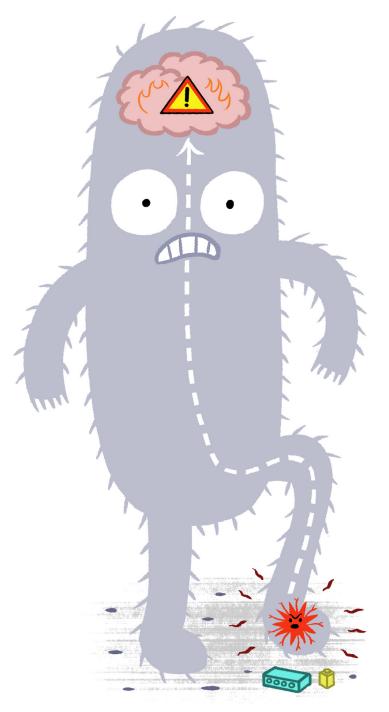
### It may seem weird, but it's true!

# ACTUALLY HAPPENS IN YOUR BRAIN



Pain is just a signal.

We don't mean it in the "it's all in your head and you're crazy" way, but in an actual, real, this-is-how-your-body-was-designed way. For you to experience pain as you know it, a signal from the body has to actually reach your brain. Pain is your body's warning alarm system letting you know that something might be wrong, and that you should pay attention in case you need to do something to keep yourself safe or prevent some damage to your body.

This is really useful if we have something like appendicitis or break an arm (or step on Lego!). In those cases, we need to take action to take care of the problem. But sometimes that warning system can send a signal when we don't need it because

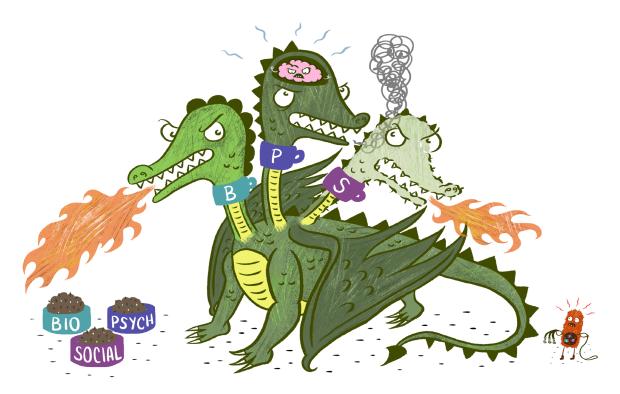
- 1.) Our body is already safe and okay and/or
- 2.) We've already done all the things we need to do

Once that pain signaling system is no longer telling us anything new or helpful, that signal becomes like someone ringing a doorbell over and over again: not helpful and really annoying.

This can happen with things like headaches, stomach pain, and pain in your body that sticks around much longer than it needs to.

When that happens, the challenge is what to do with that unhelpful signal. The great news is that there are A LOT of things we can do to turn down, turn off, or ignore those pain warning signals.

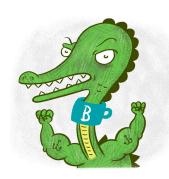
And here's a secret: you most likely already know how to do some if not all of them! To figure out what you like and could work best for you, let's take a second to learn a little bit more about how pain works.



It can be helpful to think of pain as a

## THREE HEADED DRAGON

Why? Because you might not have thought about it this way before, but the experience of pain has three parts: BIOLOGICAL, PSYCHOLOGICAL, and SOCIAL. Understanding each of these three parts is really powerful because it opens up many possibilities for making things feel a lot better. You can use this information to help yourself with any pain...from a little stubbed toe to headaches and stomachaches to major injuries.



#### **BIOLOGICAL**

The biological part of pain is the one we are most used to thinking about. It means obvious things like how bad an injury was and what kind of damage was done to our body, but it also involves things like our physical stress level, how tired or hungry we are, how much sleep we got, eating healthy food, and whether or not we have some other kind of infection or illness. All of these things affect how pain feels to us.



#### **PSYCHOLOGICAL**

Have you ever noticed that it hurts much worse when you stub your toe when you are in a bad mood than when you're in a good mood? That isn't a surprise...our mood and our thoughts impact how we feel pain. Stress, anxiety, and worry about what is happening around us can all make pain worse. Pain feels better when we feel more in control and have good coping skills. This doesn't mean we're weird or crazy, it's just the way human bodies work.



#### **SOCIAL**

What is going on around us and how people act around us when we feel pain matters a lot. When there is a lot of stress around us, our pain can be much worse.

When we feel supported, believed, and taken seriously, it feels better. When people help support good coping skills, it makes a big difference.

## WHAT HELPS?

The overall goal is calming down our central nervous system, and turning down the dial of our stress.



Higher stress = more pain.



Lower stress = less pain.

Here are some skills and strategies that you can do almost anywhere to help yourself feel more comfortable and in control. Doing them helps calm down that central nervous system and change your experience of pain.



**BREATHING VIDEO:** 



**IMAGINACTION:** 



- 1.) DISTRACTION: Paying attention on purpose to things we like is a POWERFUL tool, and can totally change how we experience pain. When we focus on pain, it gets bigger. When we focus on something else, pain gets smaller. Distracting yourself by doing something like watching a video, playing a game, doing an art project, hanging with friends, or focusing on a book are all easy ways to tune out what is happening around you, turn down that stress dial, and turn down/turn off pain signals.
- 2.) BREATHING: It's the ultimate hack of your nervous system. Slow deep breaths trick your brain and body into calming down. When things feel out of control, it's great to know you can always control the pace of your breathing...and it makes a BIG difference. Notice how it changes the way you feel.

If you want, you can use the QR code to the left find a helpful breathing video.

#### **HOW TO:**

- BREATHE IN: 5 counts
- HOLD: 1 count
- BREATHE OUT: 5 counts
- HOLD: 1 count
- REPEAT



3.) IMAGINATION: Since pain happens in your brain, your imagination is one of the most powerful tools you have. Using your imagination and your focus of attention can totally transform how you experience pain and help you feel much more comfortable and in control. Some people call this self-hypnosis. To learn just how powerful this can be, we suggest checking out a website called *ImaginAction*. It was put together for Stanford Children's Health by some of the top experts in the world. You'll find a great video explaining how and why it works, and helpful audio recordings you use anytime you'd like.













- **4.) CONNECTION:** Being with people who make us feel safe and supported helps a lot. The touch of a trusted person can calm us and relax us. Hugs, back and head rubs, and holding hands can be really comforting. When friends and family members don't focus on the pain (remember...what we focus on gets bigger!) but help us find other things to pay attention to and do, it makes a big difference. This can also include telling stories, talking about fun times, or playing games.
- **5.) SLEEP:** Lots of sleep on a regular schedule is one of the best things we can do to regulate our bodies. Going to sleep at the same time at night, and getting up at the same time in the morning helps. While it is good to rest, try not to take naps (especially in the afternoon) as it can mess up our sleep schedule and sometimes make pain worse.
- **6.) EATING:** Eating good, healthy food on a regular schedule helps our body be less stressed.
- 7.) **MEDICINE:** If a doctor or medical provider has told you medicine could be helpful, be sure to take it as they recommend. Sometimes medications don't work as well or as fast as we'd like them to, so use your other coping skills to help yourself too.
- **8.) MOVEMENT:** When we are hurting, it's usually a natural instinct to not want to do anything and be still, but it turns out that can be a bad idea. As weird as it sounds, that can actually make many kinds of pain worse. Doing things like taking walks, light exercises, and moving our bodies is really, really important to improving pain. Having other people do it with us can help! If it's possible, working with a physical therapist who understands pain can be really useful for helping us out the best ways to get moving.
- 9.) SCHEDULE: When things feel out of control in our bodies and/or around us, having more structure is really important. Creating a schedule to follow that guides things like sleeping, eating meals, and doing school and play around the same time makes a big difference. It helps us feel more regulated, decreases stress, and calms down those pain signals.
- 10.) PSYCHOTHERAPY: As we've already covered, there is a BIG psychological part of the pain experience (and because it may need to be said again...this DOES NOT mean you are crazy or that your pain isn't "real"...it is just how human beings work!). You also already probably know that dealing with pain can be very stressful and takes a very specific set of coping skills. Since the big goal is to turn DOWN the stress dial, working with a good therapist can be a huge help. They can help you learn the coping skills that work best for you, provide support, and help you figure out how to get your life back to the way you want it to be.



Each time you use one of these strategies, it's going to help that much more. You will start noticing a big difference when you do them every day. Taming the pain dragon can take time, patience, and persistence, but it's pretty incredible to discover how powerful you are and the many ways you can have control over your body and experience.

