

Homework

Section Topics

Pain Knowledge

The more people know about pain, the less pain they experience. Read each of these statements about pain and decide whether they are true or false.

Q1 When part of your body is injured, special pain receptors convey the pain message to your brain. True False

Q2 The brain decides when you will experience pain. True False

Pain Knowledge

The more people know about pain, the less pain they experience. Read each of these statements about pain and decide whether they are true or false.

Q3 Pain only occurs when you are injured.

True False

Q4 The body tells the brain when it is in pain.

True False

Pain Knowledge

The more people know about pain, the less pain they experience. Read each of these statements about pain and decide whether they are true or false.

Q5 Nerves adapt by increasing their resting level of excitement. True False

Q6 Receptors on nerves work by opening ion channels (gates) in the wall of the nerve. True False

Pain Knowledge

The more people know about pain, the less pain they experience. Read each of these statements about pain and decide whether they are true or false.

Q7 Chronic pain means that an injury hasn't healed properly.

True False

Q8 Worse injuries always result in worse pain.

True False

Pain Knowledge

The more people know about pain, the less pain they experience. Read each of these statements about pain and decide whether they are true or false.

Q9 When you are injured, the environment that you are in will not have an effect on the amount of pain you experience. True False

Q10 In chronic pain, chemicals associated with stress can directly activate nociception pathways (danger messenger nerves). True False

Pain Knowledge

The more people know about pain, the less pain they experience. Read each of these statements about pain and decide whether they are true or false.

Q11 In chronic pain, the central nervous system becomes more sensitive to nociception (danger messages). True False

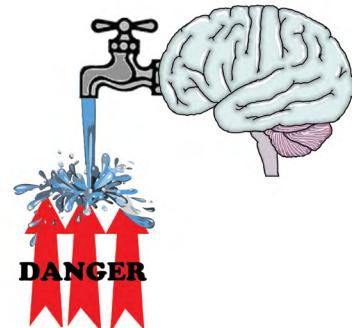
Q12 Nerves have to connect a body part to your brain in order for that body part to be in pain. True False

Homework 2.1

Sensitive Nerves: Questions

People who know more about their pain and how it works experience less pain. This allows the brain to produce a variety of pain medicine, helping you get better. The more you know, the better off you will be. Think about everything you learned about pain today. Write down any questions you may have so we can discuss them next time. This ongoing learning is key to your recovery.

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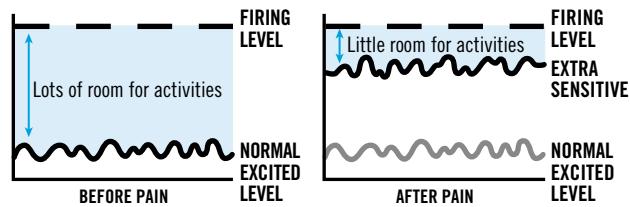
Homework

2.2

Sensitive Nerves: Extra-Sensitive Alarm System

Write down five things you used to be able to do before you developed pain. Then reflect on the fact that a main reason why you cannot do these tasks, or do them for very long, is due to your extra-sensitive nervous system, rather than an injury. Tissues heal.

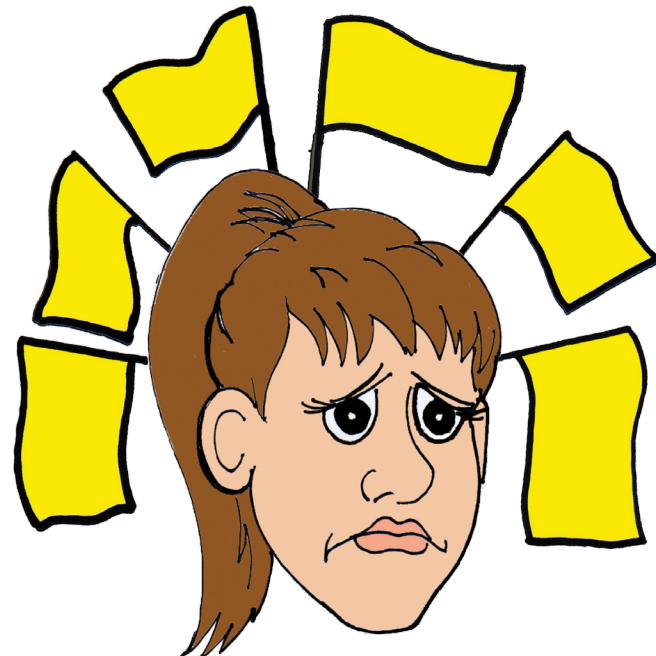
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Homework 2.3

Sensitive Nerves: Keeping the Alarm System Extra Sensitive

In people with ongoing pain, there are many issues going on that may keep the alarm system extra sensitive. Can you think of all the issues surrounding your pain that may be reasons why your body's alarm system has remained extra sensitive?

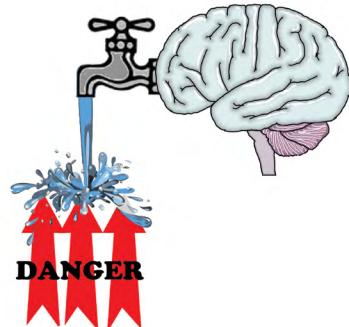


Homework 3.1

Nerve Sensors: Questions

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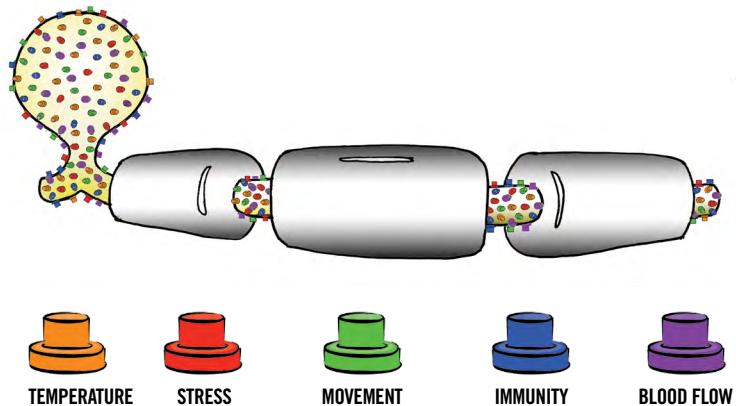


Homework 3.2

Nerve Sensors: Explaining Nerve Sensors

It is not uncommon to experience increased pain when it's cold outside or when you are stressed. Can you explain this to someone? Use the images below and explain nerve sensors to your family and friends, or write it out on a piece of paper for yourself. Here's a refresher:

- The 400 nerves in the body have sensors in them.
- They can become sensitive to cold, stress and movement.
- The sensors get replaced all the time.
- Experiencing pain when it's cold out or when you're stressed is normal and can be explained. It tells you that it's cold outside or you're stressed.



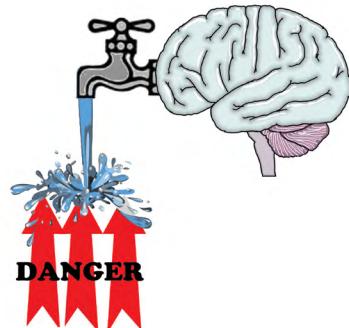
Homework

4.1

Nosy Neighbors: Questions

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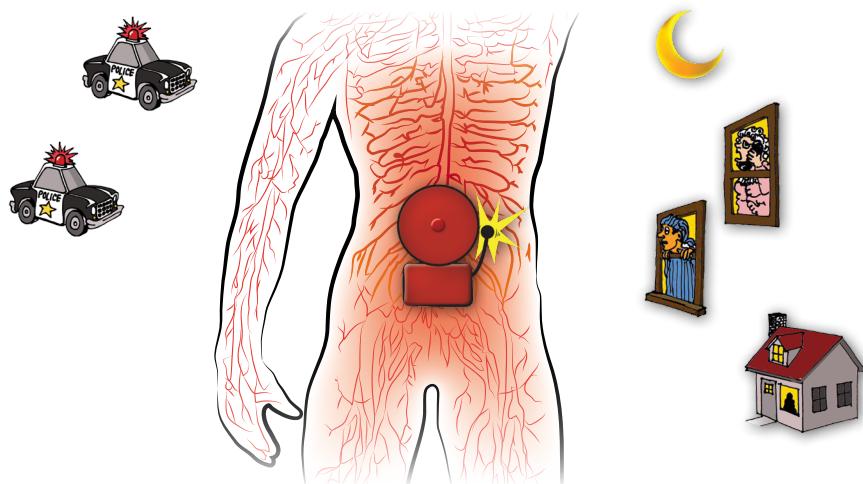


Homework

4.2

Nosy Neighbors: Explaining Nosy Neighbors

Can you explain nosy neighbors? Using the images below, explain to your friends and family how nosy neighbors result in you experiencing spreading pain. You can also write it out for yourself on a piece of paper.



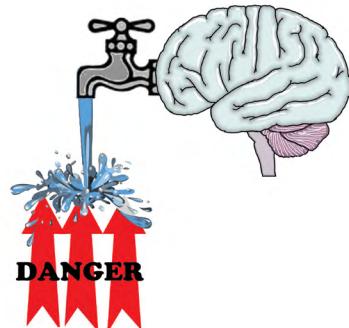
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5.1

Calming Nerves: Questions

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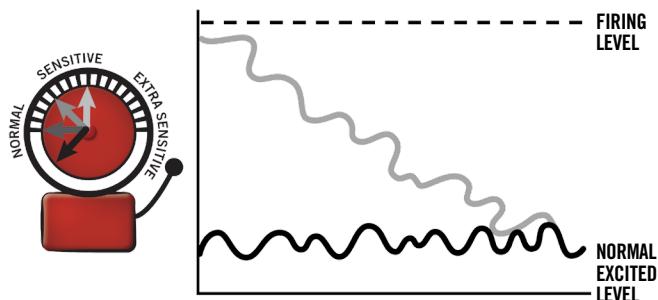
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5.2

Calming Nerves: Calming Nerves Down

A large part of your pain may be due to an extra-sensitive alarm system. Think of five ways you can help calm your extra-sensitive alarm system. What small things can you do, starting immediately, to help calm your nerves? You've already started number 1!

1. Learn more about how pain works.
- 2.
- 3.
- 4.
- 5.



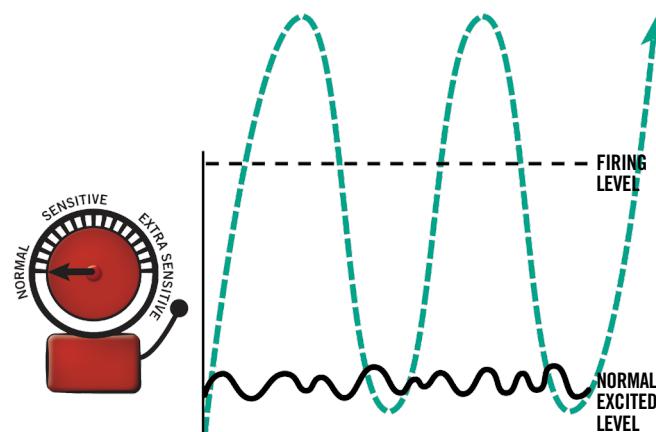
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5.3

Calming Nerves: Hard-Crash Cycles

Do you recognize this pattern? Go hard, get everything done and then...crash. Lay low for a little while and go again? Think of any tasks you do (housework, computer, sitting, driving, etc.) or exercises that follow this pattern. Write them down. Then think of ways you can break these activities and exercises into smaller pieces.

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Homework

5.4

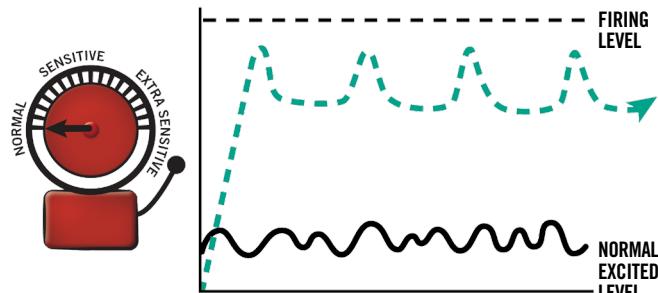
Calming Nerves: Fear of Pain

Have you noticed any tasks or exercises that you're afraid to do? You do a little, but back off as soon as you experience pain. Use this card to write them down.

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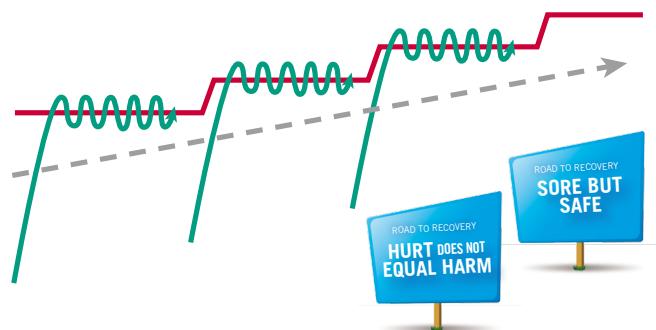
Reflect on the fact that the pain you experience is just due to an extra-sensitive alarm system and not necessarily signaling an injury. Now, prepare yourself to do a little more every day on your way to recovery.

Homework 5.5

Calming Nerves: Pacing and Graded Exposure

Think of a task you'd like to do or need to do.
Write it down.

Task:



Think of a small piece of the task that's achievable. Start small. See yourself doing that part and only that part. As you get healthier and understand more about your pain, increase the task a little bit. Over a period of time, increase the task a little more and then a little more. Eventually, see yourself completing the task, just as you imagined.

Homework

5.6

Calming Nerves: Sleep Hygiene

Below is a list of strategies to help you develop a healthy sleeping pattern. Choose one every day, and over time you will see the benefit. Use this as your sleep checklist:

- Set a time to go to bed—before 11pm.
- Quiet the house by turning off the computer and the TV.
- Reduce fluid intake in the evening.
- Reduce alcoholic beverages in the late evening.
- Darken and cool the bedroom.
- Remove kids and pets from your bed (no bed buddies).
- Park your ideas. Place a notepad and pen next to your bed.
- Relax, meditate or read a book before bed.
- Avoid checking e-mails or messages before bed.
- Stay in bed. If you cannot sleep, close your eyes and relax.
- Set a wake time, and stay in bed until then.
- Eliminate naps. If naps are needed, limit them to power naps of fewer than 20 minutes.
- Avoid caffeine in the late afternoons or evenings.
- Exercise during the day.

Homework 5.7

Calming Nerves: Develop an Exercise Program

Most people who don't exercise just don't have a plan. Research shows that 90 percent of exercise is setting a plan in place. Follow the sequence below to start:

- Measure your current resting heart rate. Find your pulse on your wrist or neck, and count the beats for 10 seconds. Multiply by six. Your resting heart rate is: _____ . Remember that you only need to get your heart rate up to 100-105 beats/minute, so it won't take much to get there.
- Choose your exercise. Make it something easily accessible, such as walking. If walking is not an option, substitute with biking or swimming.
 - Walking
 - Biking
 - Swimming
 - Other _____
- Choose the days of the week you'll be doing the exercise. We suggest five days a week, with two days off. Best to schedule a few days of exercise, a rest day, a few more days of exercise and then a day off. Schedule around your work and daily and family tasks to avoid undue stress.

Monday Tuesday Wednesday Thursday
 Friday Saturday Sunday

- Pick a time of day you'll do the exercise. The time can be different on different days. Write it next to the days you will exercise.
- Let people know your plan. You can share this with a spouse, a friend, a work colleague or a family member. Better yet, ask them to join you.
- Start small. If you have not done much exercise lately, do as little as three to five minutes to get started. Remember, you are very sore and sensitive. Take it slow, but get going. Every two to three days, add a minute. The goal is to reach 20-30 minutes of exercise, five days a week.
- Log your progress. Write down the date, time, duration and something positive that happened in your day. Log your sleep hours as well.

Homework

5.8

Calming Nerves: Logbook

Date	Sleep hours	Exercise	What was good today	Relaxation/Breathing?
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Homework 5.9

Calming Nerves: Breathing

Breathing properly helps ease your pain, gets more blood and oxygen to your sensitive nerves and calms you down. Use the following strategies to help you breathe better:

- Try to perform this exercise during a quiet time—time for yourself.
- Lie on your back on a flat surface or in bed with your knees bent and your head supported. You can use a pillow under your knees to support your legs. Place one hand on your upper chest and the other just below your rib cage on your belly. This will allow you to feel your diaphragm move as you breathe.
- Breathe in slowly through your nose so that your stomach moves out against your hand. The hand on your chest should remain as still as possible.
- Relax and let your stomach muscles go down as you exhale through your lips. The hand on your upper chest must remain as still as possible.
- Learn to do this while lying down. As you get better, you can do it while sitting, standing, etc.

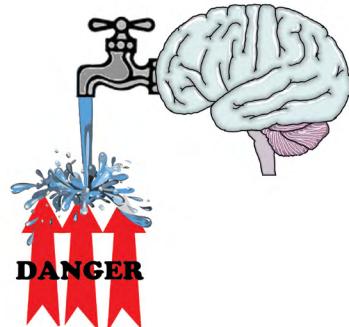


Homework 6.1

Pain and the Brain: Questions

People who know more about their pain and how it works experience less pain. This allows the brain to produce a variety of pain medicine, helping you get better. The more you know, the better off you will be. Think about everything you learned about pain today. Write down any questions you may have so we can discuss them next time. This ongoing learning is key to your recovery.

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Homework 6.2

Pain and the Brain: Tissues and Pain

Can you think of a time when you noticed a bruise, scrape or cut on your body, but couldn't remember when it happened? You experienced a tissue injury, but had no pain.

Can you think of any other cases where someone sustained a bad injury, but had no pain?

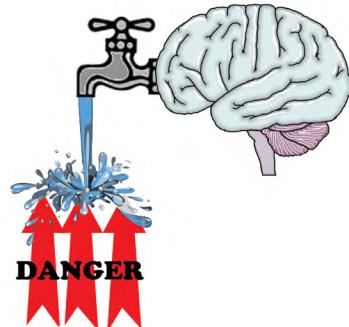


Homework 7.1

Brain's Pain Map: Questions

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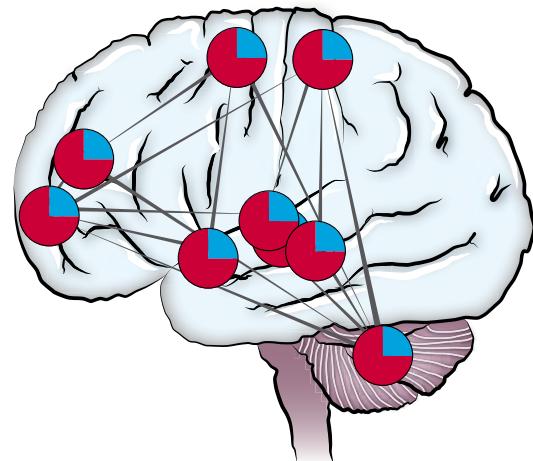


Homework 7.2

Brain's Pain Map: Pain Meeting

Think of all the issues you have had due to your pain. Below is a list. If you have had trouble with an issue, check the box. Now sit back and review your answers. Understand that the reason you struggle with these tasks is because the areas of the brain that control those tasks are involved in a “pain meeting.”

- Focus/Concentration
- Motivation
- Memory
- Movements
- Body Awareness
- Body Temperature
- Sleep
- Balance
- Stress
- Fear/Anxiety



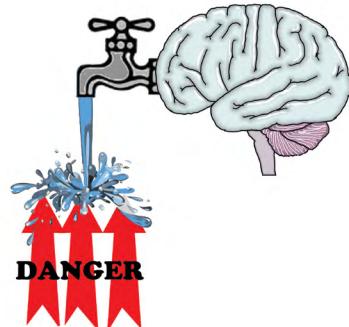
Homework

8.1

Body, Inc.'s CEO: Questions

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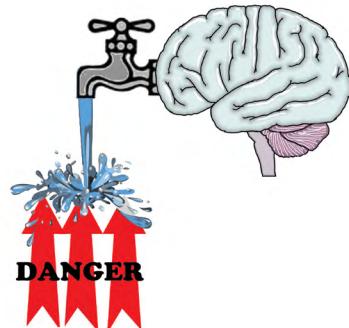


Homework 9.1

Lions and Stress: Questions

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Homework 9.2

Lions and Stress: Stress

What would you do if a massive, roaring African lion jumped into the room right now? Take a moment to think about it, and write it down.

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Homework 9.3

Lions and Stress: The Lion in your Life

The lion in our story represents the collection of issues you deal with on a daily basis since experiencing pain. Below is a blank picture of a lion. Take some time and write in all the issues you have been facing since you developed pain.

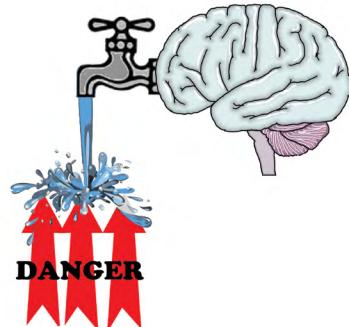


Homework 10.1

Tissue Issues: Questions

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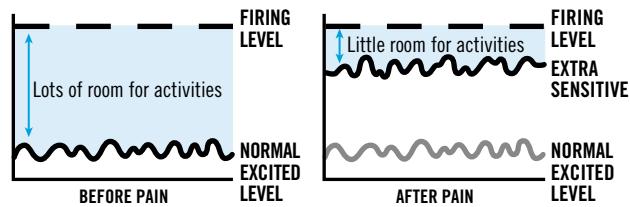


Homework 10.2

Tissue Issues: Extra-Sensitive Alarm System

Write down five things you used to be able to do before you developed pain. Then reflect on the fact that a main reason why you cannot do these tasks, or do them for very long, is due to your extra-sensitive nervous system, rather than an injury. Tissues heal.

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Homework 10.3

Tissue Issues: Tissues and Pain

Can you think of a time when you noticed a bruise, scrape or cut on your body, but couldn't remember when it happened? You experienced a tissue injury, but had no pain.

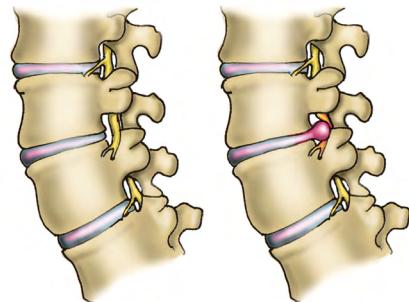
Can you think of any other cases where someone sustained a bad injury, but had no pain?



Homework 10.4

Tissue Issues: Bulging Discs

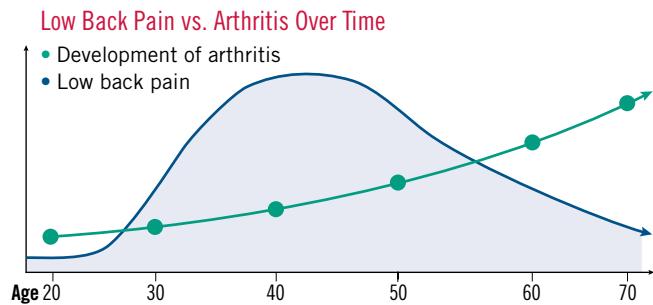
In your session, we talked about your tissues. Think for a moment, and write down why “bulging” discs may not be that big of a deal.



Homework 10.5

Tissue Issues: Arthritis

In your session, we talked about your tissues. Look at this graph. Explain this graph to a friend or family member, or write it down for yourself



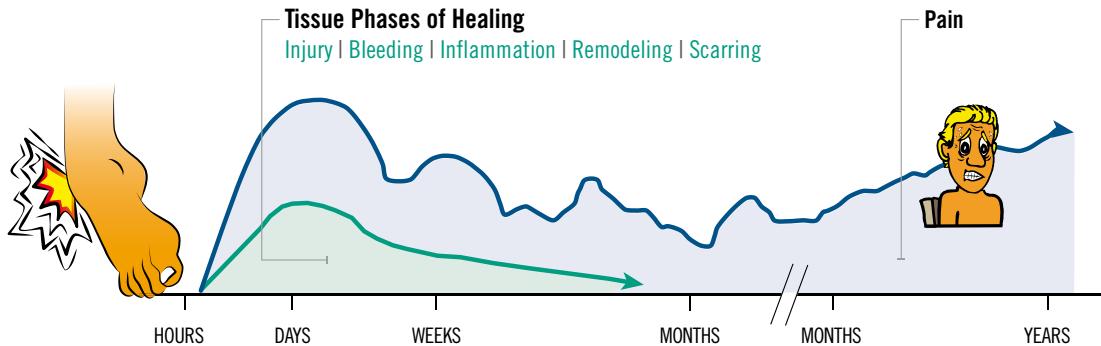
Homework 10.6

Tissue Issues: Tissues Heal

It is well established that most tissues in the human body heal within 3-6 months. How long have you had pain? Write it down.

Duration of pain: _____

Look at the graph below, and think about how a large part of your pain is likely due to an extra-sensitive nervous system

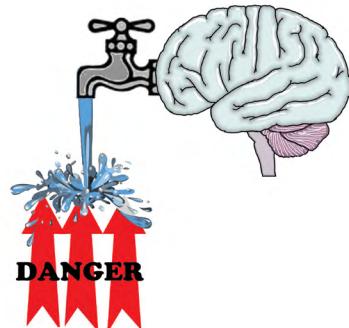


Homework 11.1

Neurogenic Inflammation: Questions

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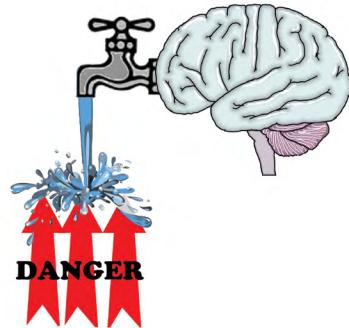


Homework 12.1

The Brain's Body Maps: Questions

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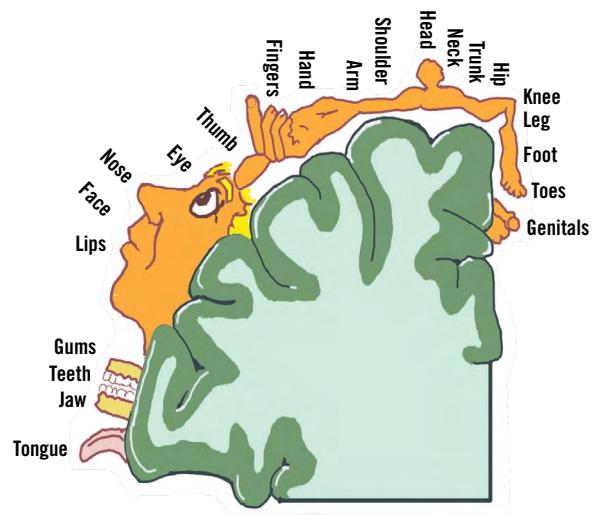
Homework 12.2

The Brain's Body Maps: Body Maps

Can you explain the body map image?

Use this image and explain the following concepts to your friends and family:

- Every brain has body maps.
- Using a body part keeps the maps sharp and in focus.
- When a body part is not used, maps become “blurred,” which increases pain.
- Movement and use restore body maps, easing pain.



Homework 12.3

The Brain's Body Maps: Restoring Body Maps

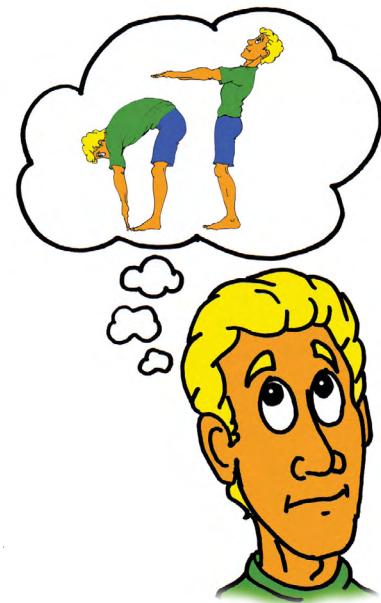
- The ability to and speed at which you correctly recognize body parts is correlated with pain.
- Page through a magazine from the cover to the back; every time you see the same body part in which you're experiencing pain, circle it. Make sure to only circle left or right parts.
- For spinal pain (neck and back), circle which way the spine is moving.
- If looking at a body part causes some stress or pain (for example, a hand), look at feet.



Homework 12.4

The Brain's Body Maps: Restoring Body Maps

- Body maps remain sharp when the body part is used, moved and exercised.
- In some people, movement causes too much pain or fear.
- Thinking of movements/tasks allows the maps to be “exercised” without causing undue pain or stress.
- Find a quiet place. Think of a movement/task you’d like to do; close your eyes and imagine yourself doing the task—do it for a few seconds, and then open your eyes; relax and breathe. Repeat.
- If an imagined movement causes fear or even pain, back off and try other movements; return to that movement as you recover.

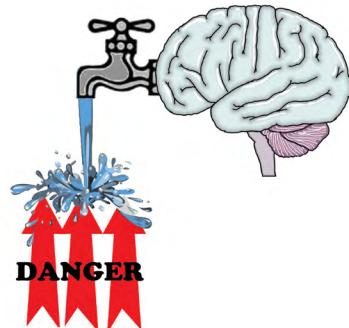


Homework 13.1

Immune System and Pain: Questions

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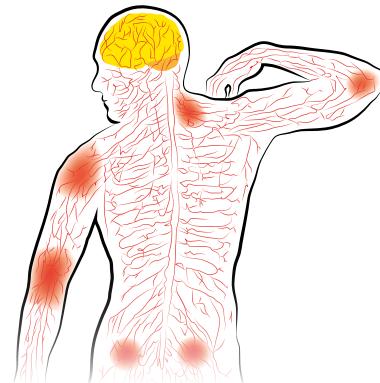
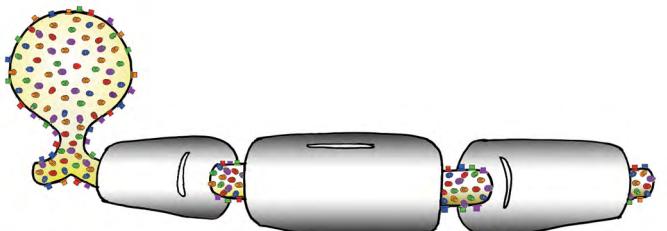


Homework 13.2

Immune System and Pain: Nerve Sensors

- When you have the flu, where do you hurt?
- All over, right?
- When we have the flu, immune molecules float through the body and set off nerve sensors that are sensitive to immune molecules.
- When the nerves all wake up, the end result is sore areas all over the body.

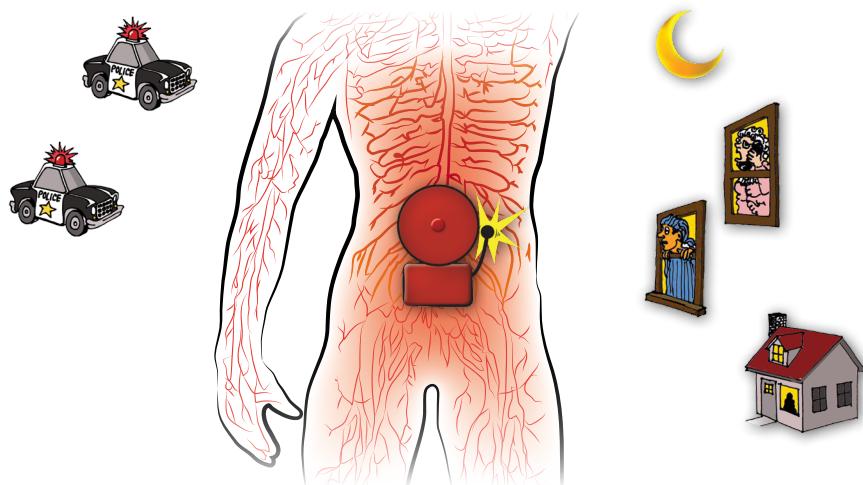
Use these images and explain this concept to a friend or family member, or write it down for yourself.



Homework 13.3

Immune System and Pain: Nosy Neighbors

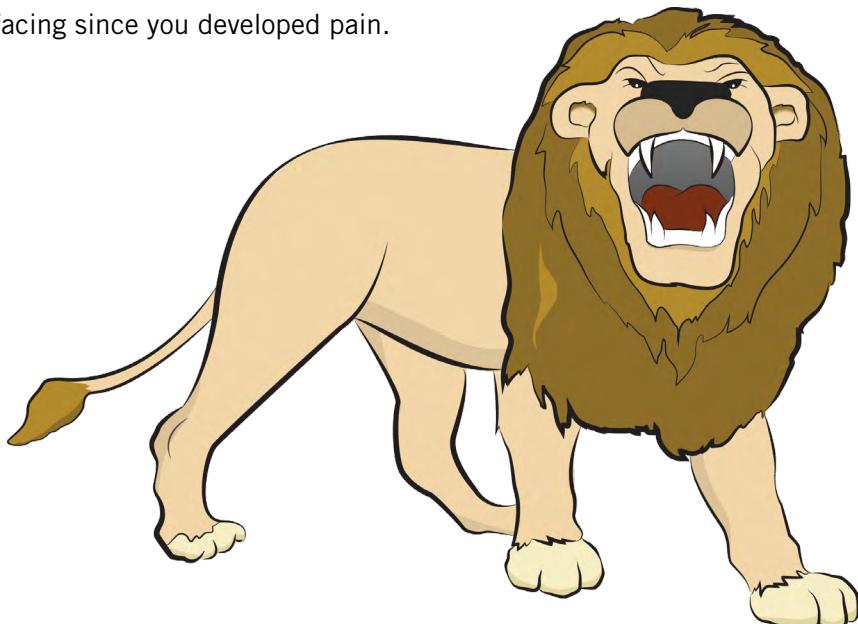
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Homework 13.5

Immune System and Pain: Sleep Hygiene

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Immune System and Pain: Develop an Exercise Program

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- Measure your current resting heart rate. Find your pulse on your wrist or neck, and count the beats for 10 seconds. Multiply by six. Your resting heart rate is: _____. Remember that you only need to get your heart rate up to 100-105 beats/minute, so it won't take much to get there.
- Choose your exercise. Make it something easily accessible, such as walking. If walking is not an option, substitute with biking or swimming.
 - Walking Biking Swimming
 - Other _____
- Choose the days of the week you'll be doing the exercise. We suggest five days a week, with two days off. Best to schedule a few days of exercise, a rest day, a few more days of exercise and then a day off. Schedule around your work and daily and family tasks to avoid undue stress.

Monday Tuesday Wednesday Thursday
 Friday Saturday Sunday

- Pick a time of day you'll do the exercise. The time can be different on different days. Write it next to the days you will exercise.
- Let people know your plan. You can share this with a spouse, a friend, a work colleague or a family member. Better yet, ask them to join you.
- Start small. If you have not done much exercise lately, do as little as three to five minutes to get started. Remember, you are very sore and sensitive. Take it slow, but get going. Every two to three days, add a minute. The goal is to reach 20-30 minutes of exercise, five days a week.
- Log your progress. Write down the date, time, duration and something positive that happened in your day. Log your sleep hours as well.

Homework 13.7

Immune System and Pain: Logbook

Date	Sleep hours	Exercise	What was good today	Relaxation/Breathing?
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Homework 13.8

Immune System and Pain: Setting Goals

Goals are important. They drive your recovery. Many people in pain have no goals or poorly defined goals. Below are some categories of goals. Read each one, develop a goal for each and write it down. Bring your goals list back so we may discuss it.

- **Exercise:** This could include a percentage of scheduled workouts from your exercise plan that you completed, a certain distance or time, completing a charity walk by a certain date, or losing X number of pounds.
- **Social:** Think of social activities you haven't done for a while and would love to get back into. This could include going to the mall; family gatherings; having the family, neighbors or friends over for dinner; date night; going to movies; going out to dinner; or meeting someone for coffee.
- **Tasks:** Think of tasks that would add to your quality of life if you could do them regularly. Certainly, no one likes doing laundry, but the satisfaction of being productive and helping the family is meaningful. This can include doing laundry, cleaning floors, vacuuming, cutting the grass, taking care of the flower beds, organizing closets or a garage, etc. Remember, it doesn't have to be done all at once.
- **Fun:** Think of the things you'd really like to do, such as dance, take a trip, complete a degree or start a business.

Homework 13.9

Immune System and Pain: Coping Plan

Your recovery will definitely have “ups” and “downs.” This is to be expected. On a “bad day,” many people ask themselves, “what do I do now?” The good news is that if you’re well-prepared and know what to do on a “bad day,” the pain, stress and anxiety will be less and the process will actually help your recovery. Below are some easy strategies. Work through them systematically:

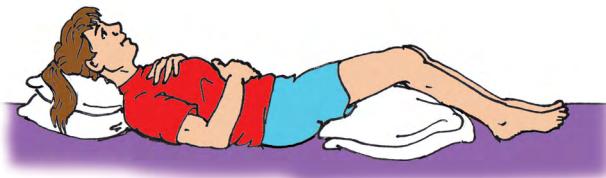
- **Normal:** Pain is normal and part of being human.
- **Problem solve:** Try to identify the trigger issues for your pain. By identifying them, you can develop strategies to deal with similar situations in the future. Remember, stress and emotions can also trigger pain.
- **Reduce pain:** Use any measure possible to ease pain. You may have found a little heat or cold to help. Perhaps a certain medicine eases the pain.
- **Move:** Once you stop, think and take action to ease some pain, start moving as soon as you can. Do a few stretches; walk a little, but keep moving.
- **Get Away:** Remove yourself from stressful situations. Take a short walk; go get a drink of water; take deep cleansing breaths as you walk.
- **No On/Off Switch:** When you’re having a bad day, don’t just cross out all your plans and stop. Prioritize; get some tasks done. This active way allows for better coping strategies and better recovery.

Homework 13.10

Immune System and Pain: Breathing

Breathing properly helps ease your pain, gets more blood and oxygen to your sensitive nerves and calms you down. Use the following strategies to help you breathe better:

- Try to perform this exercise during a quiet time—time for yourself.
- Lie on your back on a flat surface or in bed with your knees bent and your head supported. You can use a pillow under your knees to support your legs. Place one hand on your upper chest and the other just below your rib cage on your belly. This will allow you to feel your diaphragm move as you breathe.
- Breathe in slowly through your nose so that your stomach moves out against your hand. The hand on your chest should remain as still as possible.
- Relax and let your stomach muscles go down as you exhale through your lips. The hand on your upper chest must remain as still as possible.
- Learn to do this while lying down. As you get better, you can do it while sitting, standing, etc.

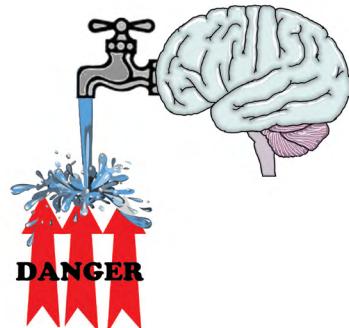


Homework 14.1

Emotions and Pain: Questions

People who know more about their pain and how it works experience less pain. This allows the brain to produce a variety of pain medicine, helping you get better. The more you know, the better off you will be. Think about everything you learned about pain today. Write down any questions you may have so we can discuss them next time. This ongoing learning is key to your recovery.

- 1.
- 2.
- 3.
- 4.
- 5.



Homework 14.2

Emotions and Pain: Keeping the Alarm System Extra Sensitive

In people with ongoing pain, there are many issues going on that may keep the alarm system extra sensitive. Can you think of all the issues surrounding your pain that may be reasons why your body's alarm system has remained extra sensitive?



Homework 14.3

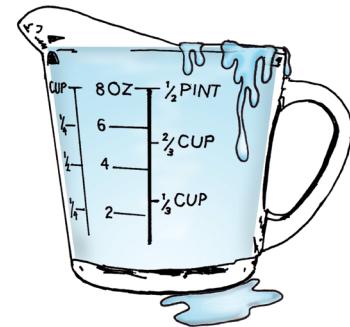
Emotions and Pain: Emotions and Pain

Tissue injury and pain are two different topics. Some people experience pain, but have healthy tissues.

Increased emotions along with various stressors in your life can cause the brain to produce pain in order to protect you.

On the right is a measuring cup.

Write down all the things you have had to deal with in regards to your pain/life since experiencing pain. Visualize how these issues may fill the cup, overflow the cup and then activate the alarm system.

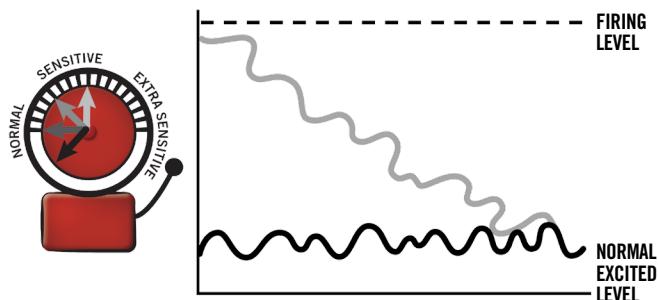


Homework 14.4

Emotions and Pain: Calming Nerves Down

A large part of your pain may be due to an extra-sensitive alarm system. Think of five ways you can help calm your extra-sensitive alarm system. What small things can you do, starting immediately, to help calm your nerves? You've already started number 1!

1. Learn more about how pain works.
- 2.
- 3.
- 4.
- 5.



Homework 14.5

Emotions and Pain: Tissues and Pain

Can you think of a time when you noticed a bruise, scrape or cut on your body, but couldn't remember when it happened? You experienced a tissue injury, but had no pain.

Can you think of any other cases where someone sustained a bad injury, but had no pain?

