

The Autonomic Nervous System (And How to Control It)

What is the Autonomic Nervous System?

The **autonomic nervous system** controls many of the organs in our body, including the heart, stomach, and intestine. In most situations, we are not aware that our nervous system is doing anything because it happens automatically. However, sometimes we become aware of these organs and the way our nervous system regulates them, like when we get scared or feel like we are in danger.

What are the two major parts of the Autonomic Nervous System?

The autonomic nervous system is made up of two major systems or parts that trigger different responses in your body:

- The “fight or flight” response
- The “rest and digest” response

The “fight or flight” response:

Your “fight or flight” response is an automatic physical reaction that happens in your body when you feel scared or think you are in danger.

Example: It is a nice, sunny day and you are taking a walk in the park. Suddenly, an angry bear appears in your path! Do you stay and fight or do you run away?

In a situation like this, your heart beats faster and you get ready to protect yourself. You are not likely to want to eat when your body is telling you to “fight or flight.”

The “rest and digest” response:

Your “rest and digest” response is an automatic physical reaction that happens in your body when you feel safe and calm.

Example: It is a nice, sunny day and you are taking a walk in the park. This time there is no bear, and you decide to relax and enjoy the warm sunshine.

In a situation like this, your “rest and digest” response is activated. Your heart beats slower and you can have a fun time without worrying. You may feel hungry too.

“Fight or flight” vs. “Rest and digest”: How they work

Response	Situation	Our body’s reaction
“Fight or flight”	Emergency, danger, stress, fear, or anxiety	<ul style="list-style-type: none">• Heart beats faster• Digestion slows• Pupils get bigger• Breathing gets faster
“Rest and digest”	Non-emergency, calm	<ul style="list-style-type: none">• Heart beats slower• Digestion is normal• Pupils get smaller• Breathing is slower and deeper

Why should I learn relaxation exercises?

Sometimes our “fight or flight” nervous system takes over even when it is not needed. Things in our environment can cause us to be scared or anxious. When this happens, our body may give us the message that we are in danger when we really are not.

We can learn to change our body’s response back to “rest and digest” through relaxation exercises. This skill is something that has been used in India and the

Far East for centuries and is incorporated into some forms of yoga, meditation, and martial arts.

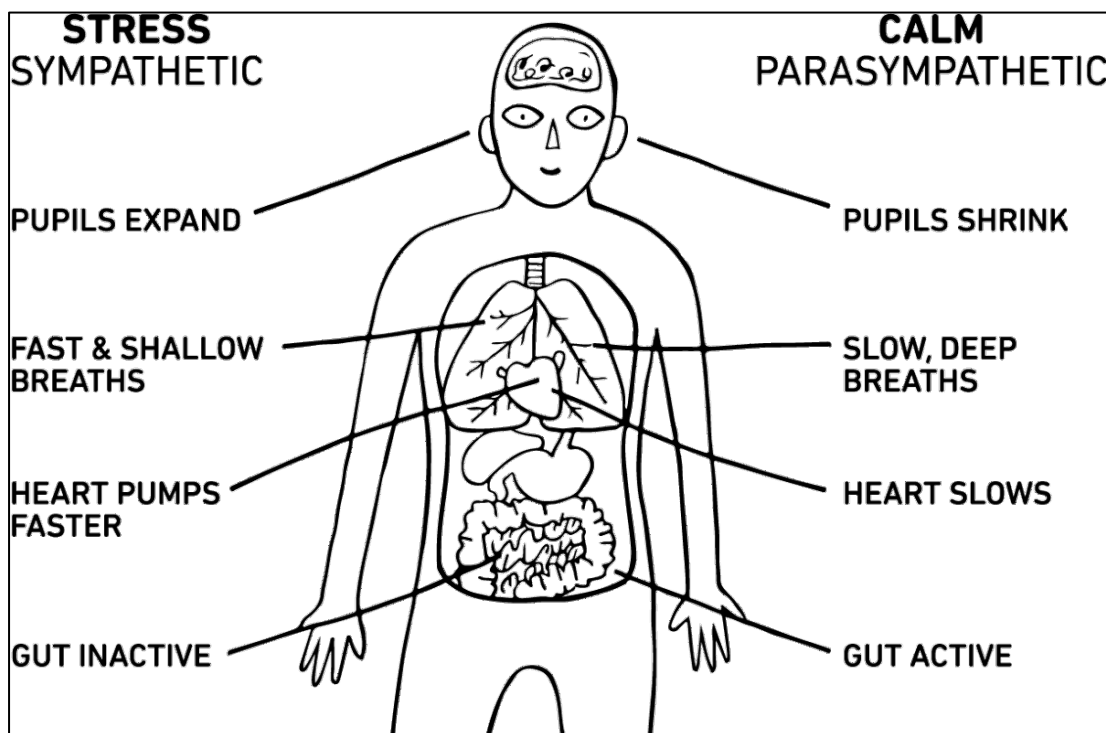
Relaxation exercises teach us to:

- Prevent or stop the “fight or flight” response
- Return our body to a state of “rest and digest”

The Autonomic Nervous System Diagram

“Fight or Flight

“Rest and Digest”



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How do I get my body to “rest and digest”?

We recommend three main ways to get your body to relax.

- 1) **Take deep breaths:** Deep breathing is the key to relaxation. Be sure to not breathe too fast though, or you might feel dizzy.
 - Steps for deep breathing (repeat 3 times):
 - Slowly breathe in through your nose, filling your lungs completely. (Tip: If you place your hand or a piece of paper

on your stomach, you should notice it lifting when you breathe in; this means you are using your diaphragm.)

- Hold your breath in for 5 seconds.
- Slowly blow out through your mouth. (Tip: Pretend you are blowing through a straw, an instrument, or blowing out a candle.)
- Relax for 10 seconds before taking the next breath.

2) **Tighten and relax your muscles:** We divide the body into eight muscle groups. You will tense and relax each group twice, as follows:

- Steps for tightening and relaxing your muscles (repeat 2 times):
 - Tense as tight as you can for 5 seconds.
 - Relax muscles for 10 seconds.
- Muscle groups:
 - Face (forehead, eyes, cheeks, nose, mouth, neck)
 - One arm (make a fist)
 - Other arm
 - Shoulders, chest, and back (push chest out, bring shoulder blades back toward each other)
 - Stomach (pull in)
 - Buttocks (squeeze)
 - One leg (point toes toward nose)
 - Other leg

3) **Imagine something you like:** This is a fun part!

- Choose a place or activity that you really enjoy.
- Some examples that other kids have chosen include: the beach, a bubble bath, lying in a field, walking in a magical forest, playing basketball, riding a bike, rollerblading, riding a horse, playing with a dog, and taking a trip to outer space.

- You can keep the same image each time you practice or you can change the image whenever you want. Don't worry if you lose focus; just try to get back to your image.
- Once you have chosen an image of a place or activity that you enjoy, notice the following:
 - **Circumstances** - Who is with you, where are you, when is it?
 - **Sights** - What can you see ahead, to the right, to the left...etc.?
 - **Sounds** - Can you hear voices, the wind, waves, birds...etc.?
 - **Feels** - Can you feel the warm sand or sun, water, breeze in your hair...etc.?
 - **Smells** - Can you smell flowers, cooking, coffee, candles burning...etc.?
 - **Tastes** - Can you taste a peach, chocolate, snowflake...etc.?

How do I use my new skill?

You may need to have your parents help you with this. Once you can take three deep breaths and imagine a favorite place or activity, we will look at the times when you are usually become upset, worried, or stressed. Then we will have you practice using your new skills **before** those things happen or as soon as you start to notice you are getting upset so that you can help your body relax.

Remember: This is a skill that you will need to practice. Expect that there will be times when you need to practice again/more intensely.

How do I keep track of how I'm doing?

It helps to write down how relaxed you get when you practice your relaxation techniques. Below is an easy way to do this.

Sunday					

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