

Hello and greetings to all of you from me.

I am Doctor Golder was assistant

professor at the Department of Psychology,

Poverty by Chocolate College of Arts

and Science Autonomous and I will

be talking to you today about the

divisions of the nervous system.

Module #4 of unit.

Two biological foundations of behavior.

Briefly, the points that I will

be covering are the divisions

of the nervous system made up of

the central nervous system,

the peripheral nervous system,

the somatic nervous system,

autonomic nervous system, sympathetic,

and the parasympathetic nervous system.

By the end of this video,

you will be able to describe the

divisions of the nervous system,

differentiate between the central

and the peripheral nervous system.

Compare and contrast the autonomic

and the somatic nervous system.

Describe the functions of the sympathetic

and the parasympathetic nervous system.

So let us begin.

Well,

it is understood and it is a

fact that the brain is the most

important organ in our body.

However,

this would be incomplete to say

without the support of a highly

complex and specialized system

known as the nervous system.

It controls the body's

functions such as sensation.

For example, you hold something hot.

Your brain gives you the message that there

is pain and you let go of your fingers.

Movement going from one place to another,

coordination that is taking food from
the play to your mouth balance without
tipping over and the nervous system
also regulates the action of other bodies.

Systems such as.

Blood circulation,
your digestive system,
and your respiratory
system along with others.

Moving on a brief overview of the
division of the Nervous system,
another system is divided into
the central nervous system and
the peripheral nervous system.

Somatic and autonomic are parts
of the peripheral nervous system.

The autonomic is further divided
into the sympathetic and the
parasympathetic nervous system.

Let us look at each of these
divisions in a little more detail.

The truly elegant system,

which is your nervous system because

it is highly organized and specialized,

has two major divisions.

The central nervous system,

which consists of the brain and

the spinal cord, the brain.

We all know the basic functions of the brain,

but the spinal cord.

You can imagine it to be similar to a rope.

It is consisting of a bundle of

nerves and each strand of the rope can

be compared to each single nerve.

The spinal cord is also responsible just

like the brain for basic processing

of information such as sensory information,

motor information and likewise.

The peripheral nervous system is the

other division of the nervous system,

which consists of a network of nerves

that connects the brain and the

spinal cord to other parts of the body.

So that means it's a connection

from your internal organs,

your skin to the central nervous system,

which consists of the brain

and the spinal cord.

The function of the peripheral

nervous system is to take

information too.

The central nervous system and

carry messages from the central

nervous system to the different

muscles and glands in order to

carry out its commands and activities.

Well. The peripheral nervous system

is also further divided into 2.

The somatic nervous system,

which consists of sensory nerves that

convey messages from the skin and

muscles to the sensory nervous system.

Which tells the muscles

ultimately what to do.

For example,

if you're holding a hot Cup of coffee,

there is a message that is sent

from the tips of your fingers to

the brain and the spinal cord that

tells you there is pain felt and

you need to let go of your fingers.

The autonomic nervous system takes

messages to and from the body's internal

organs to the central nervous system.

When we are faced with

a threatening situation.

For example, a heart beats faster.

How do we know our heart beats faster?

It's because of these nerves that

take the message to the brain.

The primary function of the autonomic

nervous system is homeostasis.

That means we,

the body basically takes care

of its internal environment.

There are two types of autonomic nervous systems.

The sympathetic nervous system and the parasympathetic nervous system.

The sympathetic nervous system arouses the body and is responsible for the body's fight or flight response.

For example, in a threatening situation, your heart beats faster, you start sweating, you get palpitations and your breath becomes deep and shallow.

Adrenaline is released and that prepares your body to either run away or fight the situation.

On the other hand, the parasympathetic nervous system calms the body.

And its primary function is to stimulate the body's rest and digest response,

which means once the threat is eliminated,

it sends signals to your brain to know

to calm the nerves and relax the body.

To summarize what we have just discussed,

the nervous system controls

the bodies function.

The nervous system is divided into 2.

The central nervous system made up

of the brain and the spinal cord.

The peripheral nervous system.

Made up of nerves that run from the

internal organs and external organs

to the central nervous system.

The peripheral nervous system we

saw is further divided into 2.

The somatic and the autonomic nervous system.

The somatic nervous system consists

of nerves from the skin and muscles

that go to the central nervous

system and the autonomic nervous

system consists of nerves that are

connected to the internal organs

and the central nervous system.

The autonomic nervous system is further

divided into the sympathetic and

the parasympathetic nervous system.

The sympathetic nervous system we

know is responsible for the flight

and fight response which arouses

the body and the parasympathetic

nervous system we know is responsible

for the rest and digest response.

Rather, it comes our body.

A few questions for you to work on.

Describe the nervous system and

its functions.

Explain the division of the nervous system.

Differentiate between the central

and the peripheral nervous system.

Compare and contrast the somatic and the

autonomic nervous system and describe

the functions of the sympathetic and

the parasympathetic nervous system.

For the purpose of this class,

I have referred to two textbooks,

child development by Laura E.

Berk and child development by Santrock.

For further information you

can also refer to the various

web sources available to you.

I have referred to the Biju's Learning app.

Thank you.