep story.

Many chronic “non-specific” back pains are now interpreted as a consequence of ligamentous creep (Solomonow et al. 2012).



Your waking day has something like 16 hours.

7–8 hours of sleep, a few hours of tattooing.

How do you spend the rest of the day, my friend?

That is an important question if you want to understand why your back is causing problems.

We should always look at the whole day, at your whole life, always at you as a person, in order to understand where the problems are coming from.

This will become even clearer in a moment.

## **Danger Detectors**

Look, you have small danger detectors everywhere in your tissues — nociceptors.

They also sit in these ligaments around the spine.

And they are actually responsible for those short-term posture-related pains.

You probably know it too: when you sit collapsed for a long time, at some point your back starts to hurt.

The ligaments are constantly under tension, and these little sensors tell your brain:

Yo, dude, move a bit. It's getting uncomfortable back here.

Then we move into another position and everything is fine.

By the way, the same thing would happen if you sat forever in an overextended position.

You can try it out: sit like a tin soldier the whole time.

That simply puts other structures in the back under tension, but the principle is the same.

## **Load Distribution**

From a biomechanical perspective, the spine offers favorable load distribution and high stability in a neutral position.

This is where the most even load distribution in the intervertebral disc occurs.

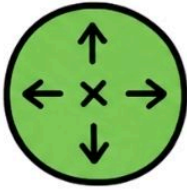
In a neutral position, the spine can absorb high loads without individual structures being excessively stressed.

The vertebral body presses broadly onto the disc.

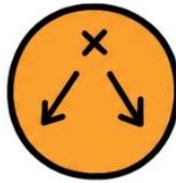
With flexion and extension, this force distribution shifts toward either the front or the back part of the disc.

And again: nothing bad at first. The dose makes the poison ...

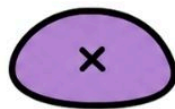
Neutralstellung



Beugung



Streckung



Langfristige  
Anpassung

*Purple shows a possible adaptation to years of hunching. At some point, your structures change in a way that makes extension in the thoracic spine no longer work as nicely as it used to.*

## Posture and Movement Variety

Many people would see posture as something static. A snapshot.

Posture is not static.

Posture changes throughout the day.

Posture is dynamic.

For me, what matters much more is how many postures and positions you can assume, perceive, and control.

The more movement options you have, the better!

Think of the sentence from above:

Your life shapes your spine.

If you now hang around forever in this crouched position, then your body and your structures — ligaments, muscles, bones, ligaments ... — will adapt.

And over the long term, you will have less competence in properly straightening your back.

Your spine loses movement options.

And that sucks.

See the illustration above, purple.

And that leads to problems.

Fewer movement options, less variability in your everyday life, in your postures, in your movements, means that the same structures are always being loaded.

It is much nicer when loaded structures can also rest for a bit and other parts of your body take over the load.

Bottom line:

If you tattoo for 4 hours straight and sit the whole time like the woman in my beautiful sketch above, then it is completely normal at first that the danger detectors in the ligaments and muscles of your spine signal to your brain:

Yo, move a bit. This is getting uncomfortable.

Your body signals this to you through pain and that feeling of tension everyone knows.

Nothing unusual so far.

The questions remain:

What can we do about this long-term, and how can you prevent this situation from ending in chronic back pain or a herniated disc?

## **A for Awareness**

Posture only becomes a problem when you cannot leave it, when you do not perceive it, or when you are stuck in it for other reasons.

Imagine it like this:

If you press your two fists flat against each other, then the areas that press against each other are loaded.

Do that for 20 minutes and you will slowly start to feel the areas that are in contact the whole time.

The same principle applies when people lie in hospital for a long time, cannot move, and develop pressure sores — decubitus.

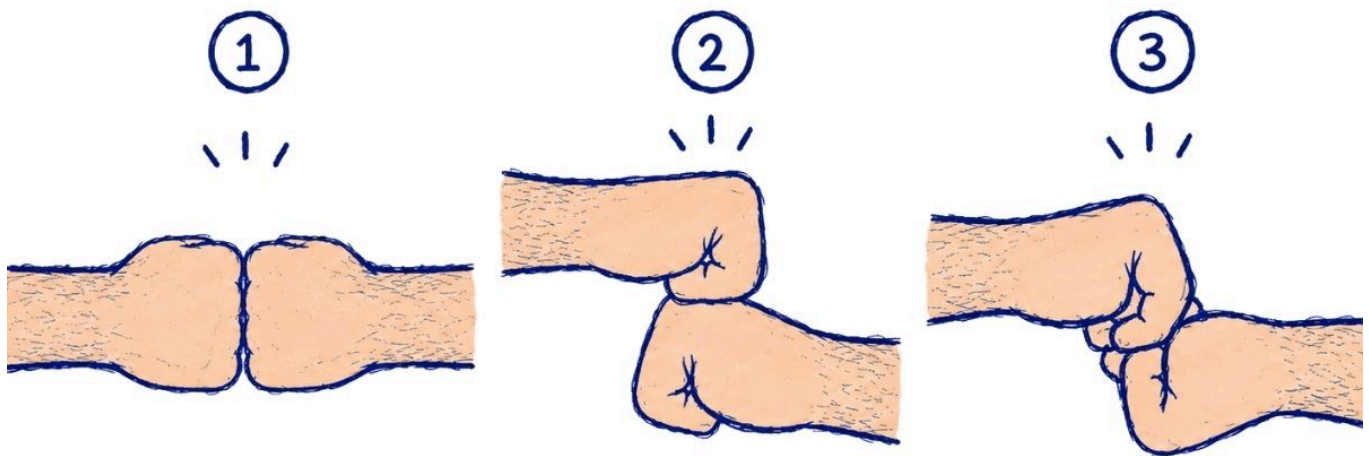
Same principle, just the extreme version.

But if you now slightly move your fists against each other, you will notice that the loaded areas change.

That is how you can imagine it in your back too.

The more movement options you have, the better your body awareness and control, the easier it is to redistribute load and give tissues a “break”.

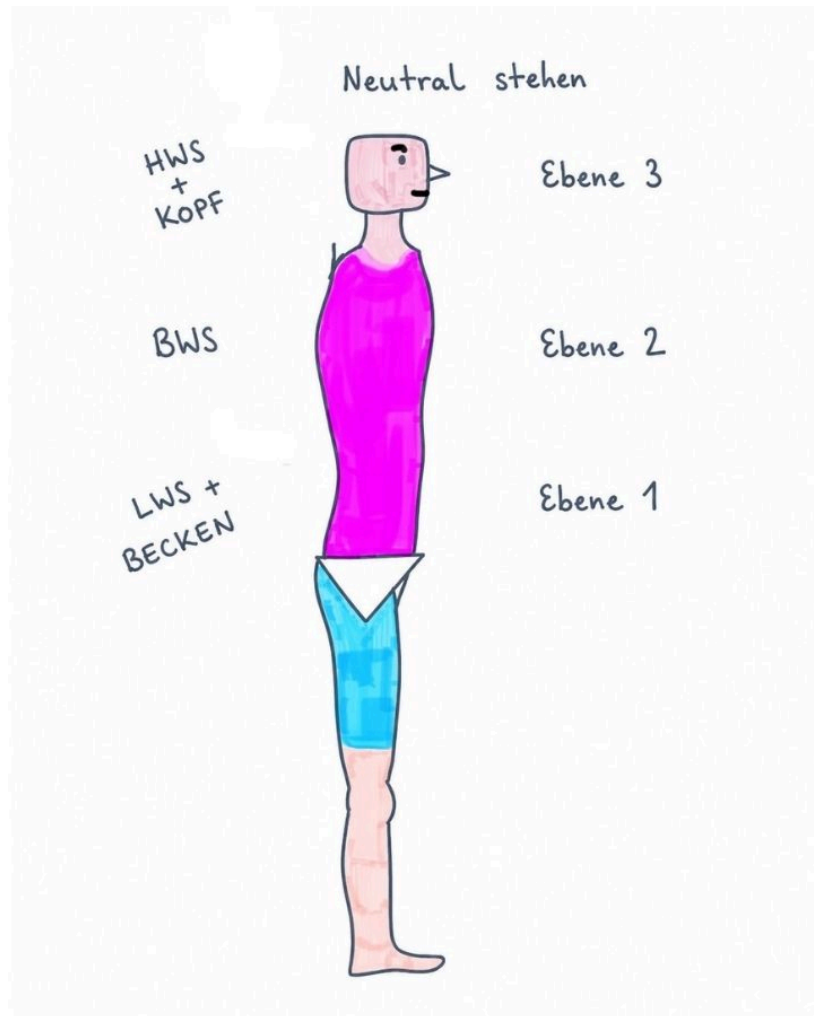
Otherwise, overload happens ...



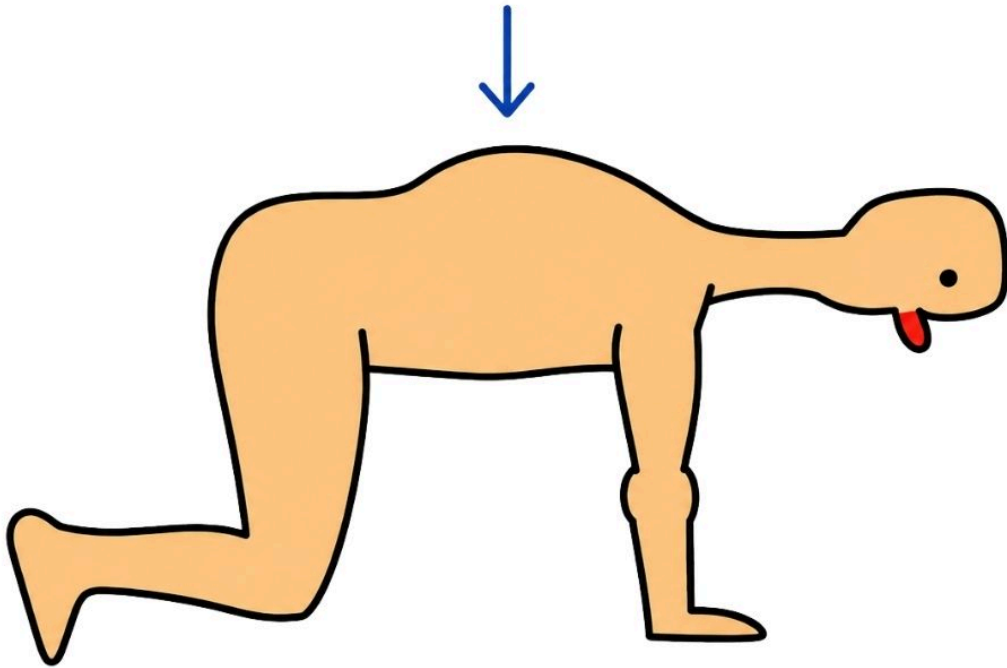
That's why:

1. Learn to stand neutrally / sit neutrally.

1. Where is my lumbar spine & pelvis, where is my thoracic spine, where is my cervical spine?

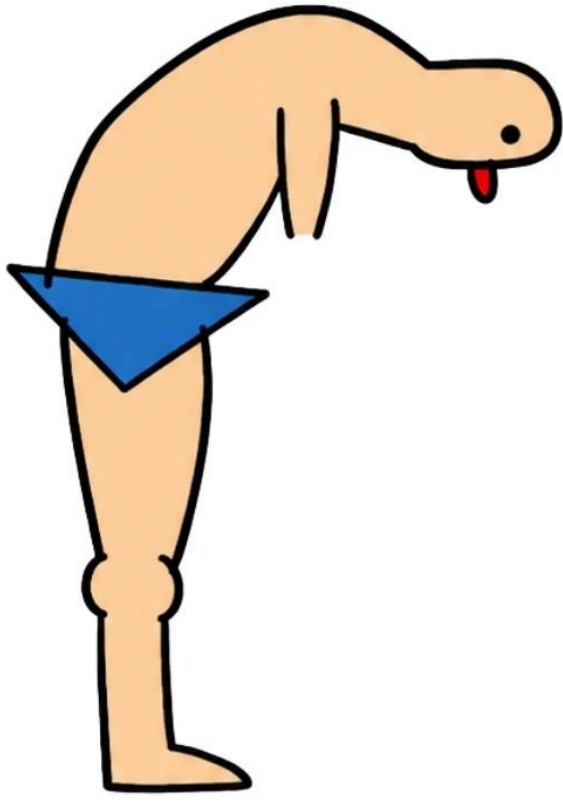


2. Learn to control the 3 planes of the spine separately from each other, segmentally.  
Cervical spine & head / thoracic spine / lumbar spine & pelvis.



*Can you move your spine only in the thoracic area without moving the lumbar spine and cervical spine — and the other way around?*

3. Learn the difference between bending from the back, bending from the hip, bending from the thoracic spine, or bending from the cervical spine.





Once you have awareness of your sitting position or your body position in general, and you have explored different ways of flexing, the first step is already done.

Oh, by the way:

You may have heard the sentence:

The next sitting position is the best.

Which ultimately just means:

Change your position every now and then — aka move the fists that are pressing against each other from time to time.

Every 10 or 20 minutes, whatever.

The main thing is that you do not freeze.

If you skip it for one day — yeah, screw it.

But what does your regular behavior look like during the week, over the years?

## **Micro-Movements**

Small micro-movements during the session can also be helpful.

I get it, you cannot jump around on your chair while you are working.

But what about small micro-movements of the neck, thoracic spine, lumbar spine, and pelvis?

Now the next point:

## **T for Tolerance – The SAID Principle**

Tissue always adapts to its specific demands.

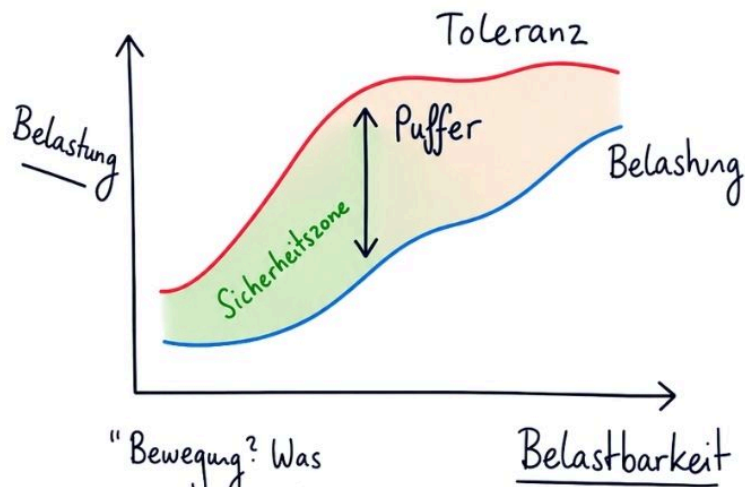
That means:

If you regularly train in flexion under controlled conditions, you will often develop a higher tolerance in flexion.

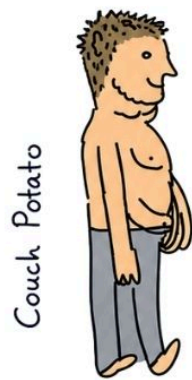
Specific Adaptation to Imposed Demands — SAID principle.

The greater the tolerance of your structures — muscles, tendons, ligaments, discs, and so on — the greater your safety buffer!

Take a look at the illustration:



"Bewegung? Was ist das?"



The same load can cause pain or injury in person A, while person B does not feel anything because their tolerance is much higher.

They are much more resilient.

That means the safety zone before individual tolerance is exceeded is much larger in Gorilla Human than in Couch Potato.

Imagine you suddenly started doing the same training as Usain Bolt tomorrow ...

After a short time, your hips, knees, and muscles would start complaining ...

because they simply do not have the tolerance.

So build yourself a solid tolerance so you stay healthy for a long time and have to worry much less about your everyday loads — like sitting hunched over.

And here comes another interesting point:

What do we want to make more resilient?

Clearly, the structures in the back that are loaded during this collapsed sitting posture.

So your back muscles — the spinal erectors that are lengthened in flexion — and the ligaments that are also put under tension.

How do most people train?

As if their upper body were in a cast.

Most people barely move their torso during training.

Pressing exercises, pulling exercises with hardly any movement in the spine.

Half squats and deadlifts with a straight back.

There is nothing wrong with that at first, but if that is all you do, then your structures are not being loaded fully!

In strength training, almost all joints are trained through their full range of motion, only the spine is not ...

And there is absolutely nothing wrong with training it.

What about rotation?

What about flexion?

What about extension and side bending and combinations of these movements?

Especially ligament structures only receive sufficient mechanical tensile load in end-range joint positions to adapt properly — meaning to become stronger.

And to gain more tolerance toward your hunched tattoo-work posture.

That is exactly what we want!

Start consciously paying attention to how you sit all day while tattooing.

Move out of your current position more often.

Find different movement options — movement variations!

Take breaks from time to time and stand up.

Try playing around with small micro-movements.

Increase your tolerance by training your spine properly — in flexion, in extension, in rotation, but also statically!

Exercises where you keep your trunk in a neutral position belong there just as much as exercises where something actually happens in the spine.

Both belong in a complete core training approach!

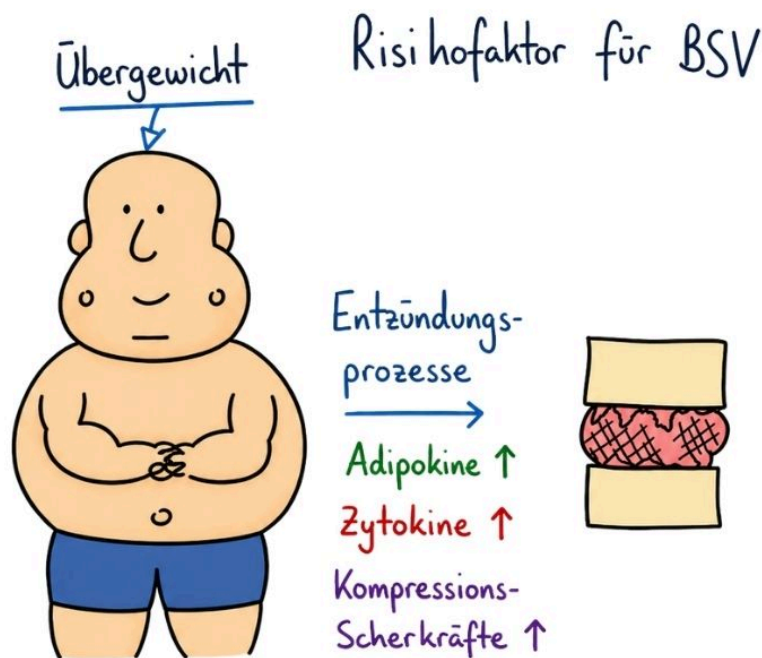
## What else plays a role?!

Whether you are prone to back pain or herniated discs does not only depend on your work posture and your training.

We know that being overweight can increase the risk of chronic back pain by up to 40–70%.

This is not only because of the increased load that constantly acts on the disc and structures of the back, but above all because fat cells are very metabolically active and inflammatory markers in the body remain elevated.

These inflammatory substances released by fat cells can enter the disc and trigger degenerative processes there.



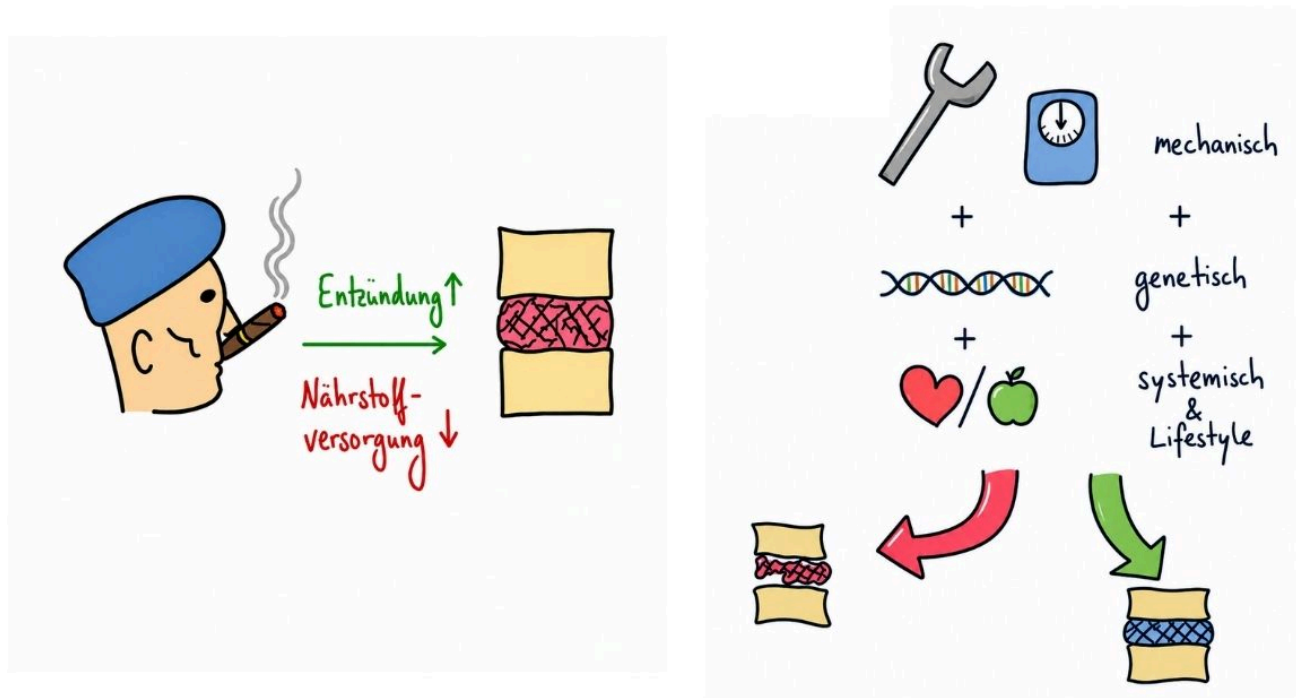
Risiko für chronische Rückenbeschwerden 40-70%. ↑

Your nutrition plays a role, whether you smoke plays a role, and your genes play a role too.

Unfortunately, we cannot do anything about that.

Some people are simply born with genes that contribute to a more favorable composition of connective tissue.

Others picked the wrong parents.



## What most people get wrong

Now let's look at the end at what most people still get wrong.

If you have acute back pain or are currently recovering from a herniated disc, then please do not make the following mistakes:

1. Avoiding painkillers and pain triggers

Instead:

Avoid painkillers and anti-inflammatories — only use them if absolutely necessary.

Inflammation is healing!

First, avoid the movements your back reacts sensitively to.

Does your back react sensitively to flexion?

Okay, then you have identified an acute pain trigger, and that is what you need to avoid in the acute phase.

That is why it is so important that you have different movement options and can feel how you are currently bending down to the floor, for example.

Only through the back?

Or through the hip — hip hinge?

Or are you using more of a squat?





2. Do not confuse trigger and cause

Instead:

Do not confuse the pain trigger — flexion — with the cause of your symptoms.

Flexion itself is not the problem.

The interaction of many factors was the problem!

Maybe that one flexion movement was the straw that broke the camel's back, but it was not the cause.

There are no bad movements.

Only movements your body is not prepared for and that then become a problem.

Or maybe it was simply too much of a good thing?

Tattooing 7 days a week in a hunched posture?

Then doing Jefferson Curls in training?

Smoking 12 packs, stress with your girlfriend, eating like crap?

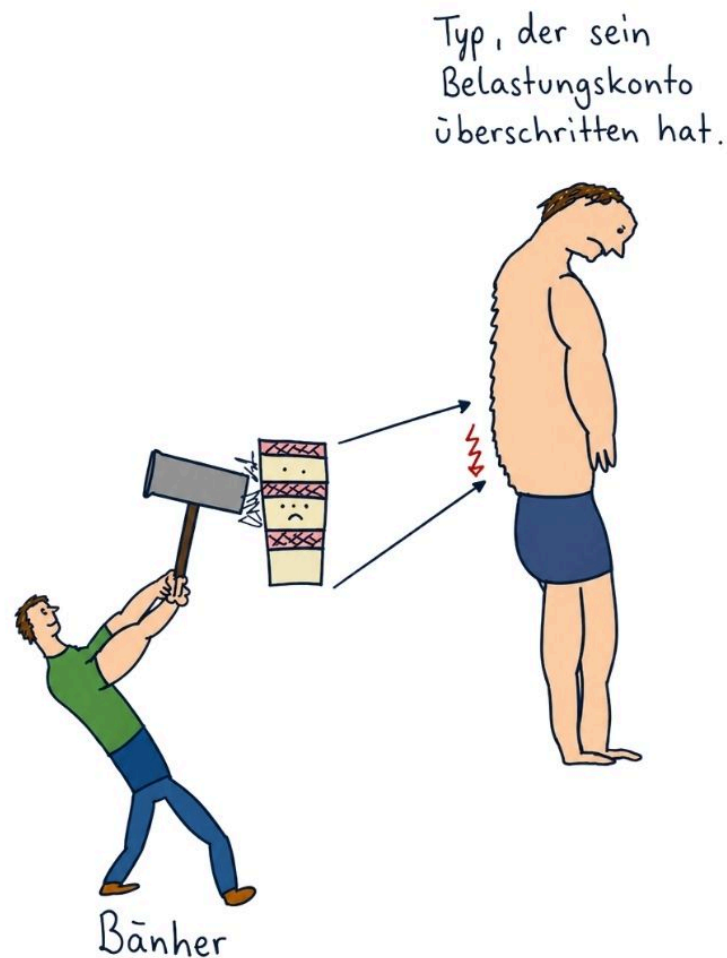
You cannot ignore all of that ...

Every person has a load account ...

Everything gets paid into it — work stress, postural stress, training, nutrition, lifestyle, emotional stress, and so on.

If that account gets overdrawn, then boom.

Then the banker comes and beats your disc out of you as punishment ...



### 3. Getting stuck in avoidance long-term

Instead:

After a certain amount of time, once you have given your back time to calm down, you are allowed — and you have to — find your way back into movement.

Even into the movements that are connected with fear.

Of course, you should not go all in right away, but gradually work your way back.

Start with easy-peasy flexion movements, build them up slowly, see how your back reacts, and guide it step by step back to where it used to be!

Regain trust in your back and in movements you are afraid of because they may have triggered pain before.

Hey, if this article helped you or you liked it and you know someone who maybe needs to hear this, feel free to share it!

Now have fun tattooing for the rest of your life.

By the way, I am planning a first test run soon for a three-month group coaching program for tattoo artists and heavy sitters who deal with back problems ... or who want to take preventive action.

If you are interested, feel free to reach out to [julius@julius-teuber.de](mailto:julius@julius-teuber.de) with the subject "back pain prevention group coaching"

Best,  
Julius