

The Günja (Yarnandi) Brain Story



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Acknowledgements

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For more information, see: www.menzies.edu.au

Objective

This flipchart is designed for use by health professionals, community workers, educators, Aboriginal health workers, Aboriginal mental health workers, drug and alcohol workers, students and community members.

It can be used to accompany a drug treatment program, or as an educational resource.

This resource is part of a series that also includes the following flipcharts:

- *The Grog Brain Story*
- *The Mental Health Brain Story*
- *Sniffing and the Brain*
- *When Boys and Men Sniff*
- *When Girls and Women Sniff*

It is designed for use mainly with Indigenous people in urban, rural and remote settings.

It uses plain English language and informative images to provide straightforward and clear information, about:

- how a healthy brain and nervous system work
- the effects of cannabis (also known as gunja or yarndi) on the brain, nervous system and lifestyle
- addiction
- how and why drug treatment programs work.

Tips for users

- Read the flipchart a couple of times before you use it with others, to educate yourself or refresh your knowledge.
- Use the glossary to make sure you understand all of the words used.
- Ask a doctor or nurse to explain anything that you do not understand.
- When using the flipchart, the image page faces the client or students and the text page faces the health educator.
- The text is a guide to the images.
- Refer to the images regularly.
- Feel free to elaborate or add familiar examples and stories.
- Encourage comments and questions from the client/students.
- Thinking of the natural chemicals in the brain and nervous system as a river system (as shown on pages 23 and 24) that needs to be kept in balance will help you to understand the role of chemicals in the brain and nervous system as a similar natural system that needs to be kept in balance.
- If using other flipcharts from this series in combination (*The Grog Brain Story*, *Sniffing and the Brain* or *The Mental Health Brain Story*), you may want to skip ‘Part 1: Healthy Brain’, as this section is the same or similar for all of these flipcharts.

Glossary

Understanding and remembering these words will help you to use the flipchart.

Use the pictures in 'Part 1: Healthy Brain' to help you.

- **Nervous system** - a system made up of millions and millions of nerve cells (neurons) that control everything we do. It carries messages around the brain and between the brain and body. It is like the body's knowledge system.
- **Neurons** - very small parts that make up the nervous system. They carry messages around the brain and between the brain and body. Messages are carried along neurons like electricity through wires.
- **Synapse** - the gap between neurons where messages change from electrical to chemical messages and back again.
- **Neurotransmitters** - natural chemicals released by neurons to communicate with each other. The chemicals allow messages to cross the gap, or synapse, between different neurons.

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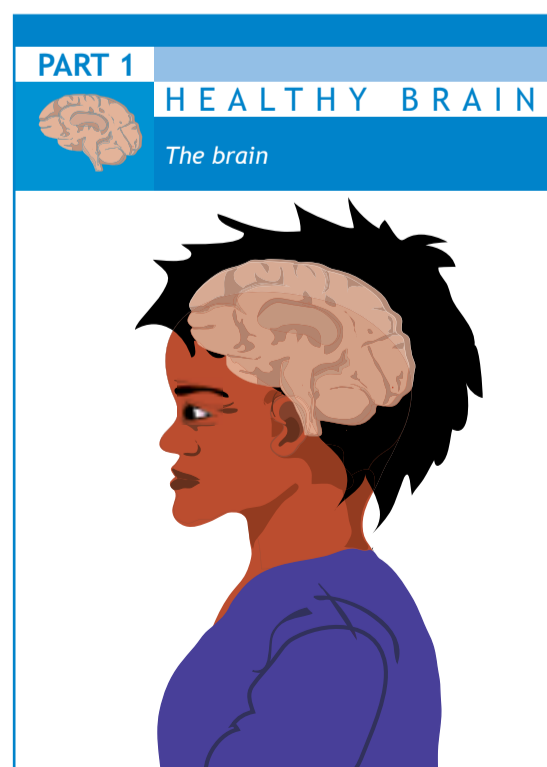
PART 1



HEALTHY BRAIN

The brain

- Inside your head is your **brain**.
- The brain is like our control centre.
- The brain controls our thinking about who we are, our feelings and the things we do.
- It is where our personality, our actions and emotions are controlled.
- The brain also controls our memory, our language and our creativity.
- It controls how we relate to other people and to the world around us.
- Everybody's brain is different.
- The brain is very important. It makes us who we are.



PART 1



HEALTHY BRAIN

The brain



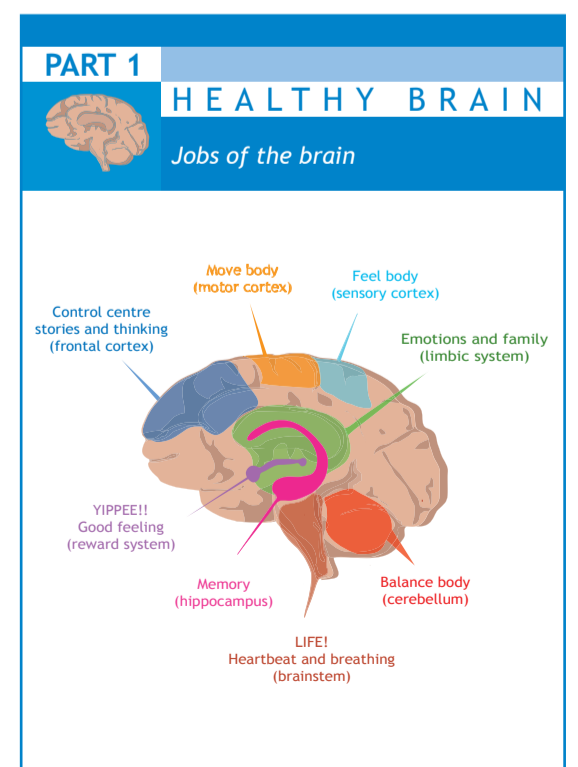
PART 1



HEALTHY BRAIN

Jobs of the brain

- Each area of the brain has a special job to do. This picture shows where each different job is controlled in the brain.
- The **dark blue** area (frontal cortex) is like the headquarters or the control centre of the brain. This area controls the rest of the brain. This is where we put together our stories.
- At the top of the brain, the **light blue** area (sensory cortex) is sent messages FROM the body that tell it how the body is moving or what it is feeling.
- The **orange** area (motor cortex) sends messages TO the body telling it how and when to move.
- The **green** area (limbic system) in the middle of the brain is very important for emotions, family matters and feelings like worries, shame and happiness.
- The **pink** area (hippocampus) is where memory is organised.
- The **purple** area (reward system) is the ‘yippee’ or ‘feel-good’ area of the brain. When you drink grog or take drugs, this part of the brain is stimulated and it makes you feel really good. It makes you want to do it again and again.
- The **red** area (cerebellum) at the bottom of the brain balances our body, both when it is moving and when it is still.
- The **brown** area (brain stem) connects the brain with the rest of the body. This part controls breathing and the heart. This part of the brain keeps us alive.
- These different areas are always working together and talking to each other.

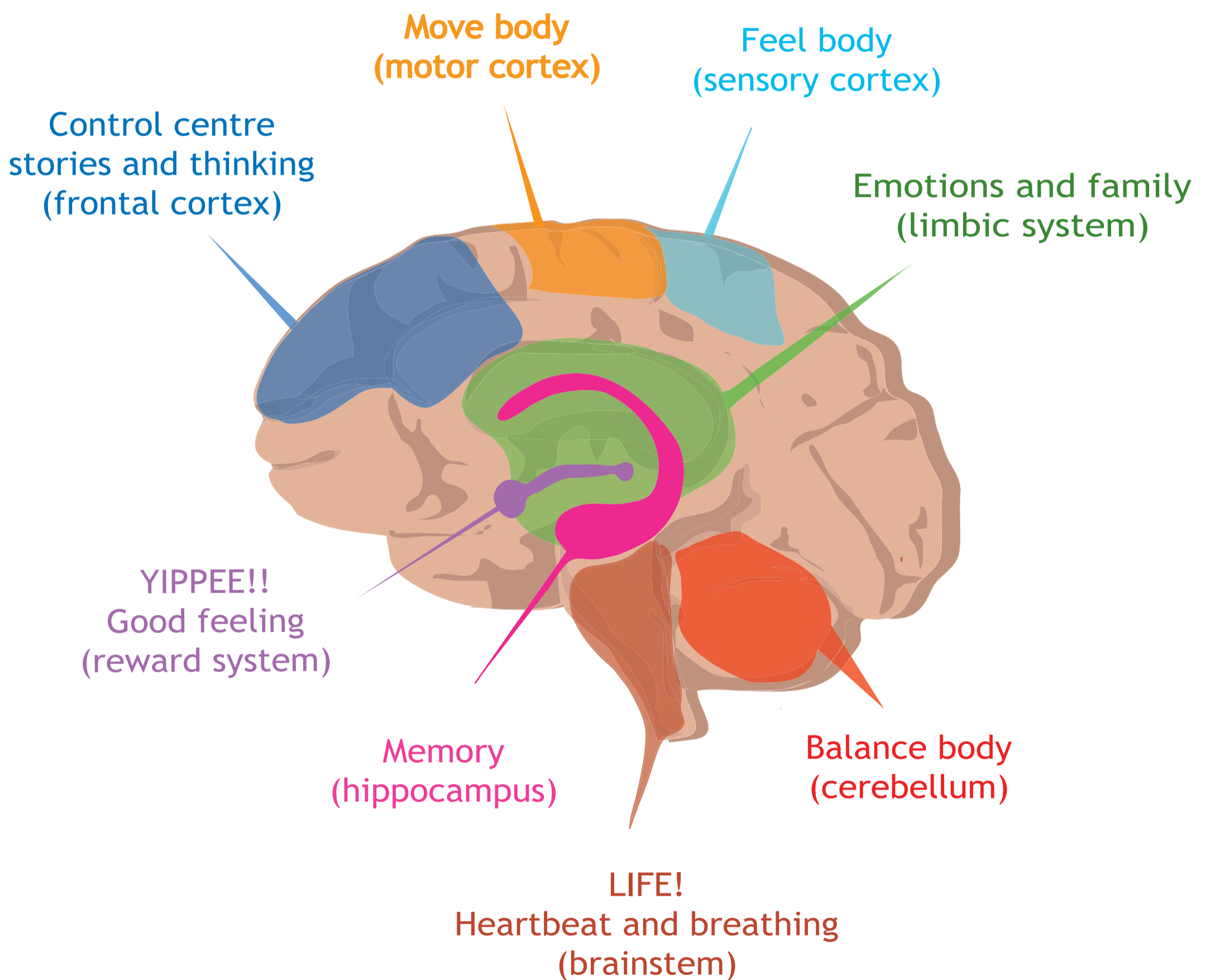


PART 1



HEALTHY BRAIN

Jobs of the brain



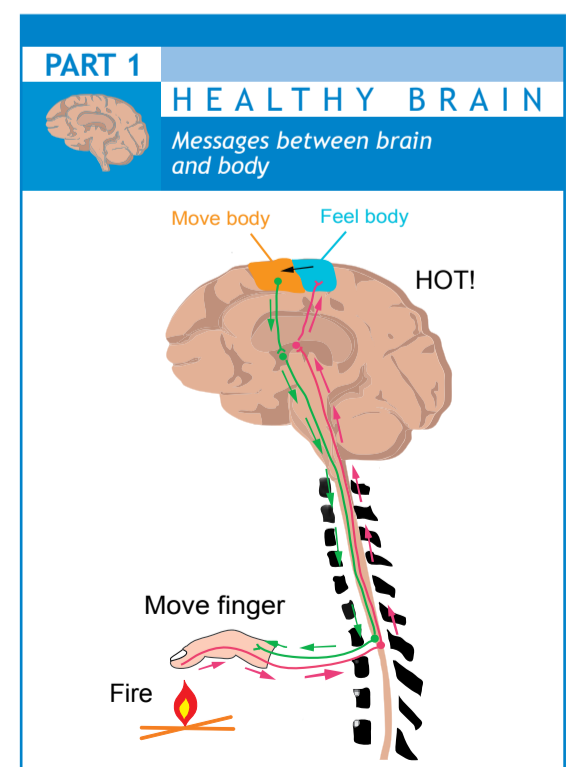
PART 1



HEALTHY BRAIN

Messages between brain and body

- This picture shows how messages go between the brain and body.
- In the picture, the finger is too close to the fire and it is getting hot. If the finger doesn't move away from the fire, it will burn and get hurt and damaged.
- Let's see how the nervous system works to stop the finger from getting burnt.
- When the finger gets hot, a message goes from the finger to the '**feel body**' area of the brain, also known as the sensory cortex (shown in light blue), saying that the finger is hot.
- A message is then sent to the '**move body**' area, also known as the motor cortex (shown in orange), saying that the finger needs to move away from the fire.
- The '**move body**' area then sends a message to the finger telling it to move away.
- The finger then moves away from the fire.
- These messages travel so fast that we don't even notice them.

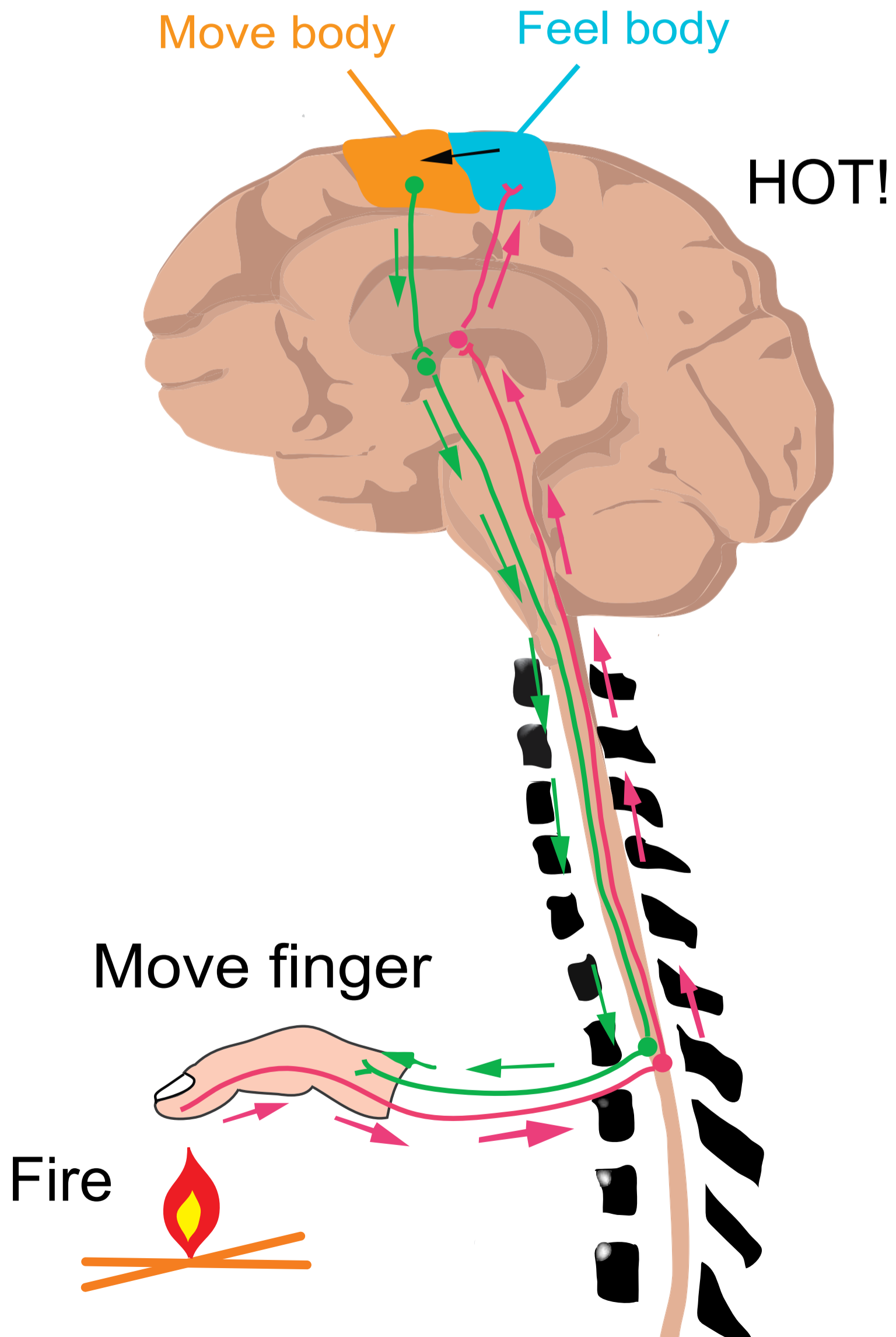


PART 1



HEALTHY BRAIN

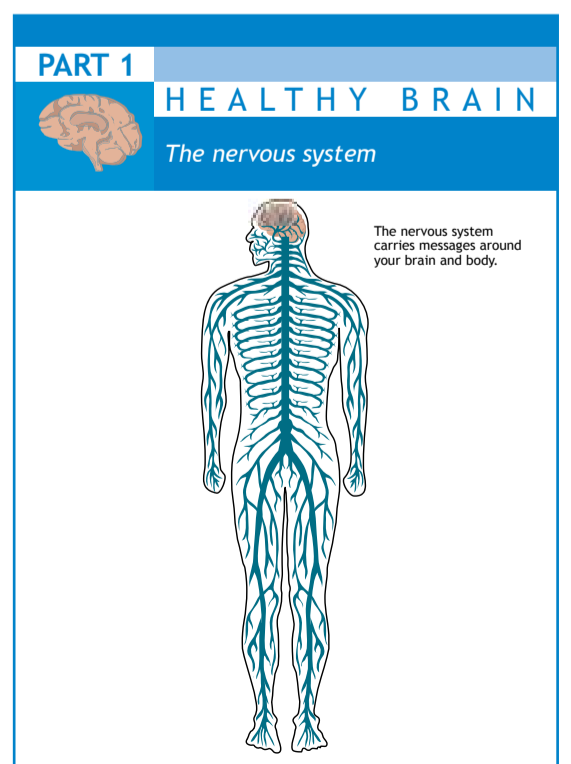
Messages between brain and body





The nervous system

- Messages are carried around the brain and body by the nervous system
- The nervous system is the name for the brain and all the **nerves** that join the brain with the body.
- The nervous system is like our body's 'knowledge system'.
- It carries messages from the brain to the body and the body to the brain.
- The nervous system lets the brain and body talk to each other to control everything that we do.
- We also use our nervous system to manage our relationship with the outside world.
- There are two ways that messages are carried around the nervous system.
- One way is **electrical**, like electricity in lights and wires. There is electricity like this in our bodies. The other way is **chemical**, like salt in food. There are natural chemicals like these in our bodies.
- Now we will see how this happens.

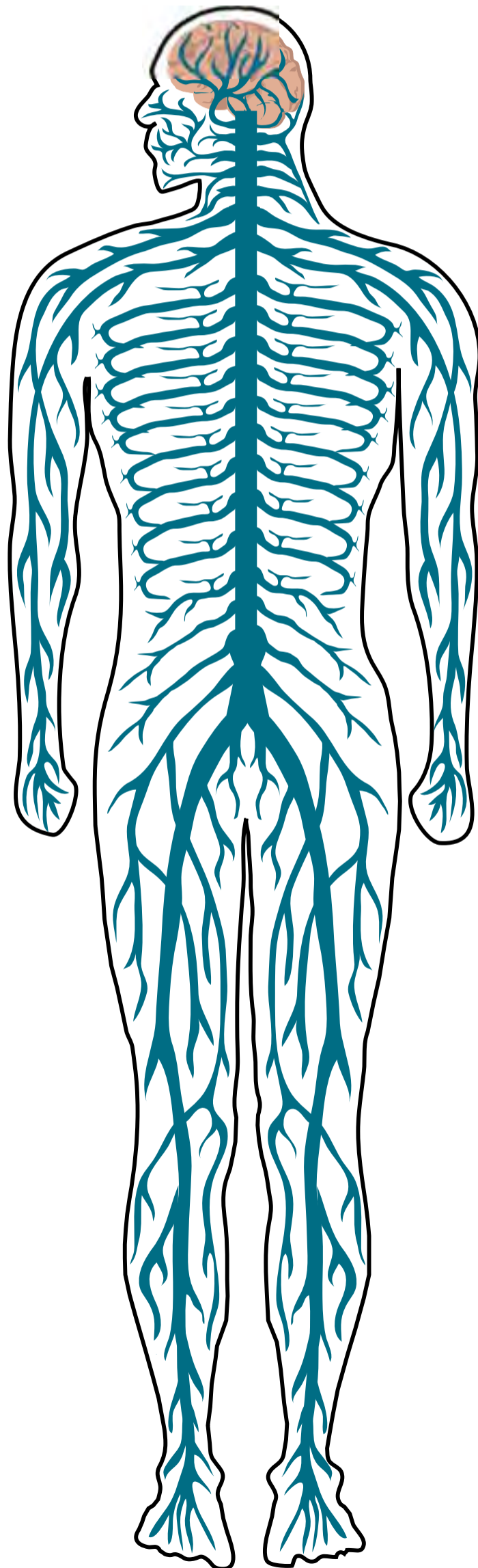


PART 1



HEALTHY BRAIN

The nervous system

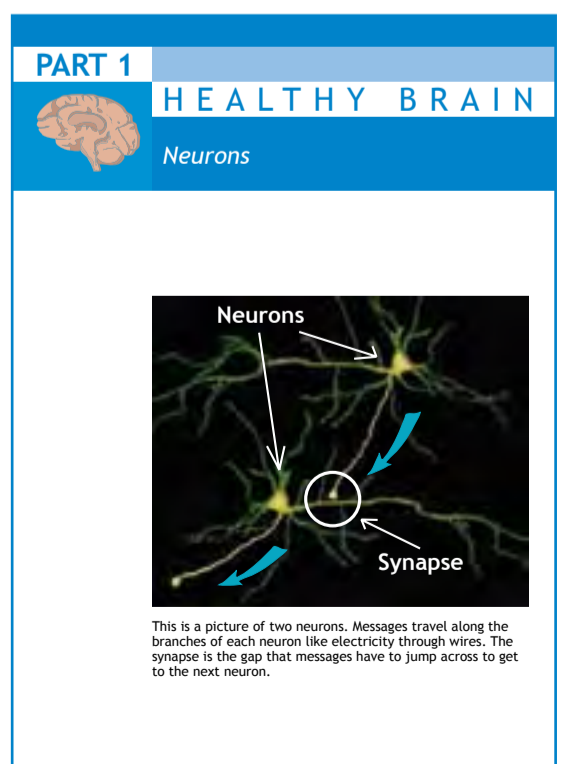


The nervous system carries messages around your brain and body.



Neurons

- Inside the nervous system are millions and millions of very small parts called ‘neurons’.
- The neurons have long bits coming off them that reach out like the branches or roots of a tree.
- The messages go through these neurons and their branches to get around the nervous system, like electricity through wires.
- This is the electrical part of our nervous system.
- **Neurons** are too small for our eyes to see.
- This is a photo of two neurons taken under a very powerful microscope. In reality they are much smaller than this.
- The message has to ‘jump’ across the gap between the branches to pass the message on to the next neuron.
- This gap is called a ‘synapse’.

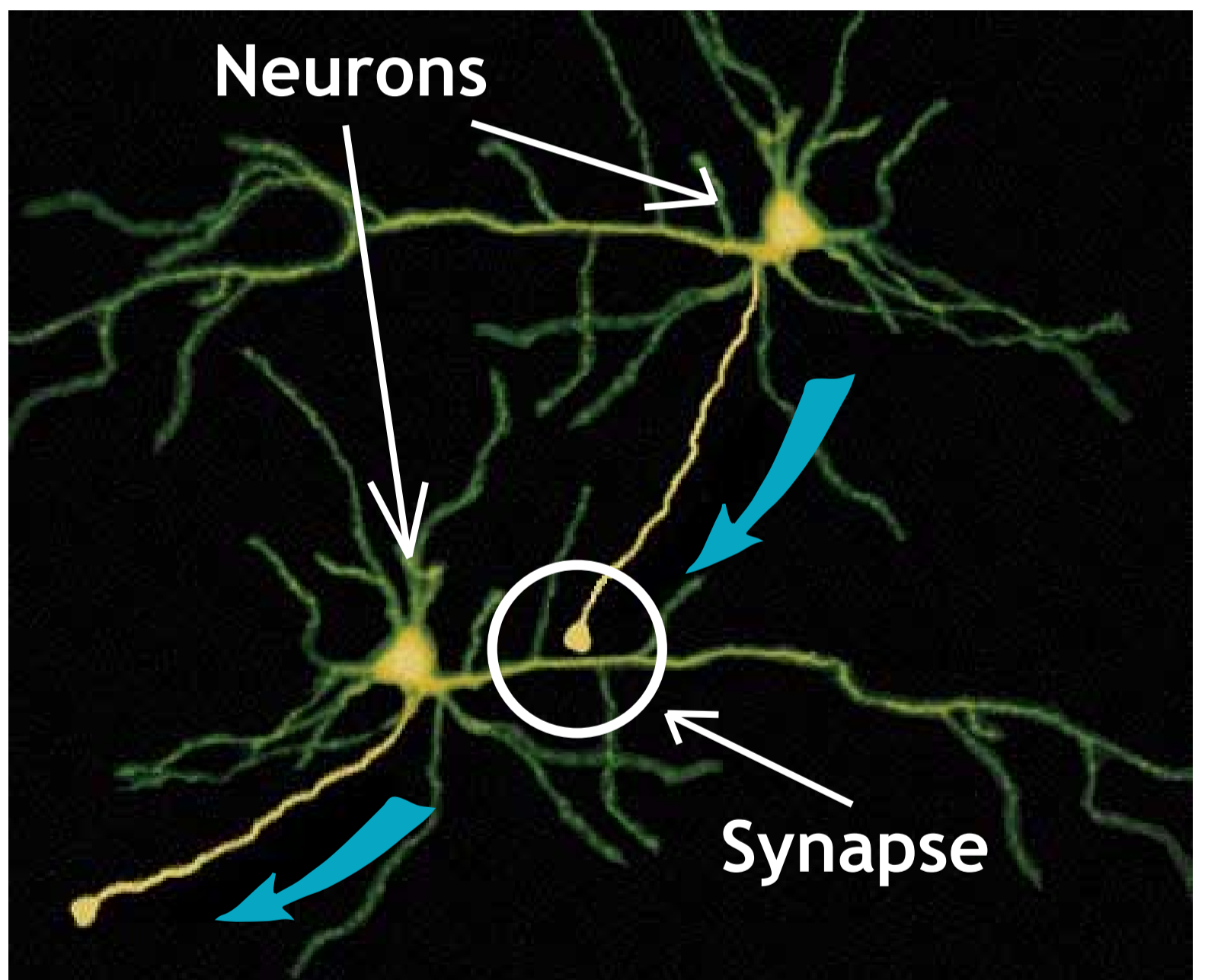


PART 1



HEALTHY BRAIN

Neurons



This is a picture of two neurons. Messages travel along the branches of each neuron like electricity through wires. The synapse is the gap that messages have to jump across to get to the next neuron.

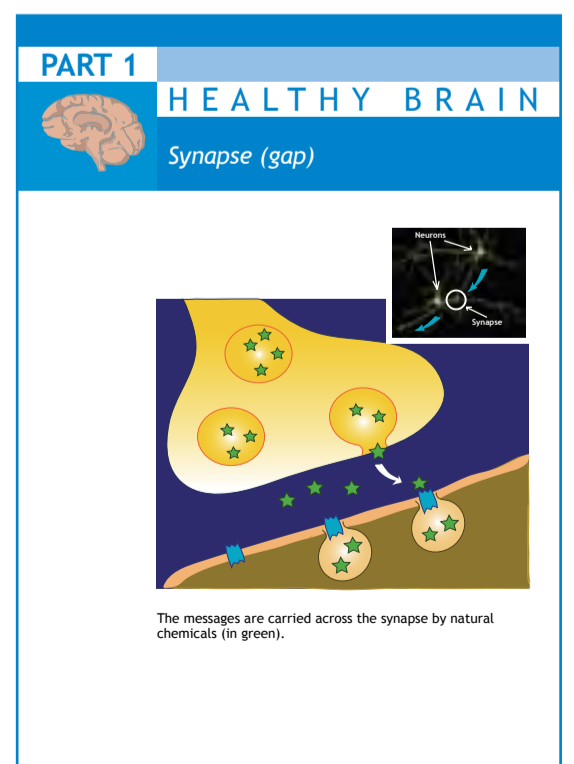
PART 1



HEALTHY BRAIN

Synapse (gap)

- In the **synapse**, messages that were electrical become chemical so they can get to the next neuron and become electrical again.
- This picture shows how this happens.
- The electrical message moves along the neuron's branches until it gets to the synapse. Here it triggers natural chemicals (shown in green) and pushes them into the **synapse gap**.
- The chemicals then move across to the next neuron where there are special places (in blue) called **receptors** that catch them.
- When these chemicals get to the next neuron, they start a new electrical signal in that neuron.
- So the messages change from **electrical** to **chemical** and back to **electrical**.
- This way the messages get passed on from neuron to neuron in our body's nervous system.

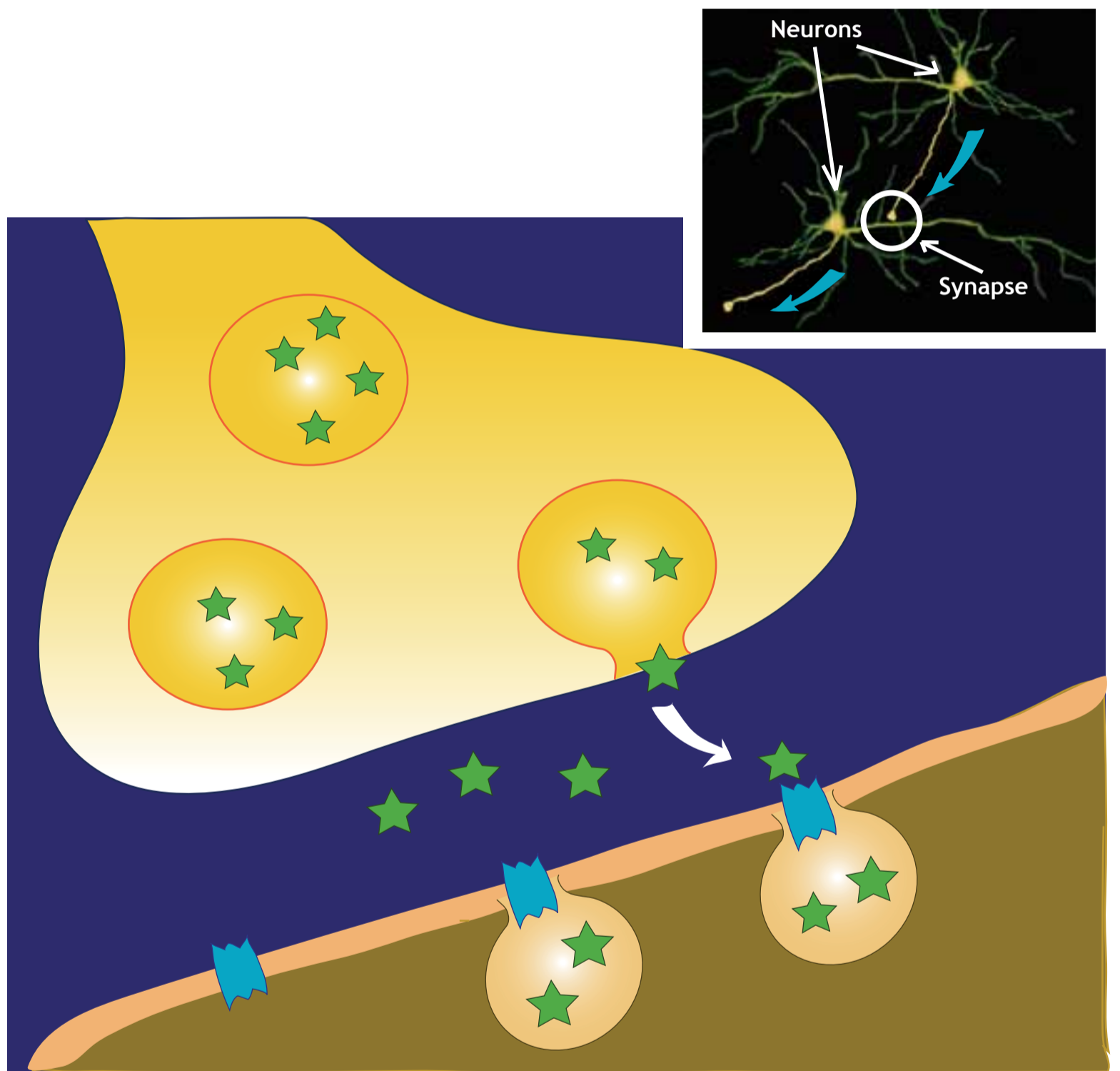


PART 1



HEALTHY BRAIN

Synapse (gap)



The messages are carried across the synapse by natural chemicals (in green).

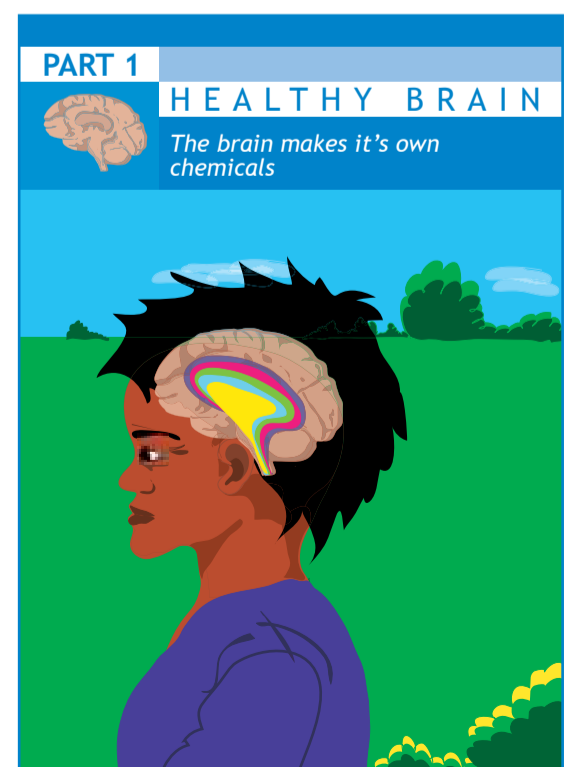
PART 1



HEALTHY BRAIN

The brain makes its own chemicals

- Now let's look at the chemicals in the brain.
- The brain makes its own chemicals.
- These chemicals are always working together to help our brain and body to stay balanced.
- They help us do everything that we do.
- These are some of the things that these chemicals can change:
 - feeling happy or sad
 - feeling hungry or tired
 - getting energy from food
 - feeling angry or worried
 - good moods or bad moods
 - feeling stressed or relaxed
 - feeling strong.
- One chemical that is very important in our brain is called **dopamine**. If we have the right amount of **dopamine** in our brain, we feel good. If we don't have enough we can't feel good at all.
- It is important for the chemicals in our brain to stay balanced for us to be healthy and strong.



PART 1



HEALTHY BRAIN

The brain makes its own chemicals



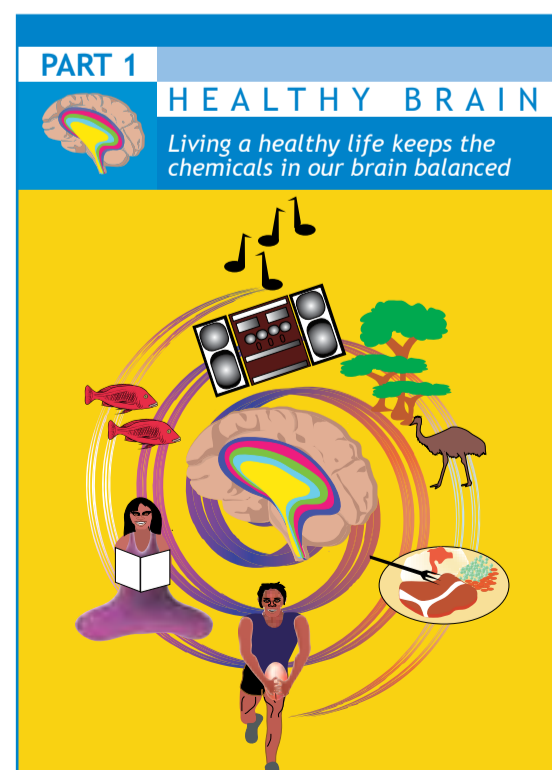
PART 1



HEALTHY BRAIN

Living a healthy life keeps the chemicals in our brain balanced

- When we **live a healthy way**, the chemicals in our brain stay balanced and we feel good.
- **Living in a healthy way means:**
 - eating healthy food
 - being active (playing sport, hunting)
 - getting out bush
 - staying away from bad food, drugs and grog
 - having good relationships
 - studying and working
 - looking after our families and children
 - being a good role model for younger people
 - treating ourselves and people around us with love and respect.
- These things will keep the chemicals in our brain balanced, and then our bodies and relationships will be healthy.
- It is important to keep the balance!



PART 1



HEALTHY BRAIN

Living a healthy life keeps the chemicals in our brain balanced



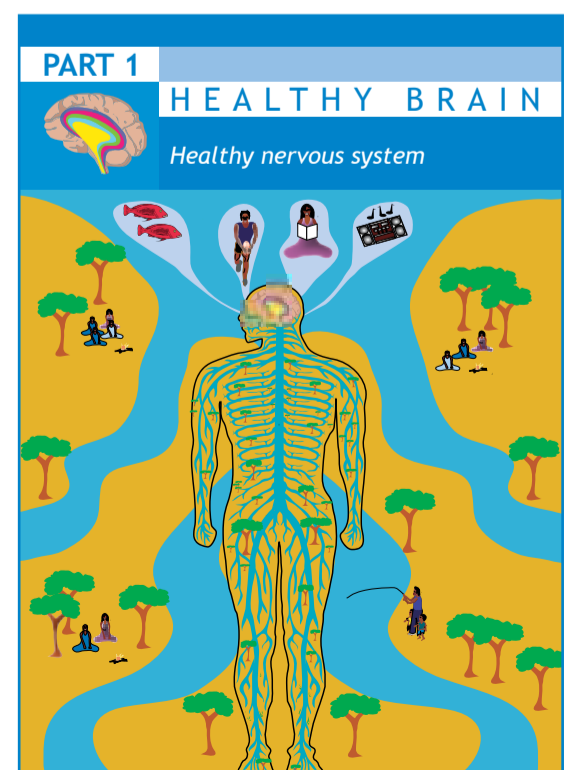
PART 1



HEALTHY BRAIN

Healthy nervous system

- Our brain and nervous system are like a river system.
- When the chemicals in our brain change, the changes can affect the whole body through the nervous system.
- Then it can change our relationships with the people and country around us.
- When the chemicals in our brain and nervous system are balanced and we are healthy, it is like the clean water in a healthy river system.
- Clear messages can get to all parts of our body.
- Then we have good communication and understanding with the people and the world around us.
- This is like a healthy river system where clean water gets to all of the plants and animals along the river, keeping them all healthy and alive.

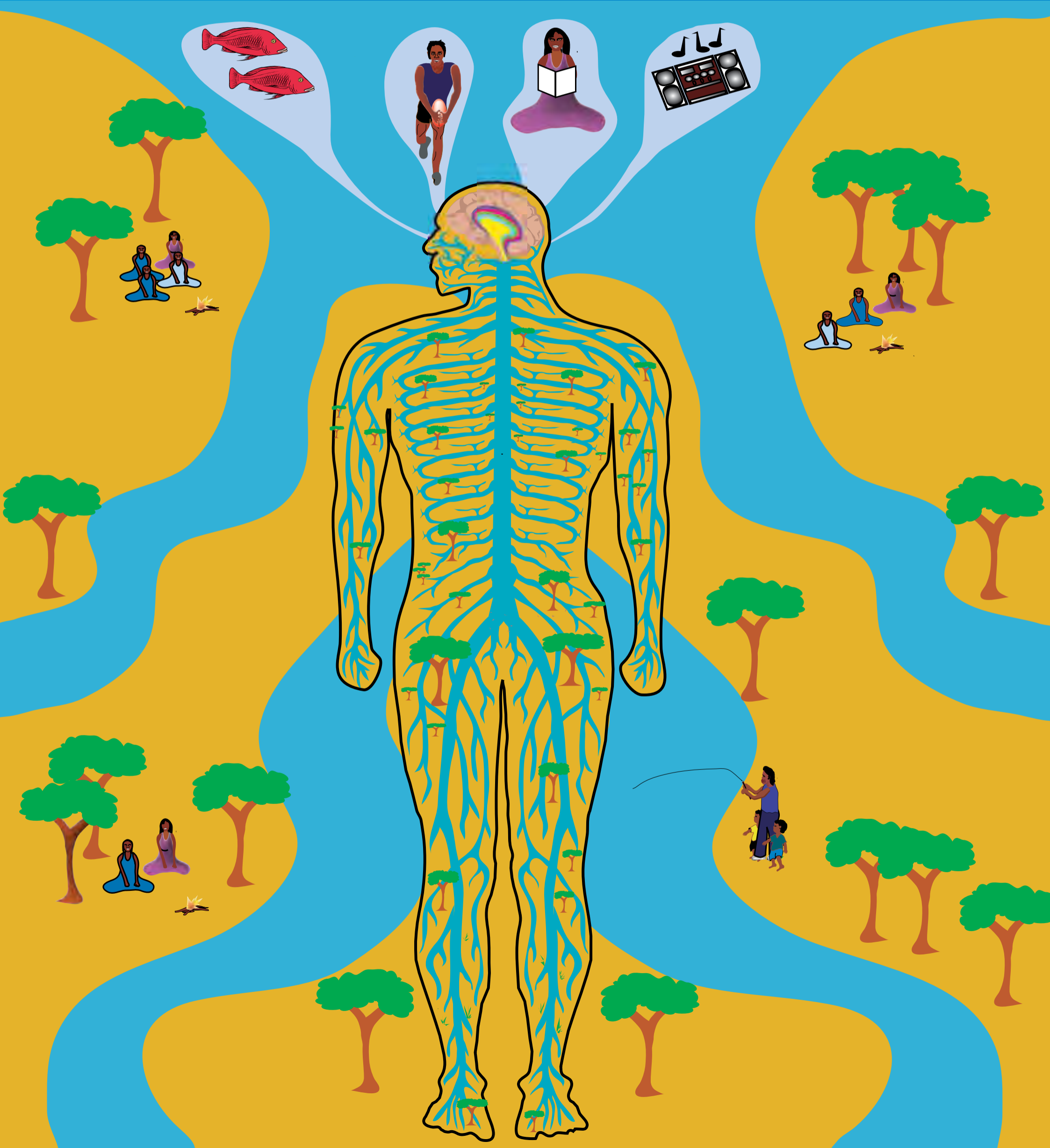


PART 1

HEALTHY BRAIN



Healthy nervous system



PART 1



HEALTHY BRAIN

Healthy brains

- These photos are of people with healthy brains.
- All of the chemicals in their brains are balanced and all parts of the brain are working together properly.
- Because their brains are healthy and strong, they can do great things.
- **Cyril Rioli** has used his healthy brain and body to become a champion footballer.
- This band called **Yilila** use their healthy brains to play music and dance in front of big crowds of people.
- **Leisa McCarthy** uses her healthy brain in her research studies of healthy diets for Indigenous people.

PART 1

HEALTHY BRAIN



Healthy brains

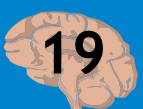


Yilila



Leisa McCarthy

Cyril Rioli



PART 1



HEALTHY BRAIN

Healthy brains



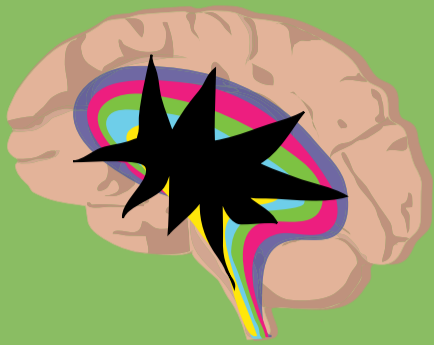
Yilila



Leisa McCarthy

Cyril Rioli

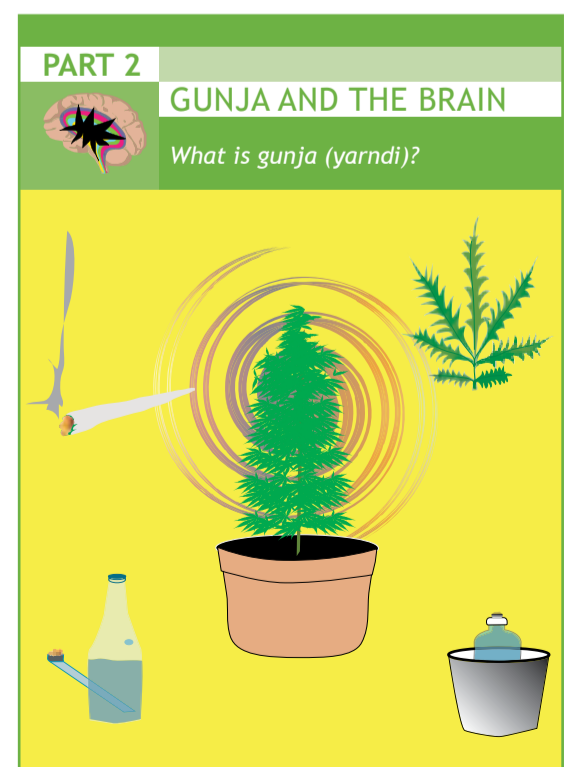
PART 2



GUNJA AND THE BRAIN

What is gunja (yarndi)?

- **Cannabis** comes from a plant called Cannabis Sativa. Cannabis is also known commonly as **gunja**, **yarndi**, marijuana, pot, grass, THC, weed or Mary J. There are also other names for it in different places. Do you know what gunja is called where you live?
- In this flipchart, we will mainly call it gunja or yarndi.
- The leaves and flower buds of the cannabis or gunja plant are dried and then smoked, or mixed into food and eaten.
- The sap from the plant can also be dried into resin. In this form the cannabis is called hash. It is stronger than using the dried leaves.
- The oil from the plant is the strongest of all. It is called hash oil.
- Gunja has a chemical in it known as **THC**. Its long name is delta-9-Tetrahydrocannabinol.
- When gunja is smoked or eaten, the THC gets into the brain and body and changes the way they work.
- When THC gets into the brain and nervous system, it can make you feel 'high' or 'stoned'.



PART 2



GUNJA AND THE BRAIN

What is gunja (yarndi)?



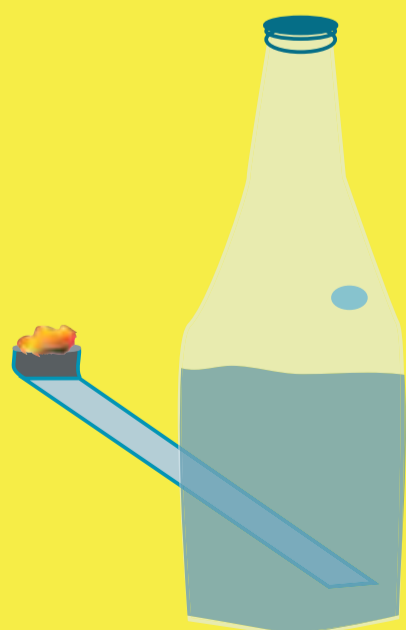
Joint



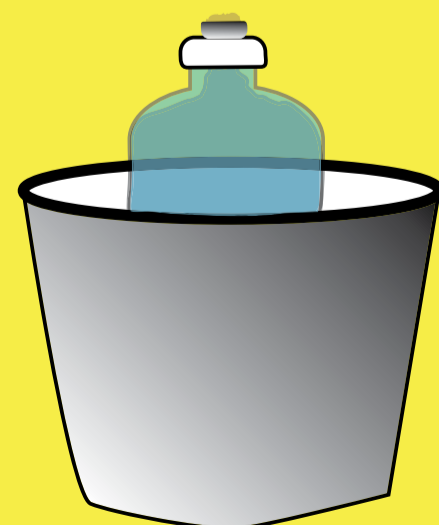
Cannabis sativa
plant
(gunja)



Gunja leaf



Bong



Bucket bong

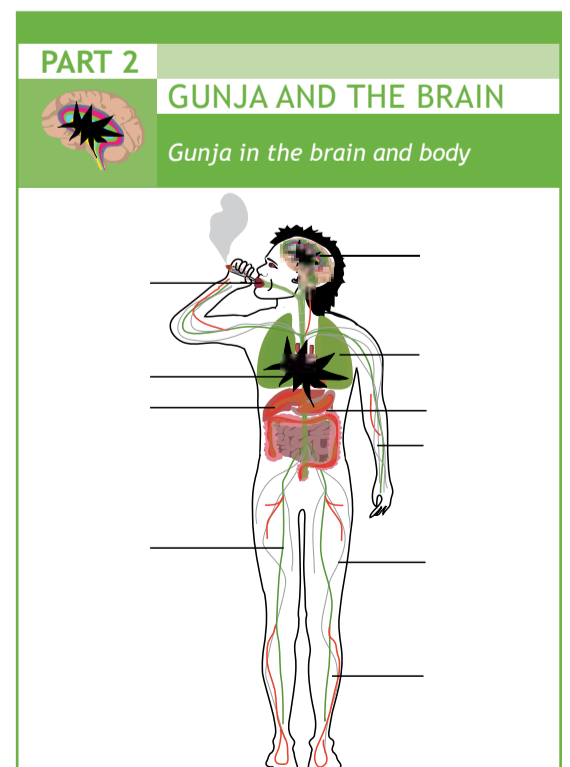
PART 2



GUNJA AND THE BRAIN

Gunja in the brain and body

- This picture shows what happens in the brain and body when someone uses gunja.
- THC from the gunja goes through the mouth or nose, and into the lungs.
- From the lungs the THC gets into the blood and then goes into the brain.
- Once the THC is in the body and brain, these things can happen:
 - heart beats faster
 - more blood pumps around the body especially to the eyes, making them go red
 - mouth gets dry and might need to cough
 - throat gets sore and lungs get irritated
 - can get very hungry or thirsty
 - can get lazy, slow and sleepy, or excited and jittery
 - movement and balance is slow and not so good
 - thinking is different and not so clear.
- These changes happen because THC from the gunja changes the way our brain sends messages around the body.
- Smoking gunja, mixed with tobacco or on its own, will also weaken the throat and lungs.

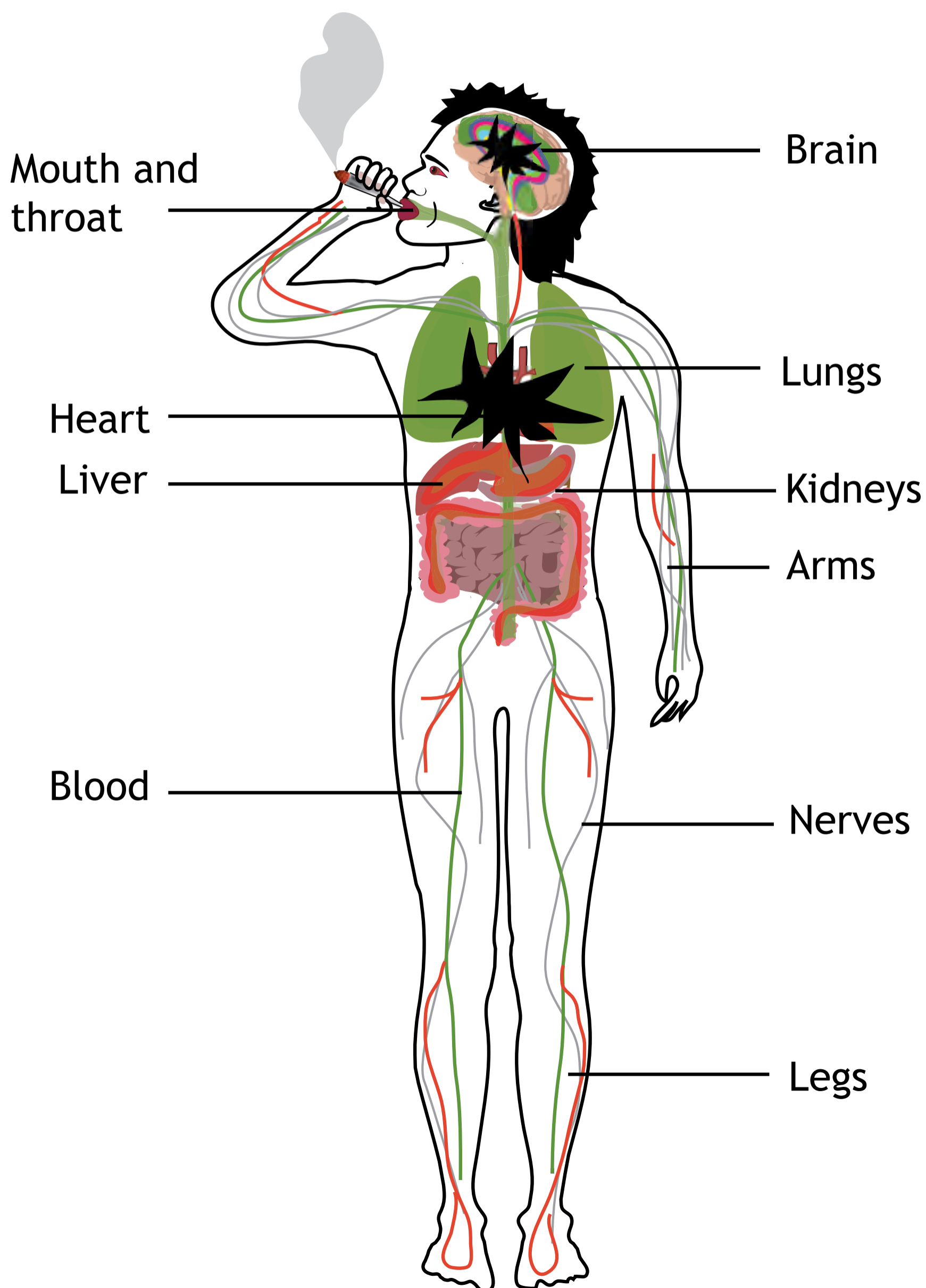


PART 2



GUNJA AND THE BRAIN

Gunja in the brain and body



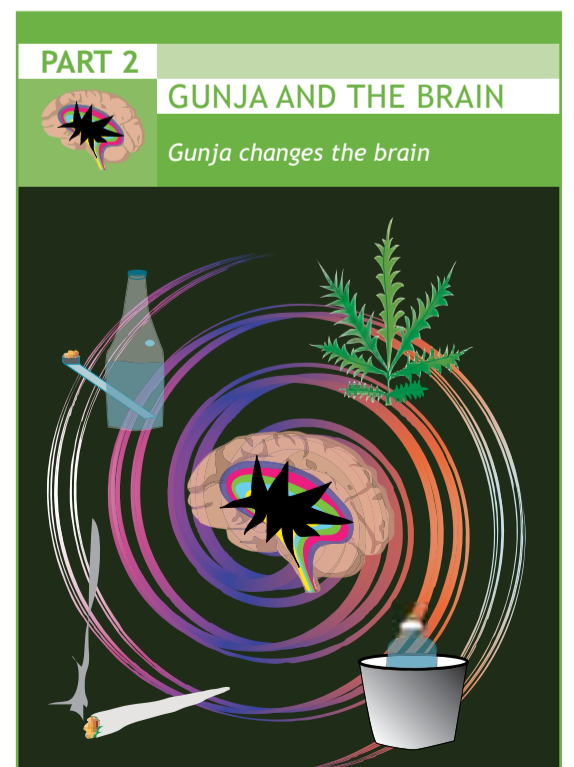
PART 2



GUNJA AND THE BRAIN

Gunja changes the brain

- Drugs like gunja change the way chemicals work in the nervous system.
- This can change the way you think, feel and act.
- These changes happen when you are using gunja and also after you have have stopped using gunja.
- When THC from gunja gets into the nervous system and stops it from working properly, you can:
 - get tired easily
 - get aches and pains
 - get sick a lot
 - not remember things
 - have bad moods
 - feel sad or lonely
 - feel angry
 - have strange thoughts.
- If the damage is more serious, you may not be able to think, talk or move properly.
- Now we will see how this happens.



PART 2



GUNJA AND THE BRAIN

Gunja changes the brain



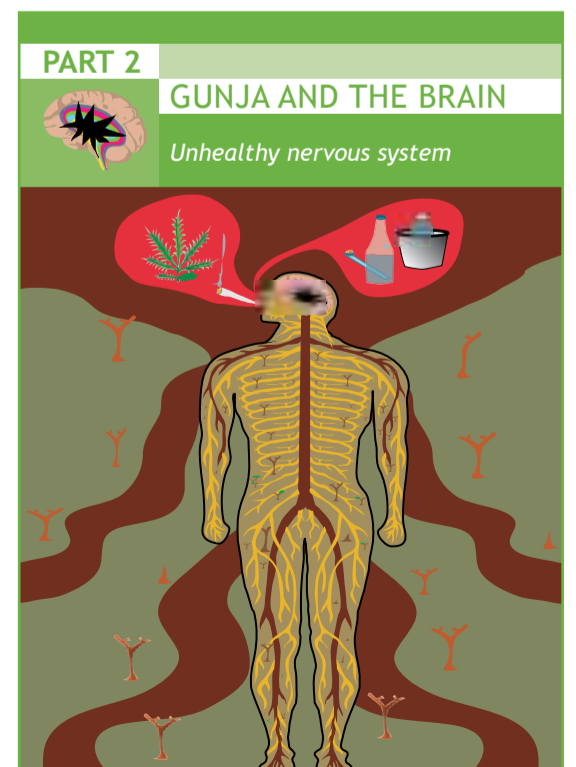
PART 2



GUNJA AND THE BRAIN

Unhealthy nervous system

- When someone smokes or swallows gunja, extra chemicals are released into the brain, and other chemicals are blocked or go away.
- When this happens, the normal messages that make the brain and body work properly are changed, and different messages are sent around the brain and body.
- Then the messages can be confused, slowed or not get through at all.
- In this way, the brain and body can't talk to each other properly.
- This makes the nervous system become like an unhealthy river system with poisoned water or water that doesn't flow properly.
- In an unhealthy river system like this, there is no clean water to feed the plants and the people living near the river.
- In the same way, when the nervous system is unhealthy from too much gunja, the person can start to have problems with their relationships with the people and the country around them.

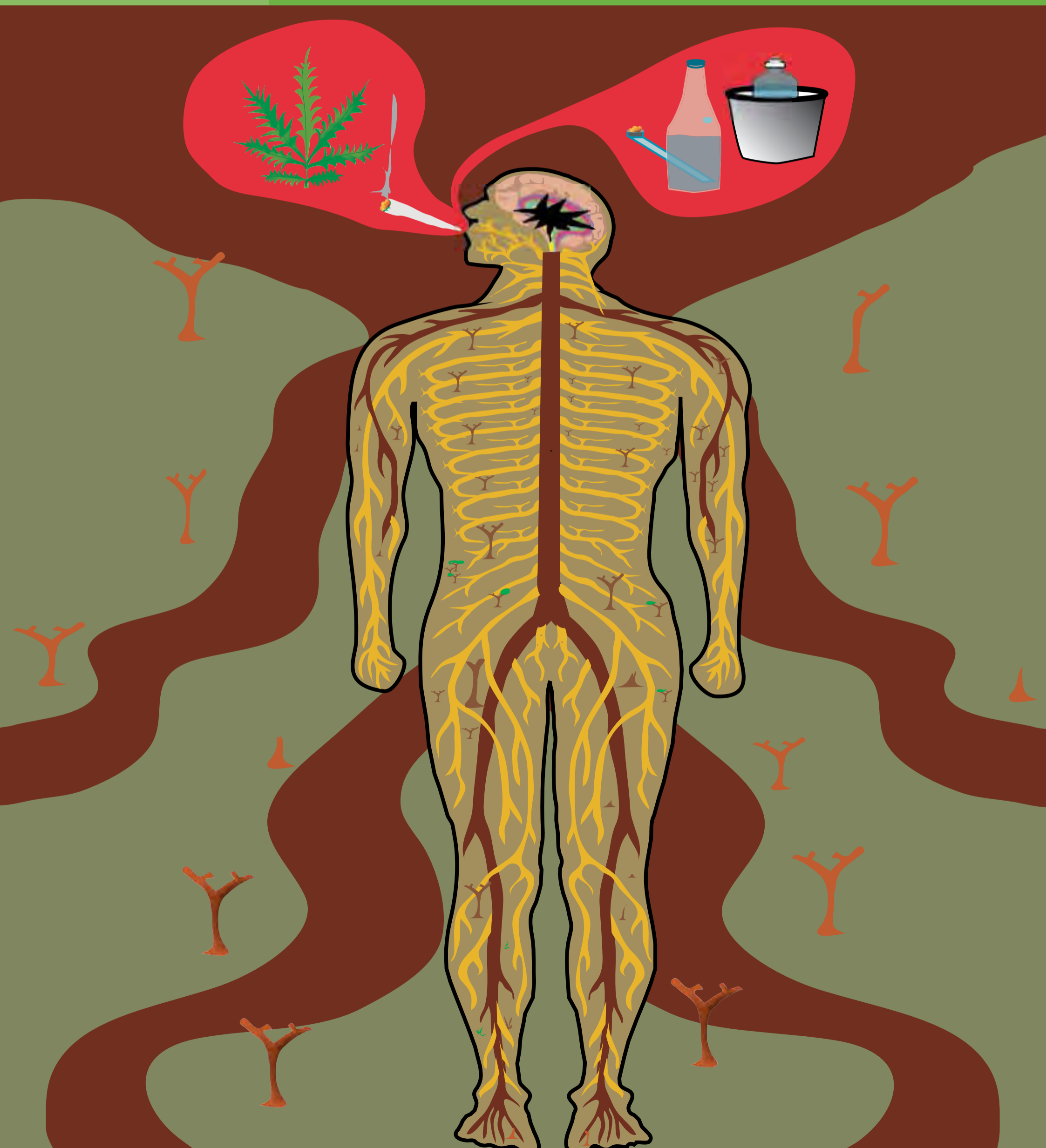


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GUNJA AND THE BRAIN

Unhealthy nervous system



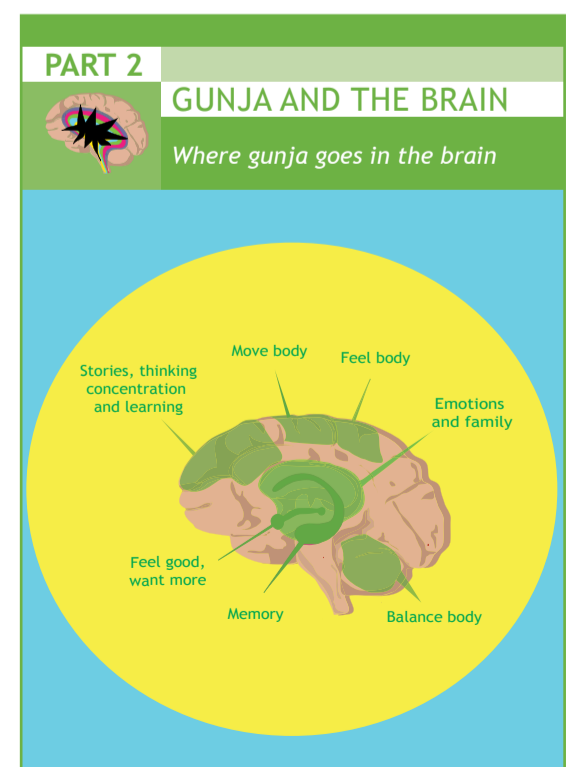
PART 2



GUNJA AND THE BRAIN

Where gunja goes in the brain

- After smoking gunja, it takes only a few seconds for the THC from gunja to get to the brain. Then it can stay there for more than 4 hours.
- These pictures show where THC goes in the brain when someone smokes gunja. It goes to these areas of the brain and changes the way they work.
- When THC gets into these brain areas, it confuses the person and can slow them right down.
- It changes:
 - thinking and concentration (frontal cortex)
 - balance and control of the body (cerebellum)
 - balance and control of the emotions (limbic system)
 - body movements (motor cortex)
 - body sensations (sensory cortex)
 - memory (hippocampus)
 - feeling good and wanting more (reward system).
- The gunja slows down the person's thinking, feeling, movements, memory and concentration.
- They might also have trouble making proper decisions, solving problems and might not be able to judge time very well.

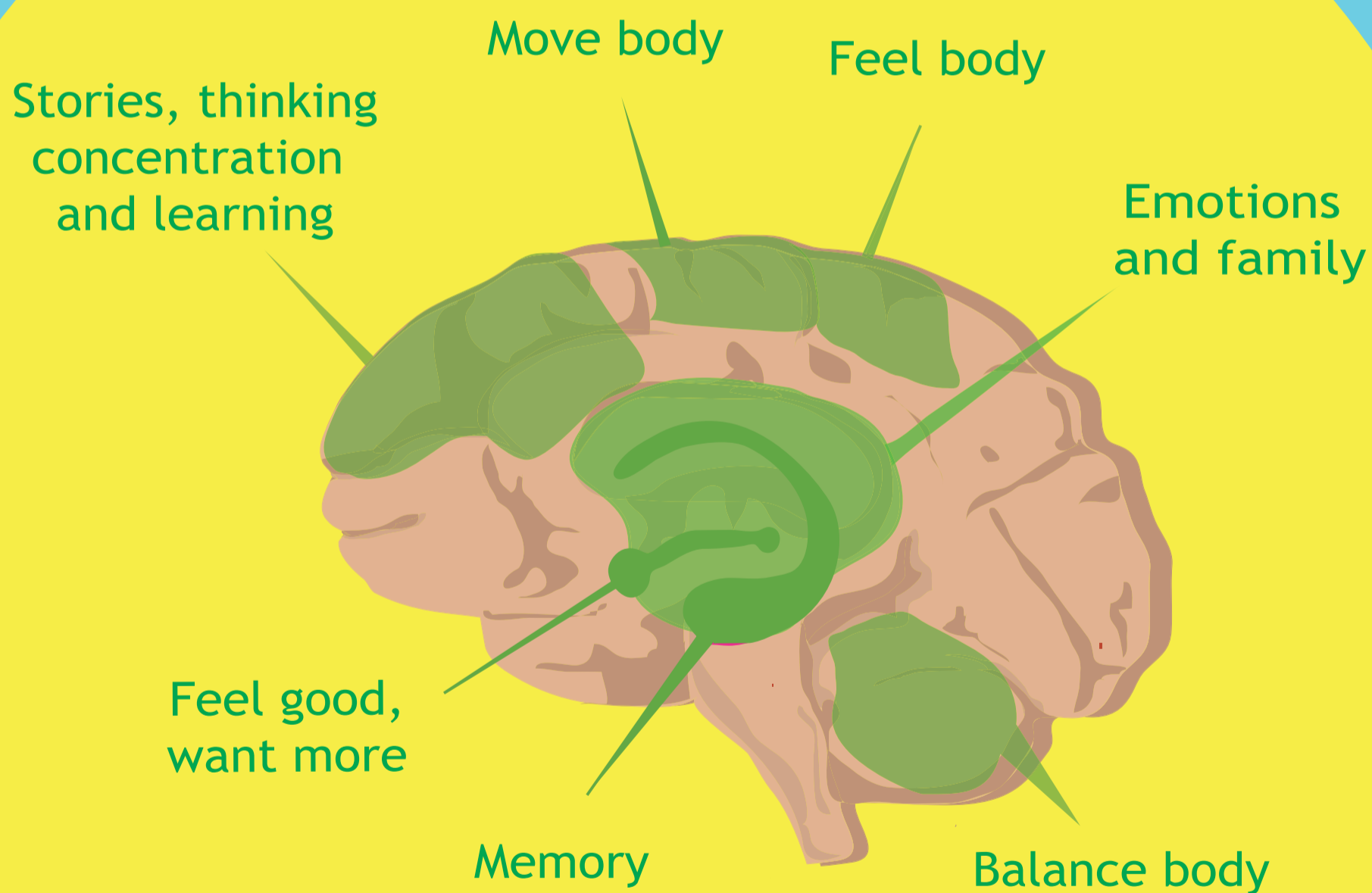


PART 2



GUNJA AND THE BRAIN

Where gunja goes in the brain



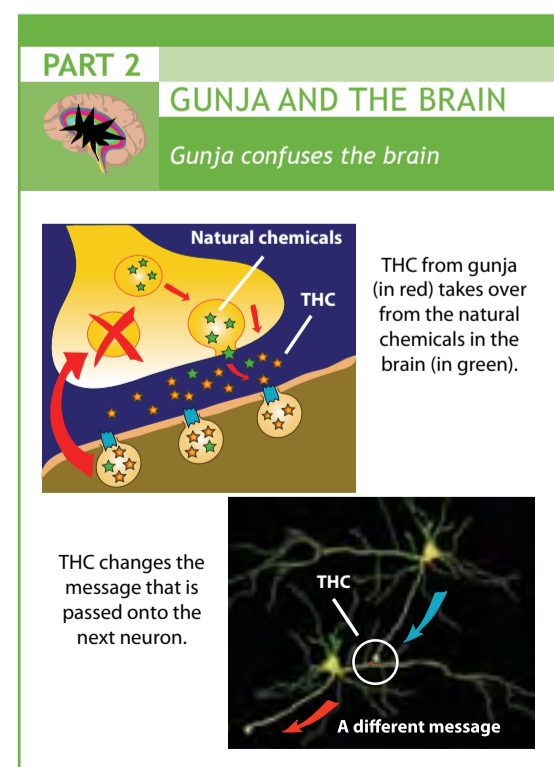
PART 2



GUNJA AND THE BRAIN

Gunja confuses the brain

- These pictures show what happens in the brain when someone uses gunja and the THC from gunja gets into the brain.
- In the first picture, you can see how when someone has taken gunja, the THC chemicals from the gunja (shown in red) get into the synapse gap between neurons. The THC takes over from the natural chemicals made inside the body (shown in green).
- The brain stops making so many of its own natural chemicals.
- Then the THC can change the message that goes from one neuron to the next.
- This way, when THC is in the nervous system, it confuses the messages that are carried around the brain and between the brain and body.
- Different messages are sent around the brain and body and this can slow down and change the way the brain and body work. Thinking, talking and moving can slow down and you can feel very different.
- The more gunja you use, the more the brain and nervous system will get confused and slow down.
- If too much THC gets into the brain, it can slow down so much that you can't talk or move properly and you can feel sick.

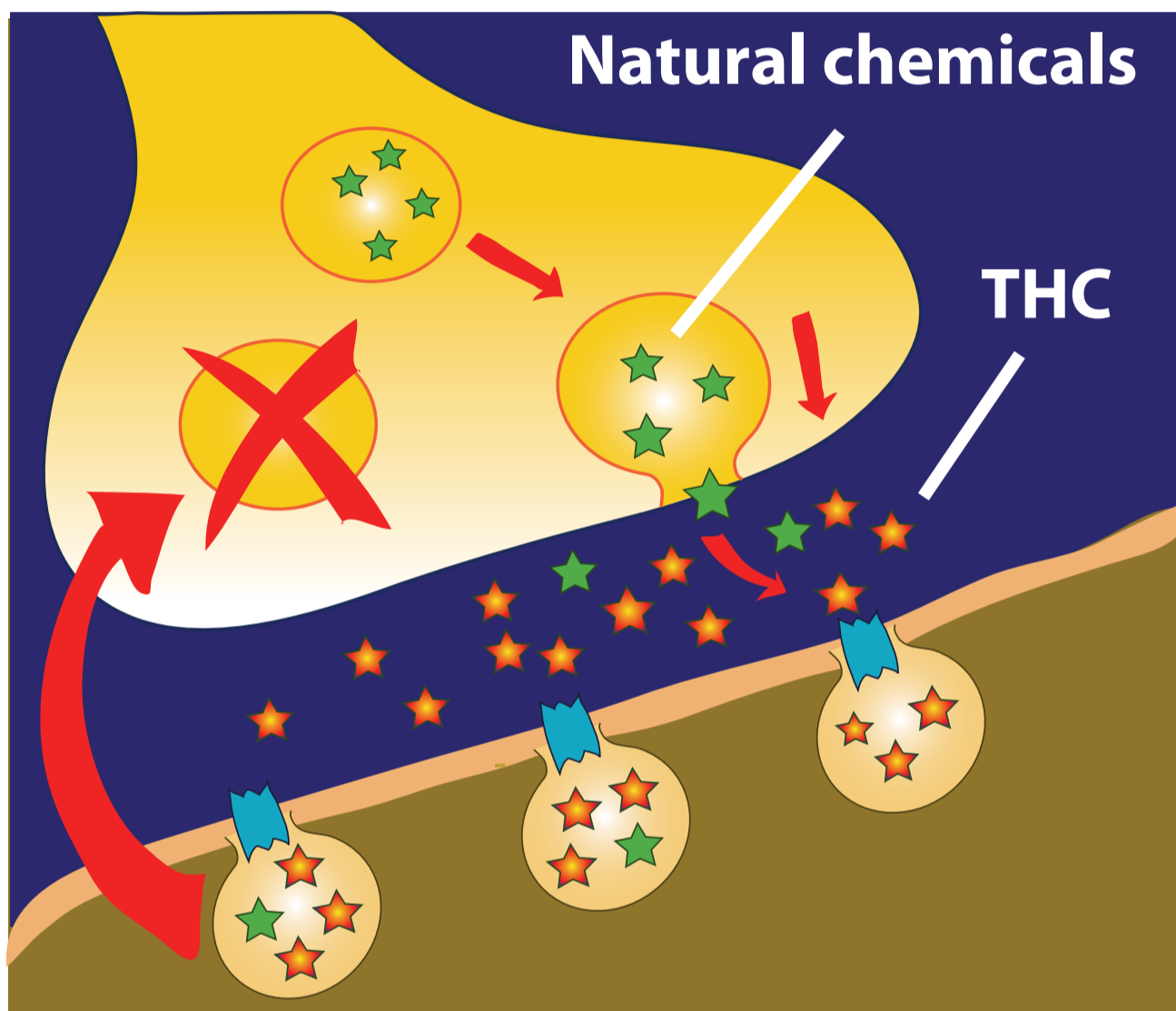


PART 2



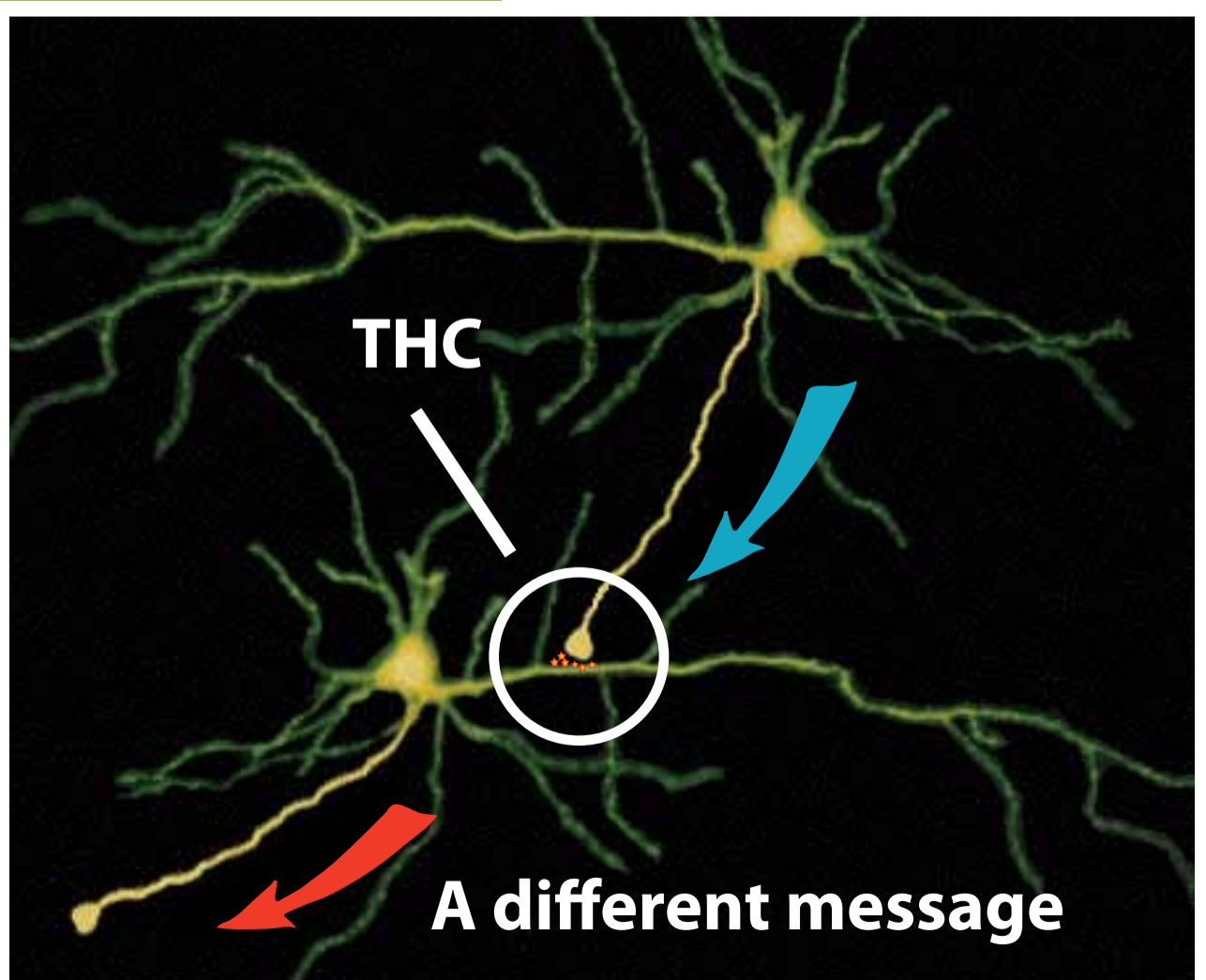
GUNJA AND THE BRAIN

Gunja confuses the brain



THC from gunja (in red) takes over from the natural chemicals in the brain (in green).

THC changes the message that is passed onto the next neuron.



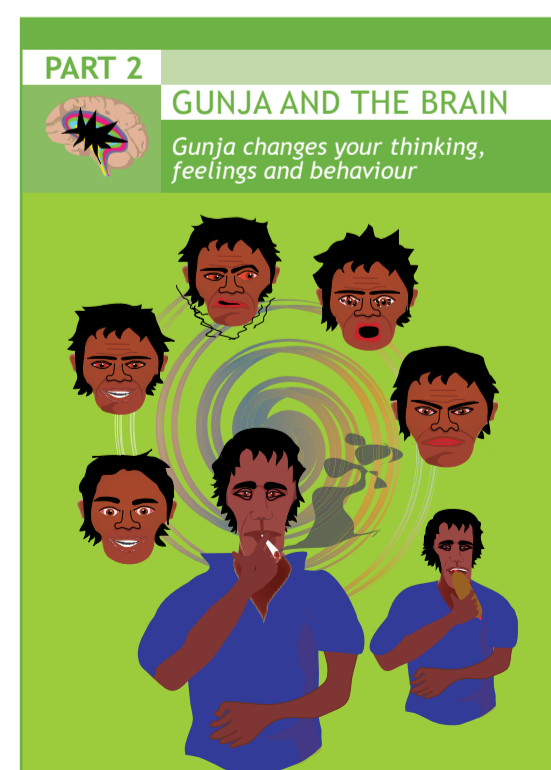
PART 2



GUNJA AND THE BRAIN

Gunja changes your thinking, feelings and behaviour

- When the brain gets confused from too much gunja, these things can happen:
 - **Anxiety:** you feel very worried about everything.
 - **Relaxation:** you feel heavy and your body is slowed down.
 - **Confusion:** it is hard to make sense of things in your head.
 - **Perception changes:** it feels like time, space and movements change.
 - **Memory problems:** you can't remember things or what you are saying.
 - **Lazy:** you can't be bothered doing anything. You have no motivation.
- People who use gunja can seem fine on the outside, but still have problems with their thinking and behaviour on the inside.
- Some gunja users might not be able to see any problem with their own thinking and behaviour, but others might see problems.
- Some gunja users may get, or make worse, a mental illness. This can happen the first time they use gunja, or after many years of using gunja.
- Some people don't get any bad feelings when they smoke gunja, even though they use it a lot. But the more gunja someone uses and the longer they use it, the more it will change their brain.
- Gunja always changes the brain and makes problems with a person's health, lifestyle, thinking and behaviour, even if they don't realise it.



PART 2



GUNJA AND THE BRAIN

Gunja changes your thinking, feelings and behaviour



PART 2



GUNJA AND THE BRAIN

Gunja does different things to different people

- Like many drugs, gunja does different things to different people. This is because everyone's brain is different and the THC in gunja changes each person's brain, in each area, in slightly different ways.
- Each batch of gunja is also made up of slightly different chemicals, or different amounts of THC.
- Most people feel relaxed at first and notice that they see the world in a different way after smoking gunja. It can change people's thinking about who they are, how they feel and what they do, but in different ways.
- Even though it slows most people down, gunja can also make some people think, talk and move faster.
- Many people have trouble concentrating or listening, but other people get really focused on one thing and their hearing becomes very sensitive.
- Some people feel light, energetic and carefree. Other people feel heavy, lazy or very worried about everything (anxiety and paranoia).
- Many people forget what they were saying when they are 'high' and can't remember much. Sometimes people laugh at things that they don't normally find funny.
- Some people get confused about where they are or what they are doing. Some people become very aware of everything around them.



PART 2



GUNJA AND THE BRAIN

Gunja does different things to different people



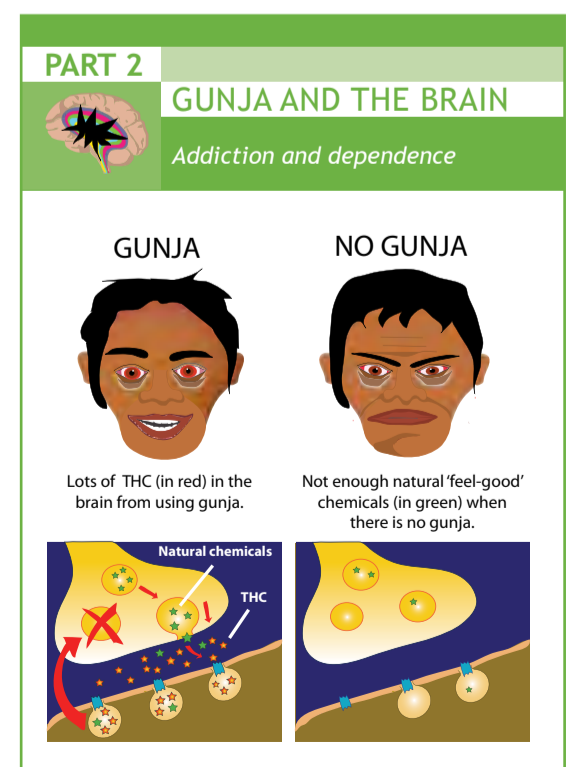
PART 2



GUNJA AND THE BRAIN

Addiction and dependence

- When someone uses gunja more and more, their brain will stop making its own natural ‘feel-good’ chemicals.
- Then things that used to make them feel good before the gunja, like sport, walking, talking to friends and family or a hug, don’t make them feel good anymore.
- The brain forgets to make its own ‘feel-good’ chemicals and the only thing that makes the person feel good is gunja.
- This is called addiction or dependence. The person is **addicted** or **dependent** on the gunja. They need it to feel normal.
- When someone is **dependent** on the gunja, their brain is so used to having gunja that the gunja doesn’t make them feel ‘high’ or good anymore. It just makes them feel normal.
- Sometimes people start using more and more gunja so that they can get ‘high’ from the gunja. But the brain keeps getting used to it, and they keep needing more!
- If they don’t have any gunja, they feel bad because the brain needs the gunja to feel good.
- These bad feelings when there is no gunja are called withdrawal sickness. This can make people sad, angry or irritable. Some people get violent and hurt other people.



PART 2



GUNJA AND THE BRAIN

Addiction and dependence

GUNJA

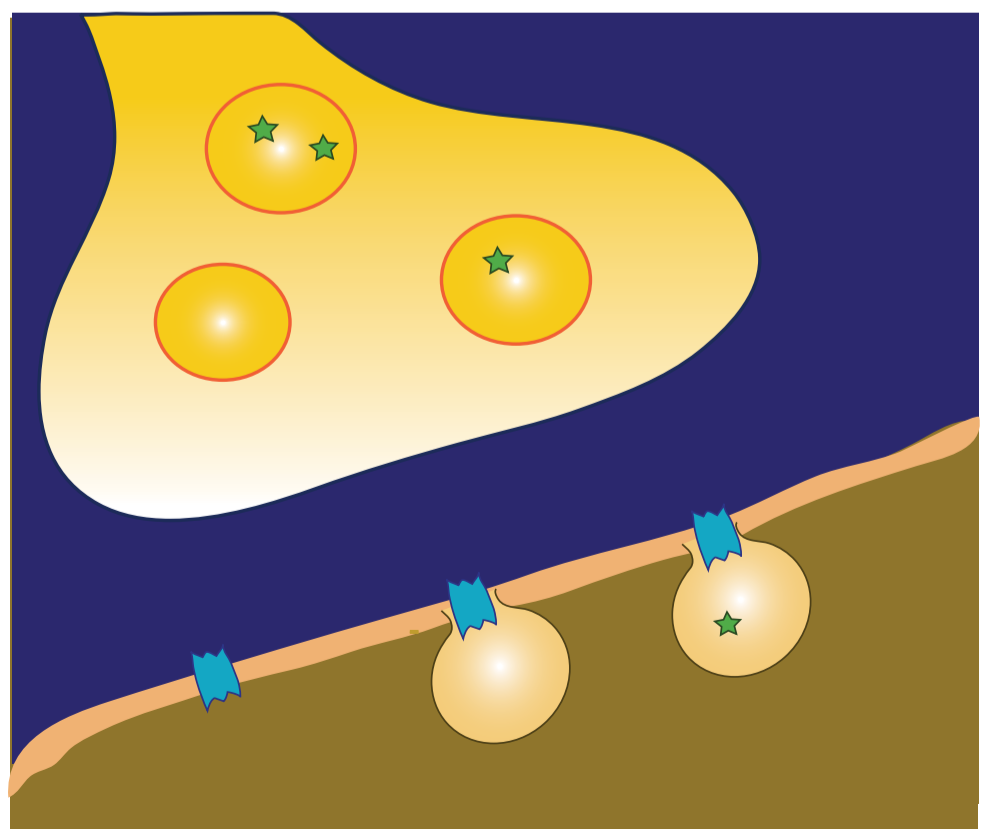
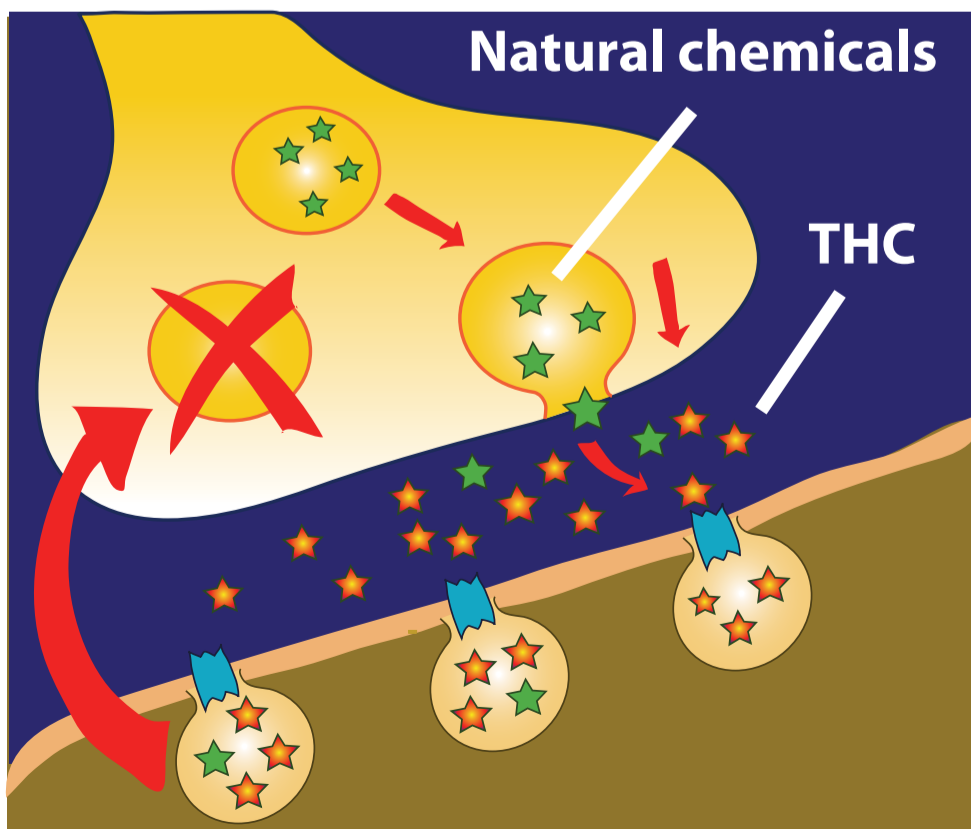


Lots of THC (in red) in the brain from using gunja.

NO GUNJA



Not enough natural 'feel-good' chemicals (in green) when there is no gunja.



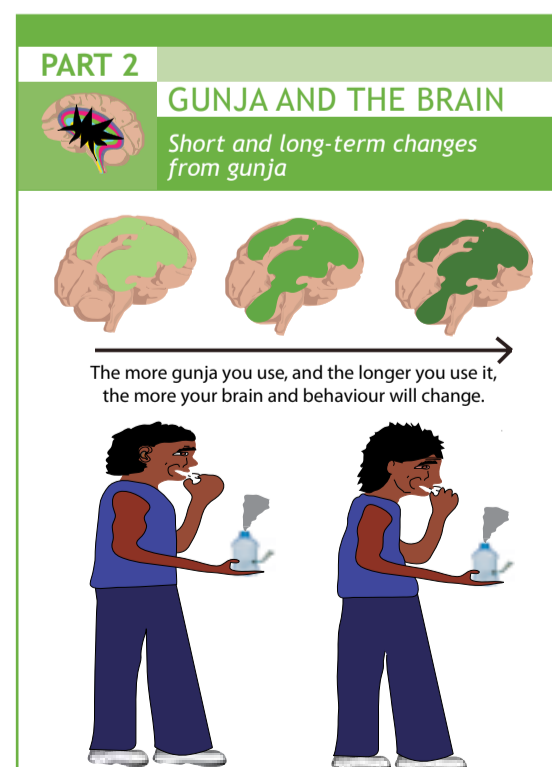
PART 2



GUNJA AND THE BRAIN

Short and long-term changes from gunja

- After using gunja for a short time, you may notice that it is:
 - hard to concentrate
 - hard to remember things
 - hard to learn new things.
- After using gunja for a long time, you may:
 - find it hard to make decisions
 - find it hard to control your emotions
 - feel lazy and not want to do anything
 - get sick more (cough, bronchitis, emphysema)
 - get cancer (mouth, throat, lungs, neck)
 - get addicted to gunja and get irritable, angry, anxious or depressed when you don't have any gunja
 - get a mental illness like depression, anxiety, schizophrenia or psychosis
 - if you are a man, you may not be able to make babies and, if you are a woman, you may have trouble falling pregnant.
- These things happen because gunja is slowly changing your brain and the more gunja you use, the more your brain and behaviour will change.



PART 2



GUNJA AND THE BRAIN

Short and long-term changes from gunja



The more gunja you use, and the longer you use it, the more your brain and behaviour will change.



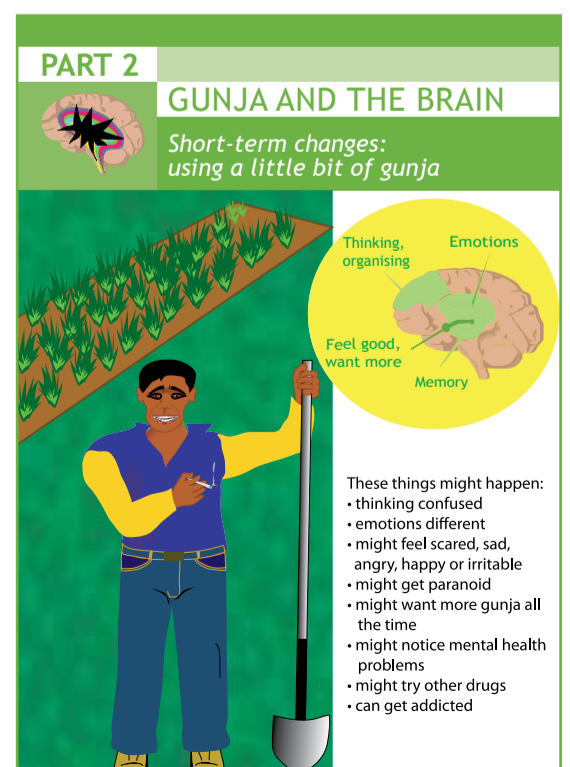
PART 2



GUNJA AND THE BRAIN

Short-term changes: using a little bit of gunja

- In the pages to come you will see pictures of how someone can change when they start smoking gunja.
- This person has been smoking gunja once a month, for a couple of years.
- Because they don't smoke all the time, their brain and nervous system have time to recover from the THC.
- They might see some small changes to their thinking, behaviour and lifestyle.
- They might notice their emotions or feelings change when they use gunja. They might feel more scared, sad, angry, happy or irritable.
- They might get paranoid more and more.
- They might even show some signs of mental health problems.
- They might be more likely to try other drugs.
- They can develop an addiction and harm their brain if they start to smoke more often.

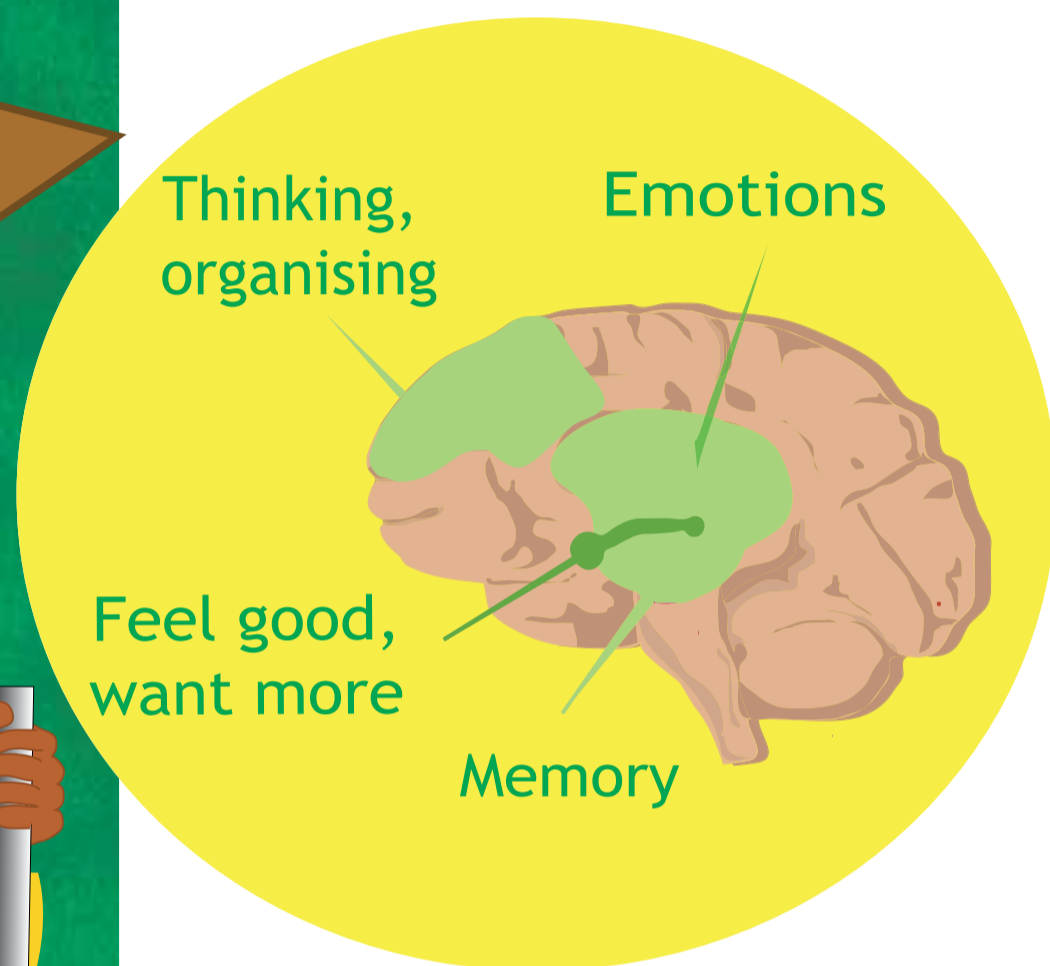


PART 2



GUNJA AND THE BRAIN

*Short-term changes:
using a little bit of gunja*



These things might happen:

- thinking confused
- emotions different
- might feel scared, sad, angry, happy or irritable
- might get paranoid
- might want more gunja all the time
- might notice mental health problems
- might try other drugs
- can get addicted

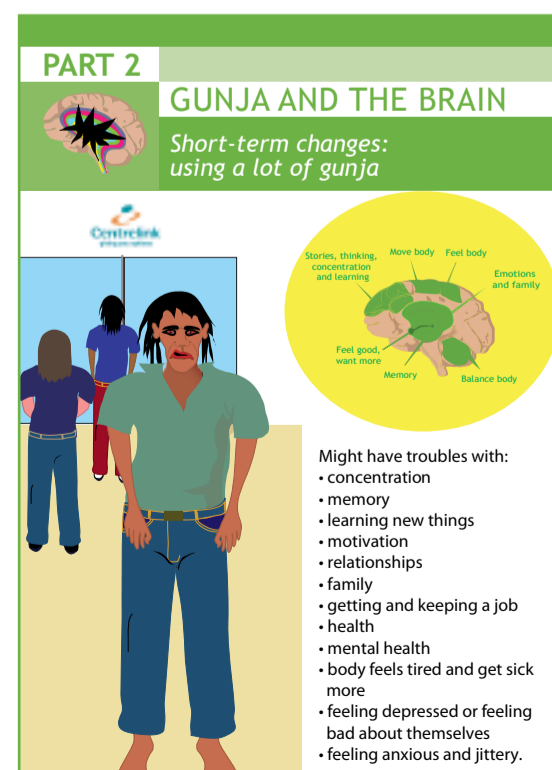
PART 2



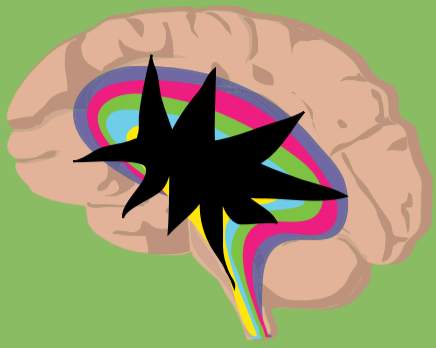
GUNJA AND THE BRAIN

Short-term changes: using a lot of gunja

- This person has been smoking gunja nearly every day for a few months.
- Too much THC has slowed down their brain and nervous system. They are starting to notice these things:
 - it is hard to concentrate
 - they have trouble remembering things and learning new things
 - they have trouble getting motivated to do anything
 - they find it hard to get and keep a job
 - their body feels tired and they get sick more
 - they may start to get mental health problems
 - they may get depressed and feel bad about themselves, or get too anxious and jittery.
- If they have a baby, their baby may have health problems from the gunja.
- All they can think about now is using gunja and getting more gunja. They have to use gunja just to feel normal and use a lot more gunja to feel 'high'.
- This person is addicted to gunja. If they stop, they will feel worse for a while before they feel better. But if they stay healthy and stop using gunja, they can get strong, happy and healthy again.

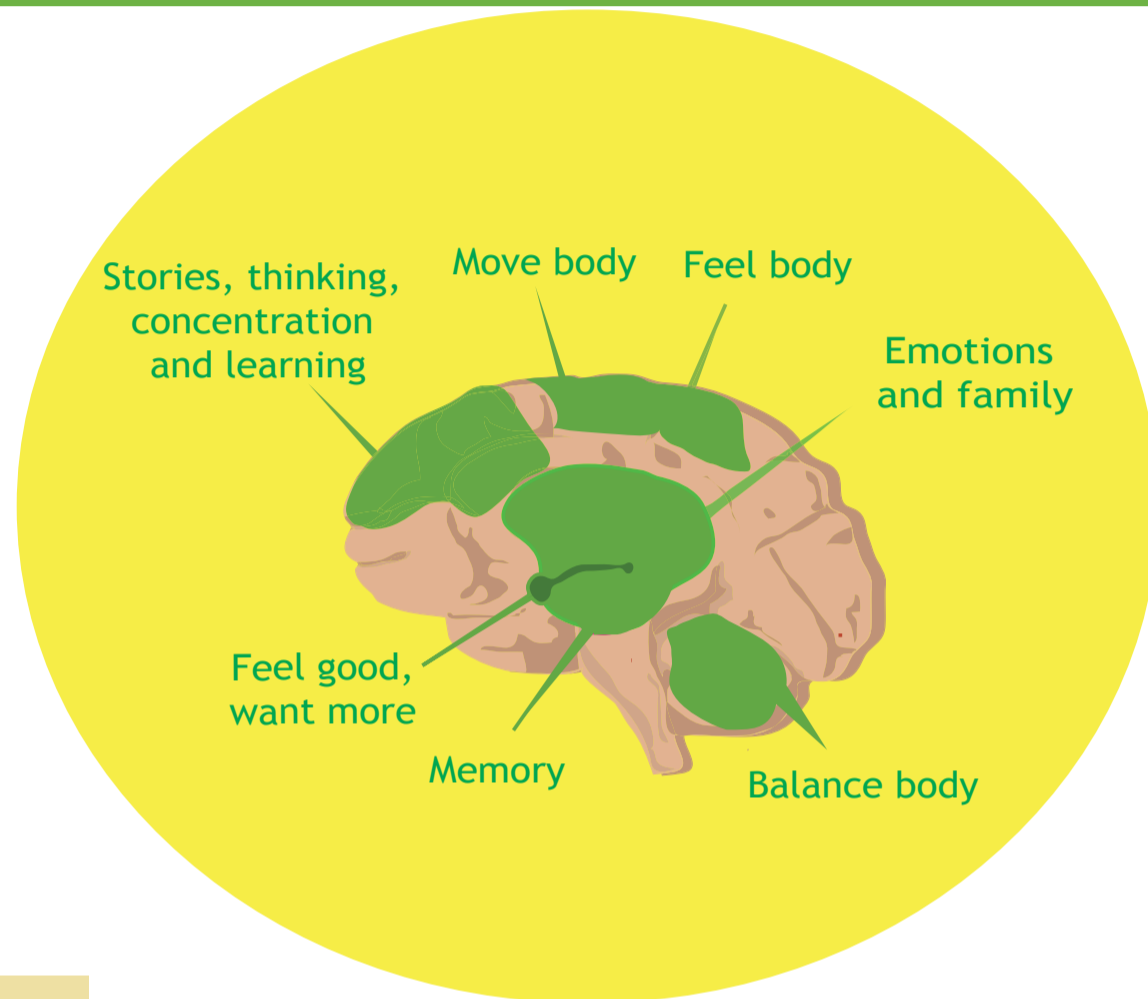
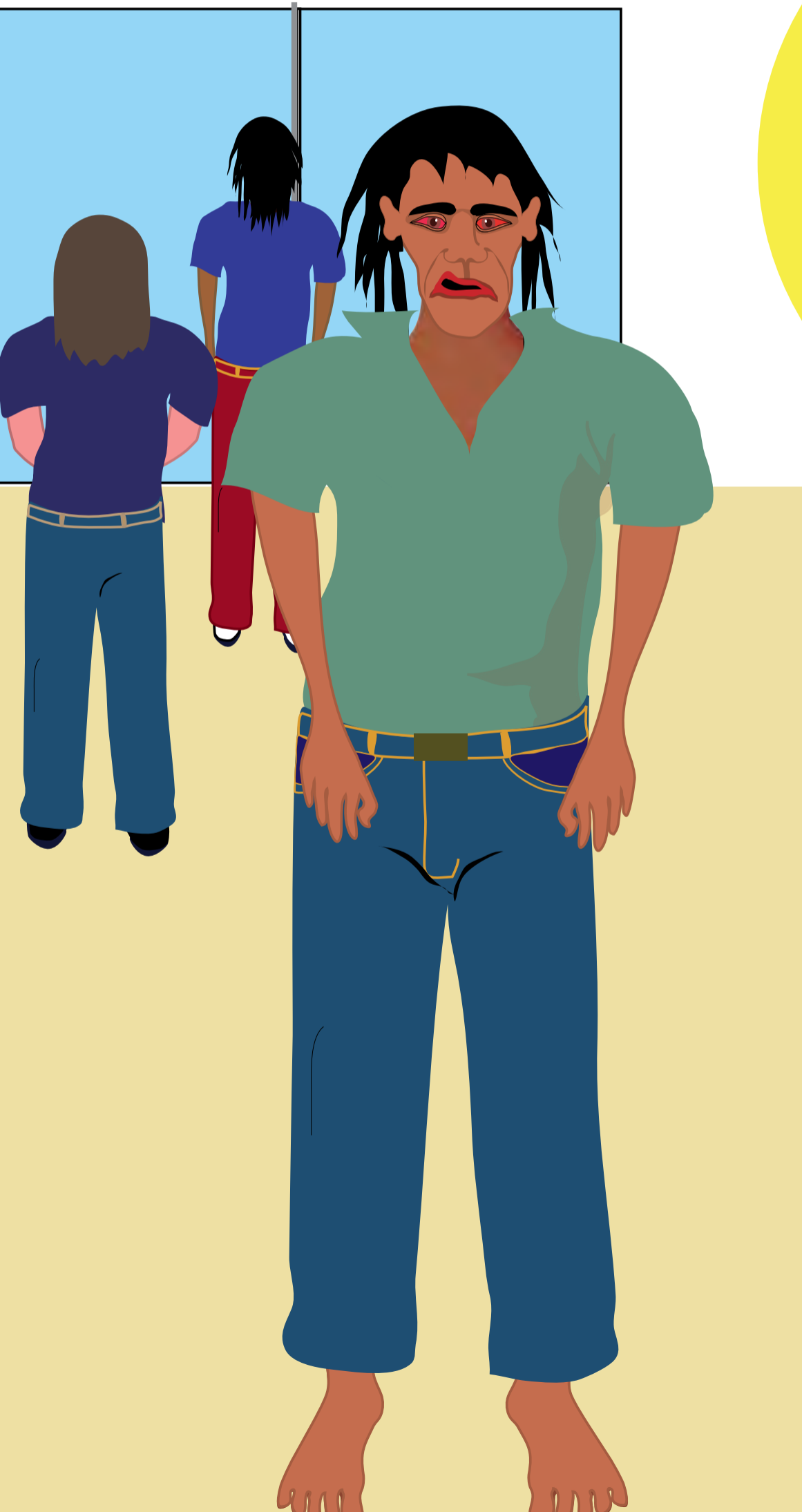


PART 2



GUNJA AND THE BRAIN

*Short-term changes:
using a lot of gunja*



Might have troubles with:

- concentration
- memory
- learning new things
- motivation
- relationships
- family
- getting and keeping a job
- health
- mental health
- body feels tired and get sick more
- feeling depressed or feeling bad about themselves
- feeling anxious and jittery.

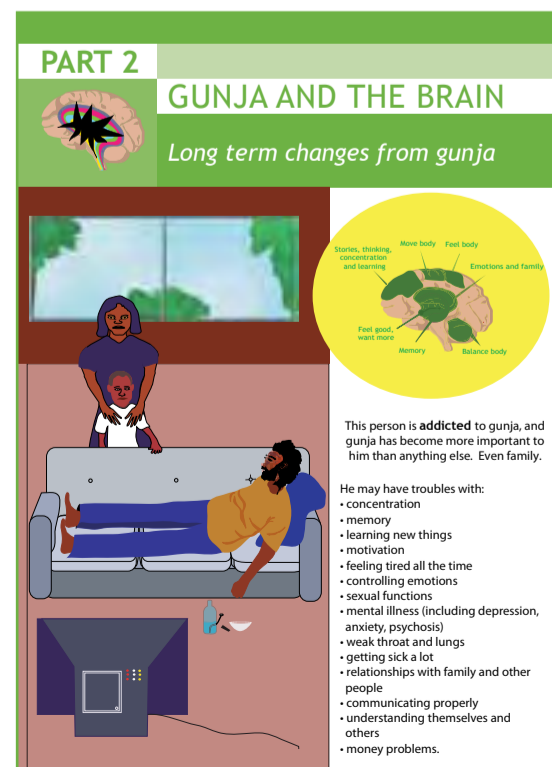
PART 2



GUNJA AND THE BRAIN

Long term changes from gunja

- This person has been using gunja nearly every day for years.
- Way too much THC from the gunja has changed the way their brain works.
- They may have problems with these things:
 - concentration, memory and learning new things
 - controlling their emotions
 - motivation
 - getting tired all the time
 - mental illness (including depression, anxiety, psychosis)
 - weak throat and lungs and getting sick a lot
 - relationships with family and other people
 - sexual functions.
- They may not even notice these things because they have been happening for so long. Other people may just think these things are a normal part of the person and not realise they are from the gunja.
- They may lose their family and their country because the only thing that is important to them is gunja.
- If they have had a baby, the baby might not be as healthy or smart because of the THC from gunja.
- They are addicted and will have trouble stopping.
- Even after they stop, they may never think as clearly again or feel as good as they did before they started using gunja.

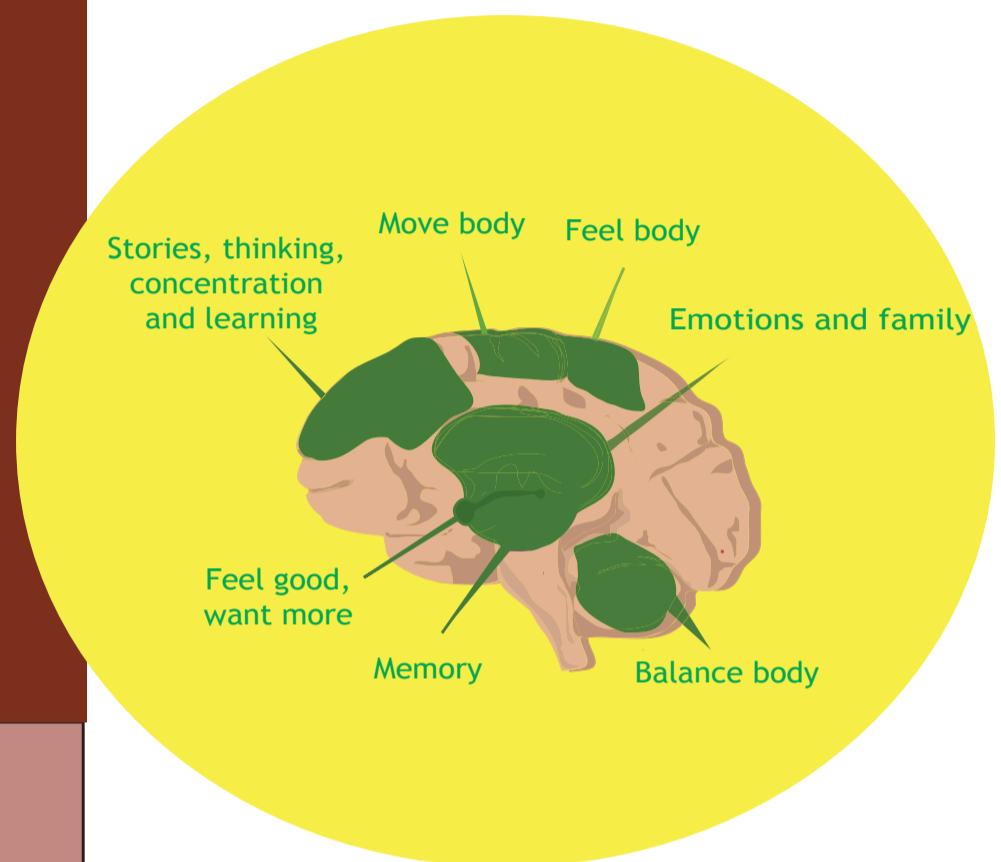


PART 2



GUNJA AND THE BRAIN

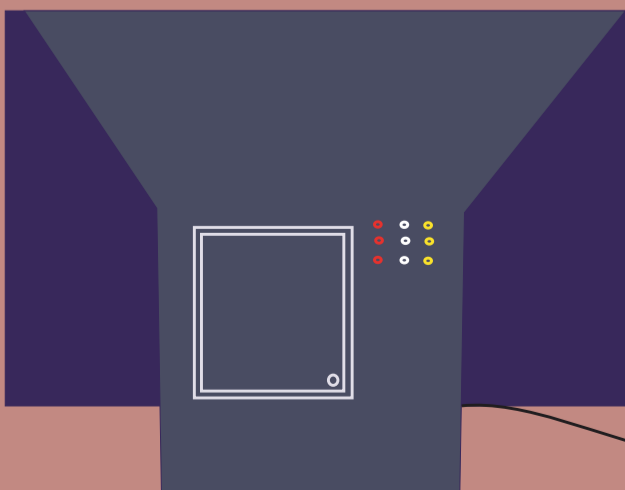
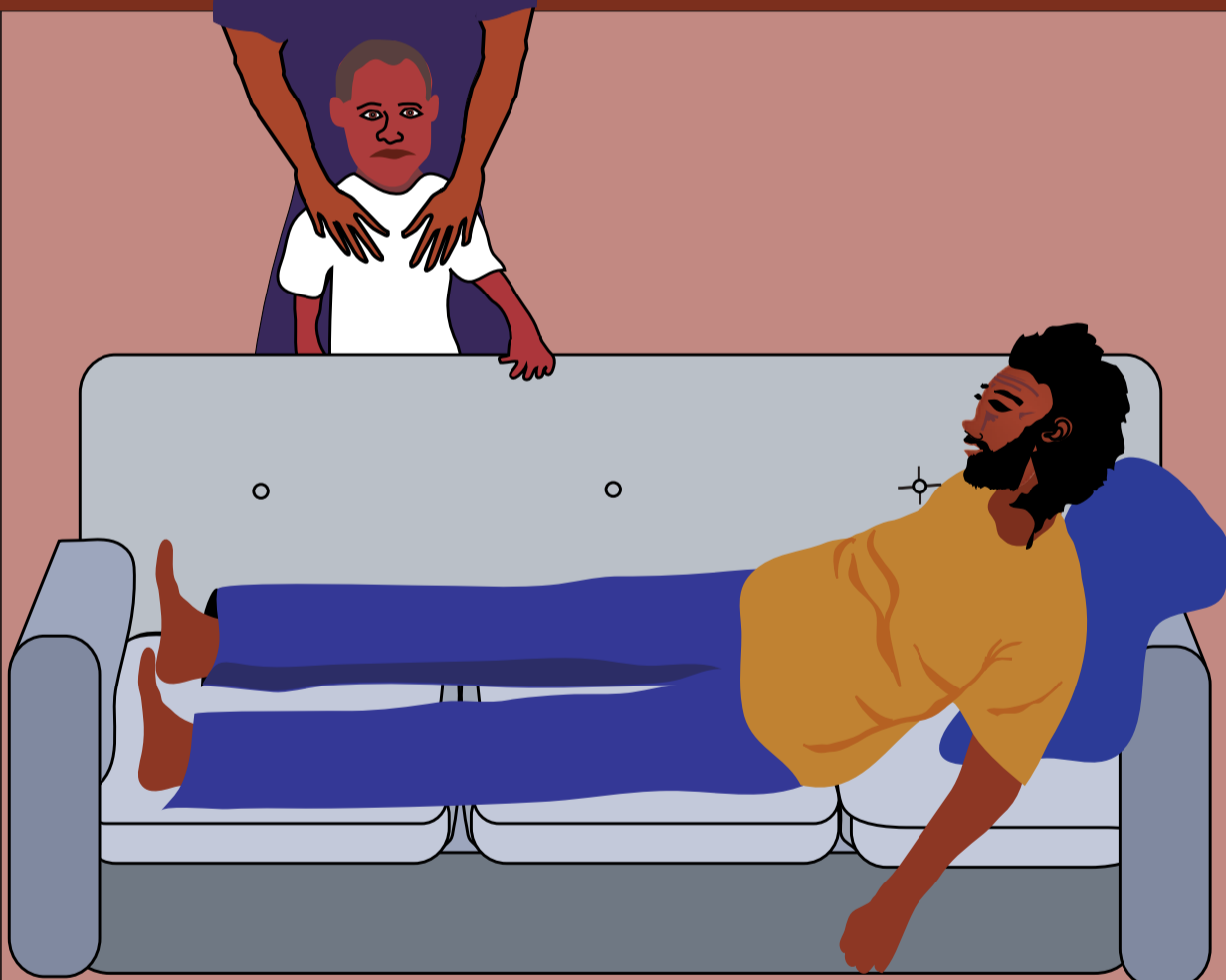
Long term changes from gunja



This person is **addicted** to gunja, and gunja has become more important to him than anything else. Even family.

He may have troubles with:

- concentration
- memory
- learning new things
- motivation
- feeling tired all the time
- controlling emotions
- sexual functions
- mental illness (including depression, anxiety, psychosis)
- weak throat and lungs
- getting sick a lot
- relationships with family and other people
- communicating properly
- understanding themselves and others
- money problems.



PART 2



GUNJA AND THE BRAIN

Gunja and mental health: anxiety, depression and suicide

- Gunja confuses the brain. This can confuse the way you are thinking and feeling and many people who use gunja have problems with mental health.
- Some people may have the mental health problem anyway, and the gunja can make it worse. But some people don't have a mental health problem until after they have been using gunja. These things can happen:
 - One mental health problem is called **anxiety**. Gunja makes the heart race and this can make you get nervous and excited at first, but then it can be hard to relax. You can get more jittery, worried and stressed and have racing thoughts and feel like these feelings won't stop. This is called anxiety.
 - **Depression** is when you feel sad, lonely, angry or low in energy for a long time. You can get too lazy to do anything or to mix with other people. They may hang around on their own or stay inside a lot.
- People who smoke gunja a lot can get depressed more than other people because their brain has forgotten to make its own 'feel-good' chemicals. Then they can't feel good unless they have gunja.
- Sometimes people use gunja to help with their problems but it doesn't help and can make them seem worse than they are.
- When using gunja or when the gunja runs out, your thinking can be so confused and you can feel so bad that you want to hurt yourself. Some people have killed themselves when this happens. This is called **suicide**. Usually people show signs of **depression** or **anxiety** before they try **suicide**.



PART 2



GUNJA AND THE BRAIN

*Gunja and mental health:
anxiety, depression and suicide*



PART 2

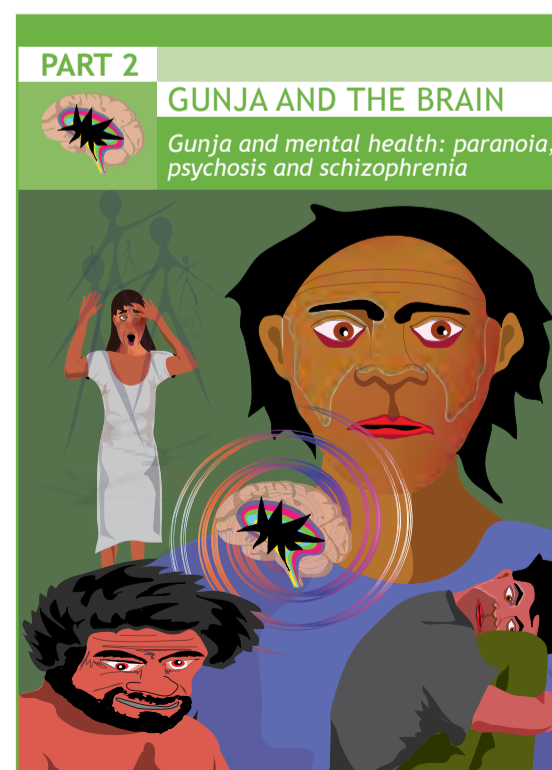


GUNJA AND THE BRAIN

Gunja and mental health: paranoia, psychosis and schizophrenia

- Here are a few more mental health problems that can happen with using gunja.
 - **Paranoia** is when you get worried or stressed about things that aren't true. You might feel like other people are talking about you, or don't like you, when it's not really true. You may also worry that you have health problems that are not there, or are not as bad as you think. People who use gunja often get **paranoid**.
 - **Hallucinations** are when you see things or hear things that nobody else can see or hear. They may be scary visions or voices telling you that you're no good. This is called **psychosis**. Some people only get psychosis once or twice then stop using gunja or get help so they can get better. But if the hallucinations are more serious, they may have a disease called **schizophrenia**. They will need treatment and gunja will make it worse.
- These things can happen a little bit or a lot, and you can have a combination of these things at the same time.
- Having a mental health problem at the same time as a drug or alcohol problem is called 'comorbidity'. Then the mental health problem needs to be treated as well as the drug or alcohol problem.
- If you know somebody that this is happening to, they can get help from mental health services. They need to stop using gunja because it will make the mental health problems worse.

There is a list of useful contact numbers for help or information about mental health, alcohol or drug problems on the last page of this flipchart.



PART 2



GUNJA AND THE BRAIN

Gunja and mental health: paranoia, psychosis and schizophrenia



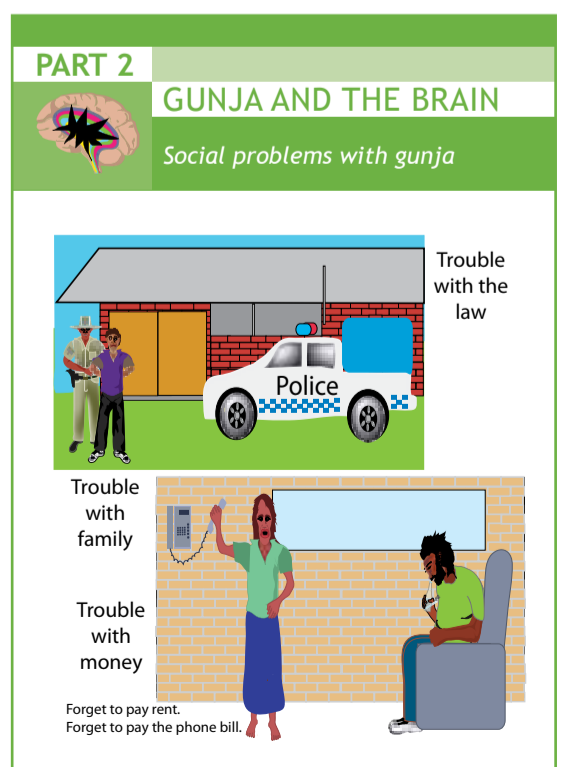
PART 2



GUNJA AND THE BRAIN

Social problems with gunja

- When anyone is using too much gunja, it is a problem for the person as well as for their family, their friends and their community.
- Gunja can make people lazy, sick and less able to work and be active in helping the community, but it can also make problems for people with money, the law and family.
- Gunja can be expensive. If somebody is using a lot of gunja, they will be spending a lot of money and may not have much money left for food, rent or looking after their family.
- When this happens, gunja users can end up fighting a lot with their family about money.
- Gunja is also illegal, so if someone is using gunja, then they are involved in the illegal activity of buying and using gunja. They may even be selling gunja.
- They are at risk of getting into trouble with the police. If they are caught by police, they may face a criminal charge and, if it is more serious, they may have to go to prison.



PART 2



GUNJA AND THE BRAIN

Social problems with gunja

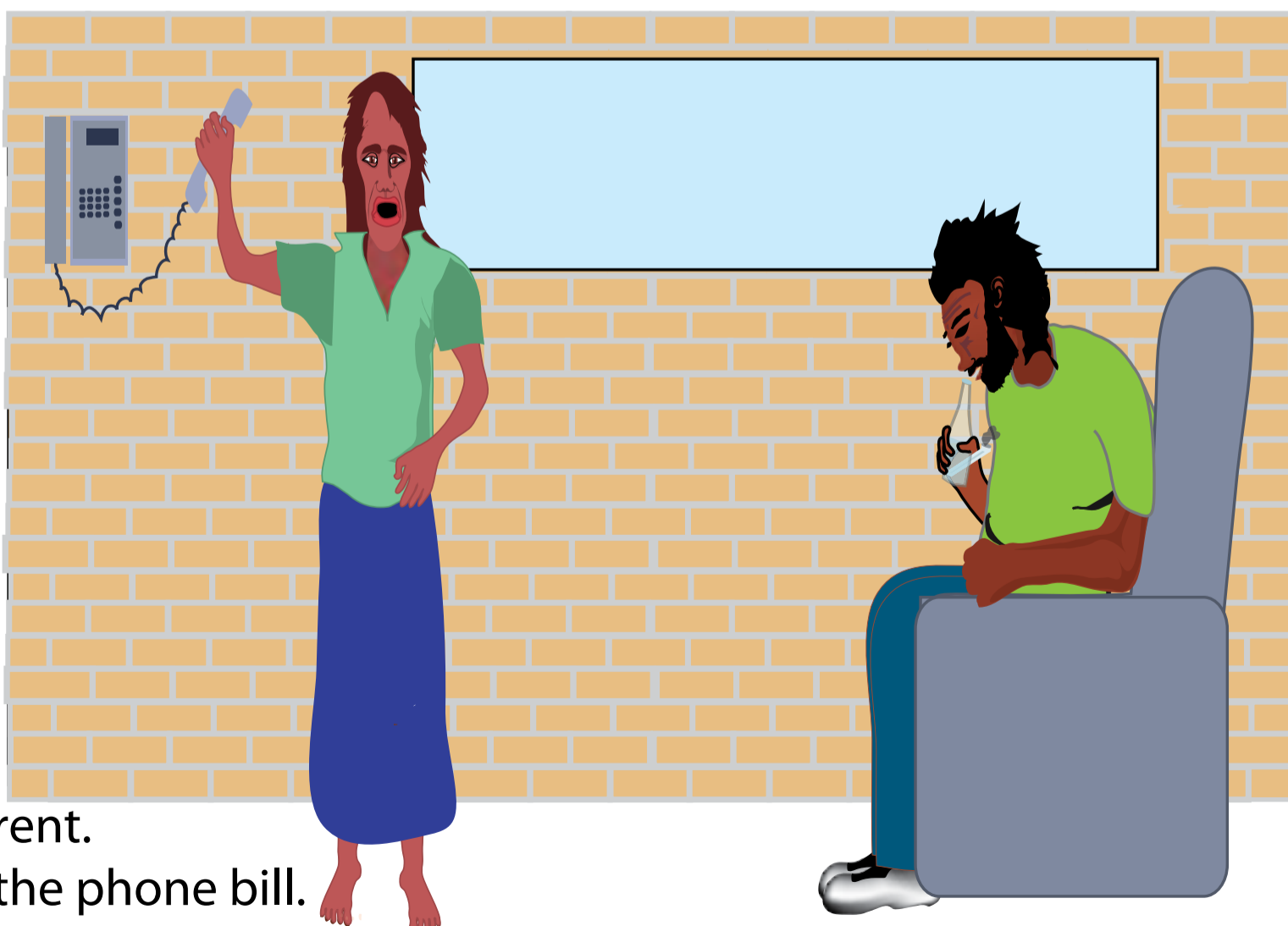


Trouble
with the
law

Trouble
with
family

Trouble
with
money

Forget to pay rent.
Forget to pay the phone bill.



PART 2



GUNJA AND THE BRAIN

Using gunja when you are pregnant is no good for the baby

- Both men and women who use gunja may have lower **fertility**. This means that men may have trouble making babies and women may have trouble getting pregnant.
- If a woman uses gunja when she is **pregnant**, the THC from gunja will go through the mother's blood and into the brain and body of the baby inside her (also called the '**fetus**').
- Smoking anything (like gunja or tobacco) during pregnancy will stop the **fetus** from getting the nutrients it needs to grow.
- Then the baby can be born too early and may be too small.
- It might get sick more often as it grows older.



PART 2



GUNJA AND THE BRAIN

Using gunja when you are pregnant is no good for the baby



Photos of the baby (ultrasound)



Mother not using gunja



Mother using gunja

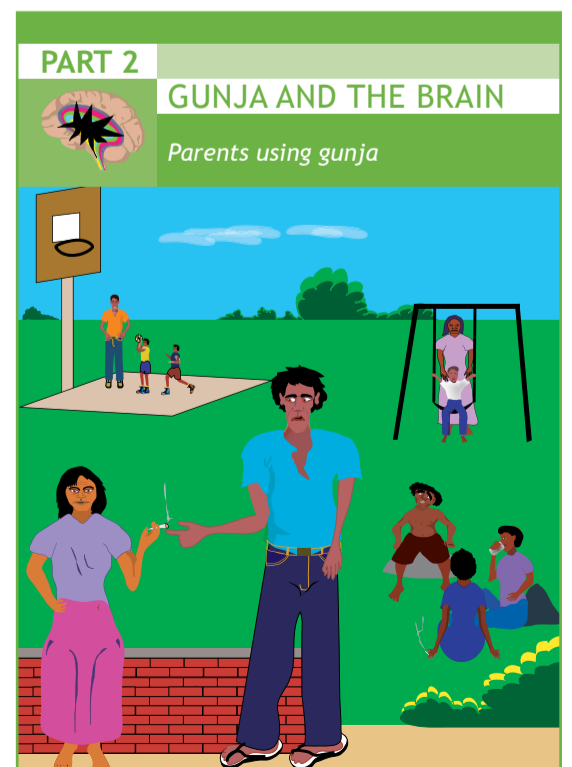
PART 2



GUNJA AND THE BRAIN

Parents using gunja

- If a mother uses gunja when she is **breastfeeding** her baby, the THC from gunja gets into her breast milk and is swallowed by the baby. It can stay in the baby's fat cells for a few weeks and may cause health problems or sleep disruption for the baby.
- Gunja users who have **children** can forget about looking after their children properly when they smoke gunja. Children of gunja users can go hungry, miss school or get into lots of trouble all the time.
- Children copy what adults do. When children grow up around gunja, they can start using gunja themselves or other drugs or alcohol at a very young age.
- When children start using gunja at a young age, they are at most risk of having physical and mental health problems from using gunja. They are also more likely to have social problems from gunja use and may be more likely to use alcohol or other drugs.



PART 2



GUNJA AND THE BRAIN

Parents using gunja



PART 2



GUNJA AND THE BRAIN

Gunja can kill your spirit

- We can see from these stories how too much gunja can make you sick, can damage your brain and hurt you and your family.
- Using too much gunja can slowly destroy your brain, your body and your relationships with other people and with country.
- This is just like a river system that has dried up and has no water.
- There is no food or life in the river or in the plants, animals and people around the river.
- The river system has no life, and no spirit, just like a person who uses gunja too much will slowly lose their life and their spirit.
- The only way to stop this from happening is to stop using gunja and start looking after yourself.



PART 2



GUNJA AND THE BRAIN

Gunja can kill your spirit



PART 3



GETTING BETTER

Getting off the gunja

- The good news is that the brain can start to get better, but only if the person stops using gunja altogether, or cuts right down.
- The brain can learn to make its own ‘feel-good’ chemicals again.
- Over time, the brain and nervous system can be healthy and strong again, like a healthy river system.
- How can the brain and nervous system get healthy again?
- The most important thing is to **stay away from the gunja**. This is the hard part.
- The next step is learning to live without gunja.
- This can take a long time and will need help from family, friends, a counsellor, nurse, doctor, rehabilitation centre or hospital.
- The brain, body and spirit can get strong again!



PART 3



GETTING BETTER

Getting off the gunja



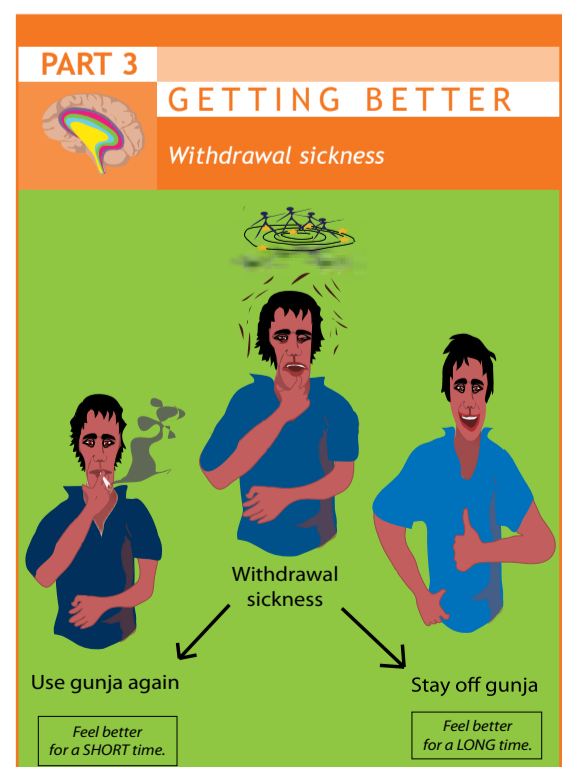
PART 3



GETTING BETTER

Withdrawal sickness

- When someone who is addicted or dependent on gunja stops using gunja, they can get sick before they get strong again.
- This almost always happens with someone who has been using gunja every day.
- This is called **withdrawal sickness**. It happens because the brain and body have been tricked into thinking they can't work properly without the gunja.
- The withdrawal sickness can start the day the gunja use is stopped. It is usually worse for the first week off gunja, and can last for a few weeks. It gets easier and easier each week after stopping gunja, depending on the person and how long and how much gunja they have been using.
- With withdrawal sickness, you may:
 - feel sad, worried or anxious
 - get irritable, angry or violent
 - not feel like eating
 - feel confused
 - have trouble sleeping
 - feel weak
 - have mixed-up thinking
 - get sweaty
 - have bad dreams
- The withdrawal sickness can be so bad that the person uses more gunja to stop the bad feelings.
- To get healthy and strong, it is important to get past the bad feelings of withdrawal sickness.



PART 3



GETTING BETTER

Withdrawal sickness



Withdrawal
sickness



Use gunja again

Stay off gunja

*Feel better
for a SHORT time.*

*Feel better
for a LONG time.*

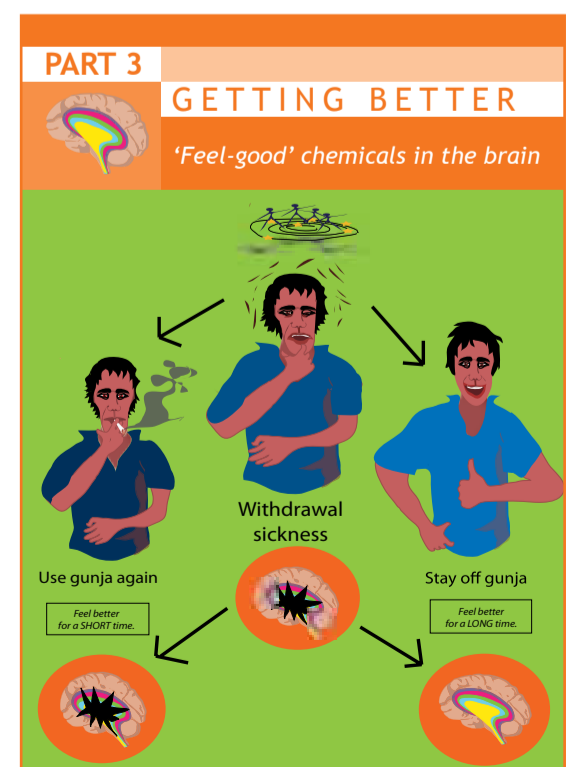
PART 3



GETTING BETTER

'Feel-good' chemicals in the brain

- When someone has been using gunja for a long time, the brain has forgotten how to make its own 'feel-good' chemicals.
- You can see from the picture in the middle here that when this person stops using gunja, they can feel very bad because their brain has forgotten how to make its own 'feel-good' chemicals.
- This is part of the withdrawal sickness.
- Because they feel so bad when they stop using gunja, they think the only thing that can make them feel good again is using gunja again.
- Then they may start using gunja again, like the person in the picture on the left.
- But the good feelings from the gunja will only last a short time and then they will keep getting sick from the gunja.
- When they stop using gunja, they have to get through the withdrawal sickness so that the brain can learn to make its own 'feel-good' chemicals again.
- Then they will feel good for a long time, like the person in the picture on the right.



PART 3



GETTING BETTER

'Feel-good' chemicals in the brain



Withdrawal
sickness



Stay off gunja



Use gunja again

Feel better
for a *SHORT* time.



Feel better
for a *LONG* time.



PART 3

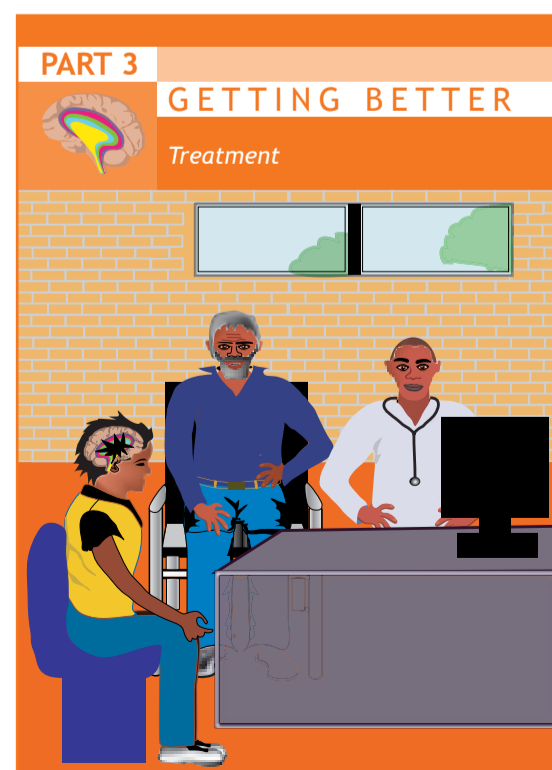


GETTING BETTER

Treatment

- To get past the withdrawal sickness and get strong again, the person may need **treatment** from a nurse, doctor, rehabilitation centre or hospital.
- If they don't get help, they could get very sick or not be able to stop using gunja.
- If the sickness is very bad, the treatment program can include taking medicine.
- This medicine can stop the withdrawal sickness and help the brain and body get strong again.
- The treatment program can also include talking with a counsellor or support person to work out ways to stay off the gunja and start getting strong.
- It is important to work out what people, places, events and problems make using gunja happen or make it worse.
- Then the person can avoid these situations or learn not to use gunja when these things happen.
- They can learn to choose healthy things to do and people to hang out with that don't involve using gunja.

There is a list of useful contact numbers for help or information about mental health, alcohol or drug problems on the last page of this flipchart.



PART 3



GETTING BETTER

Treatment



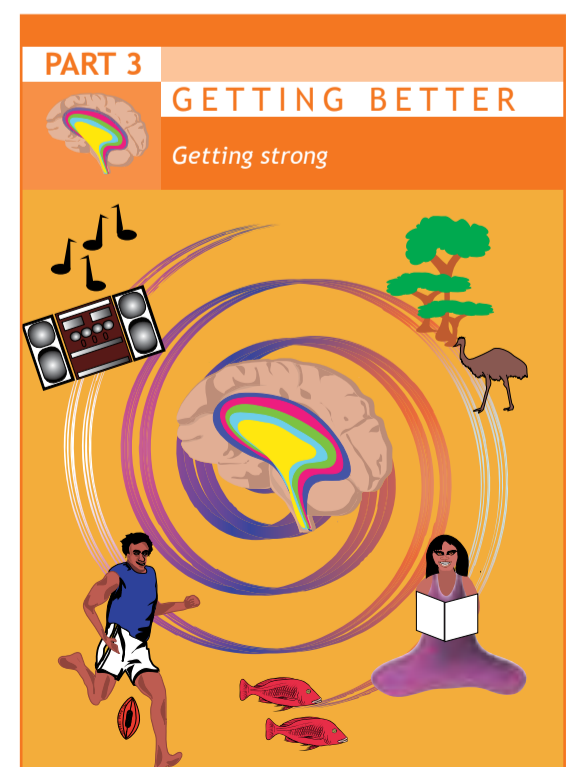
PART 3



GETTING BETTER

Getting strong

- Sometimes people who try to give up the gunja can't get past the withdrawal sickness, or they start using gunja again as soon as they leave the treatment centre.
- For someone to stay off the gunja, they may need to:
 - start doing other more healthy things that make them feel good naturally
 - stop going to the places where they used to use gunja
 - stop hanging around with people who are using gunja.
- Sometimes when people don't do these things, they can start using gunja again.
- It is important to remember that the brain will learn to make its own natural 'feel-good' chemicals again if you can stay away from the gunja. Then the brain will get back in control and you can start to feel good without gunja.
- Once you have got past the withdrawal sickness, you need to do things that really make you feel good and happy and healthy. This will help the brain learn to make its own 'feel-good' chemicals again.

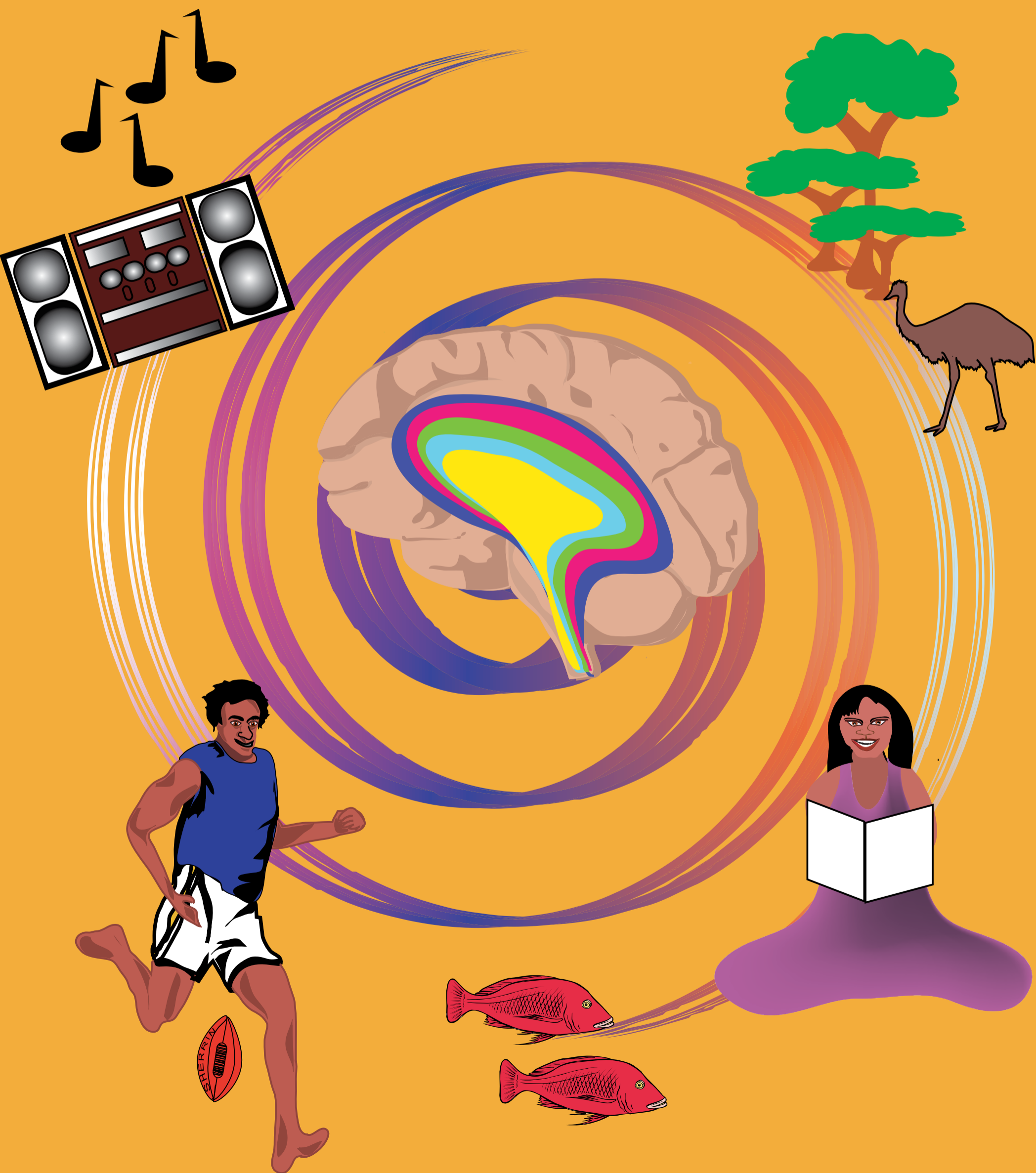


PART 3



GETTING BETTER

Getting strong



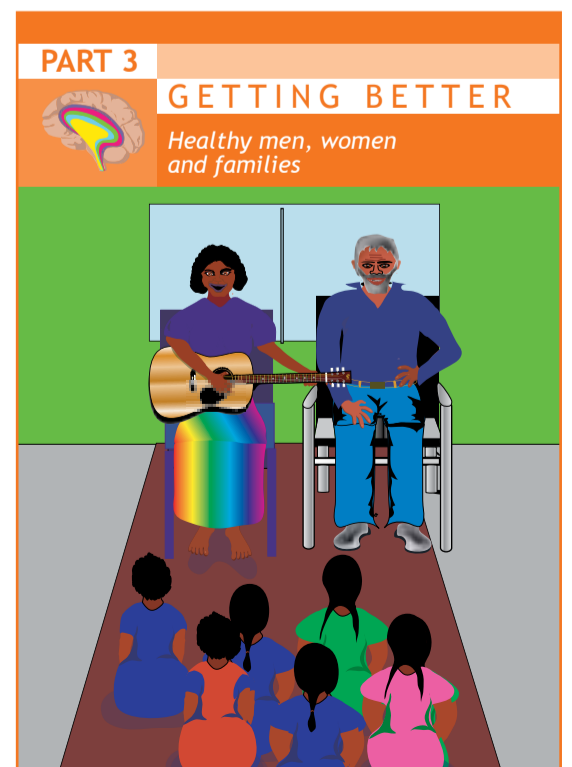
PART 3



GETTING BETTER

Healthy men, women and families

- It is important for men and women to look after themselves and their families. They can't do this when they use gunja.
- Men and women can choose to be strong and healthy.
- They can be good role models for their families and their communities.
- They can show their people how to do healthy things that make them feel good.
- Using gunja damages your health and hurts your children, your families and your community.
- Gunja hurts everybody – even people in the community who don't use it.
- Everybody can and should work together to reduce the damage caused by gunja.
- People need love and support to stop using gunja.
- Strong men and women can help other adults and young people to become strong and healthy.

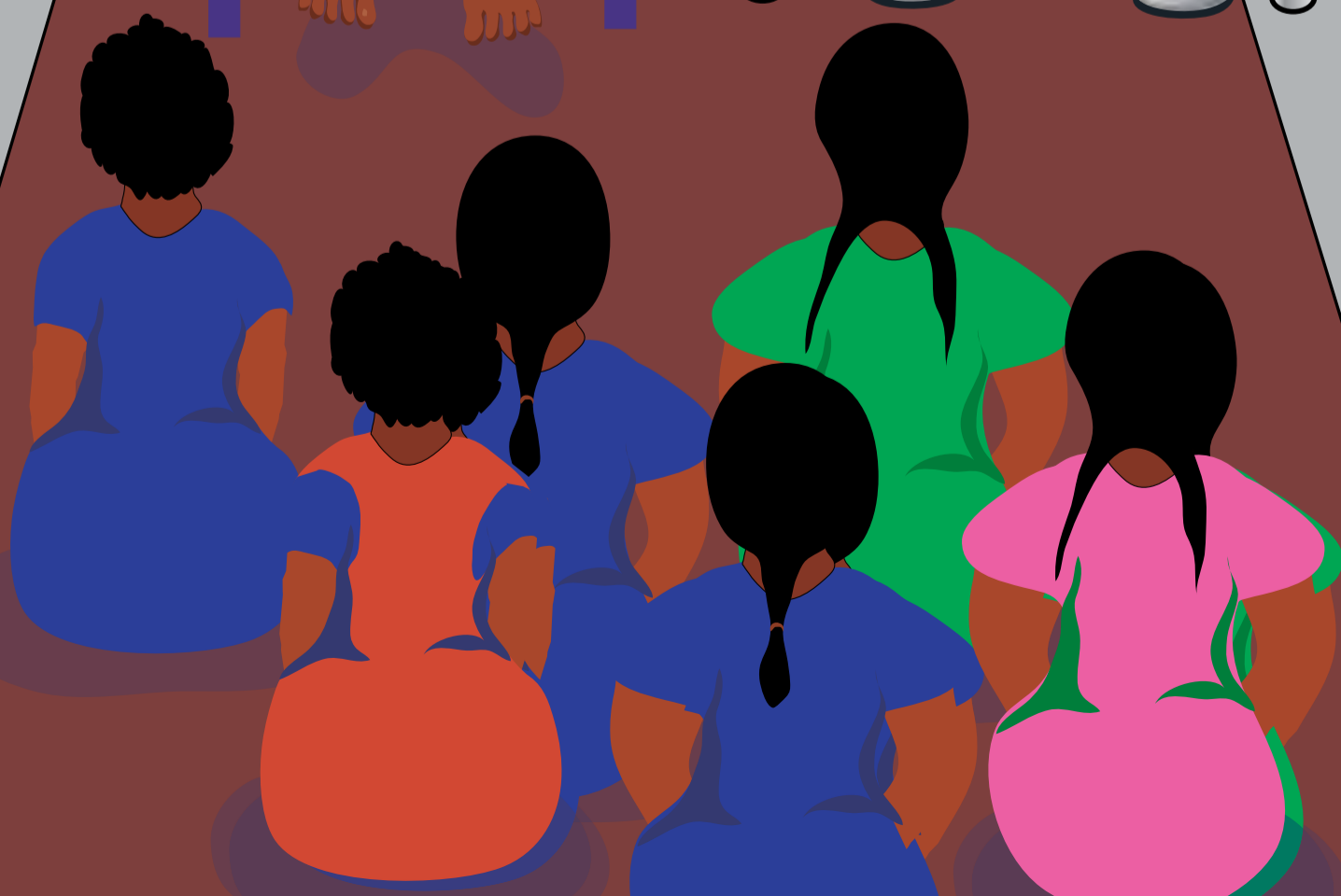


PART 3



GETTING BETTER

*Healthy men, women
and families*



PART 3

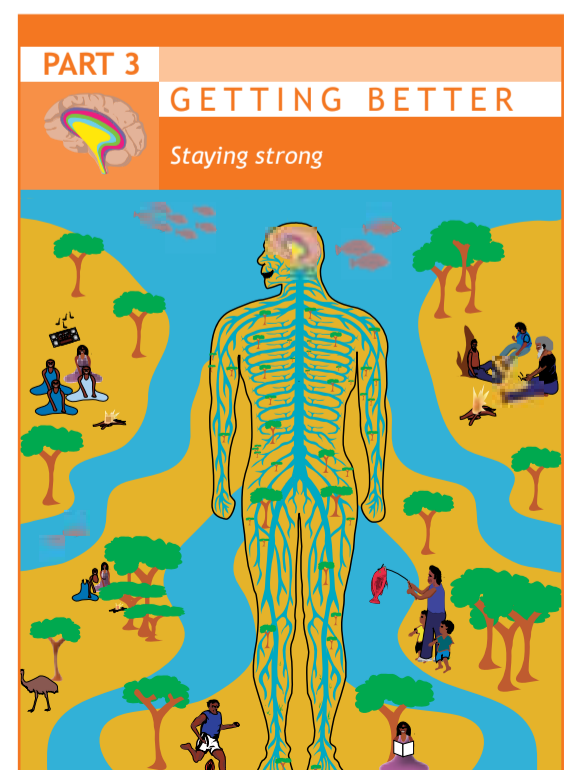


GETTING BETTER

Staying strong

Remember these steps to getting better:

- Stop using gunja.
- Get help from family, friends, clinic, rehabilitation centre or hospital.
- Remember that you are likely to get withdrawal sickness when you stop using gunja, but the bad feelings will go away if you stay off the gunja.
- Having treatment with medicine will help you feel better until your natural ‘feel-good’ chemicals come back.
- You may need to stay in a hostel, rehabilitation centre or hospital while you have treatment.
- Start eating healthy food.
- Start doing healthy things that make you feel strong, like walking, fishing, being with family, hunting, working, playing sport, ceremony, making music, getting back to country.
- Don’t hang around with other people who are using gunja.
- **Stay off the gunja and you will feel better.**

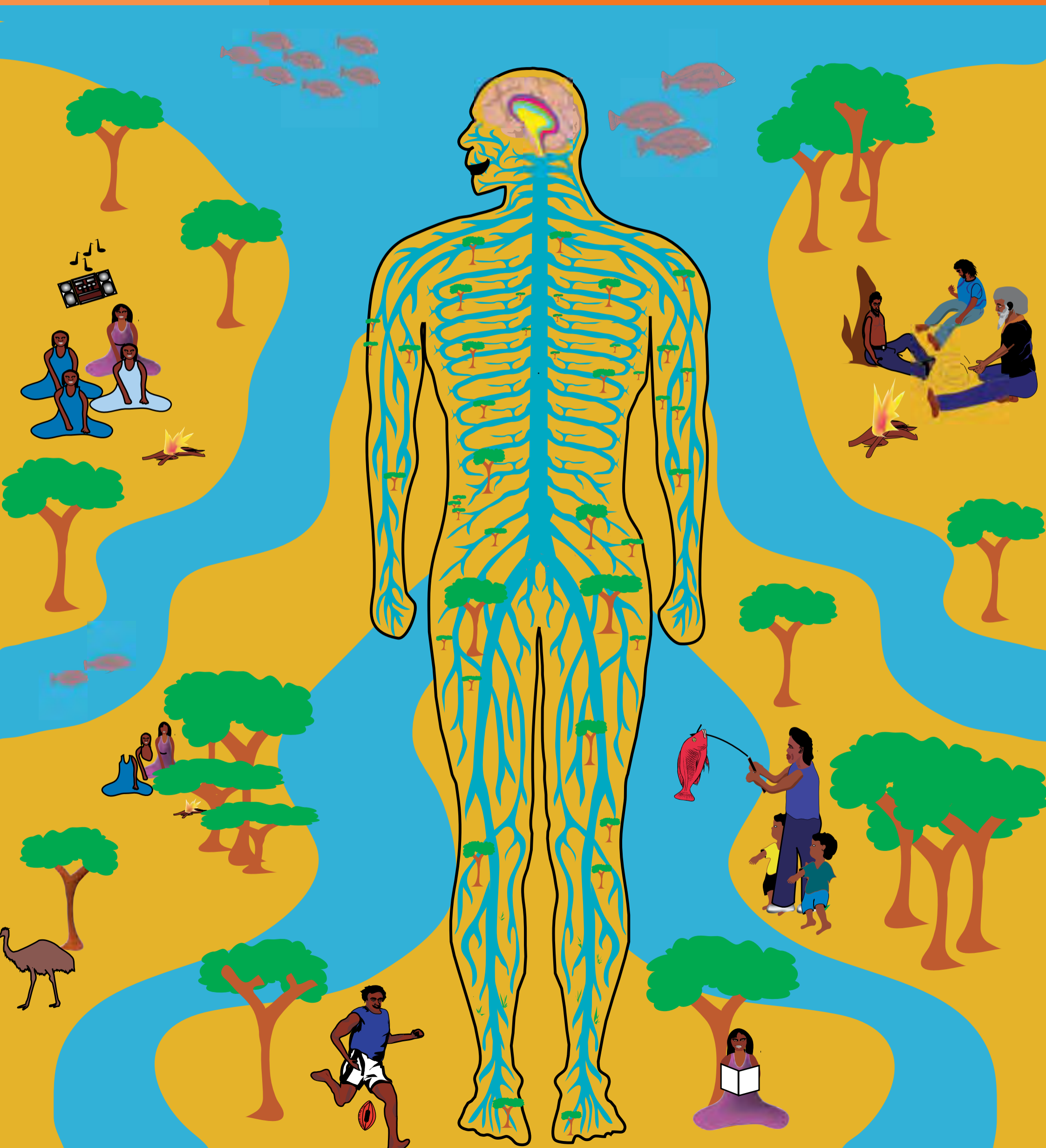


PART 3



GETTING BETTER

Staying strong





NEED HELP?

Useful contact numbers

You can get lots of useful information if you call the numbers below. They can offer you counselling anytime or can refer you to appropriate treatment services for Indigenous people in your area. You can call all of these numbers anytime at all (24-hours a day, 7 days a week).

Mental health

If you want information or help with mental health problems, you can call Lifeline from anywhere in Australia on 13 11 14.

Alcohol or drug

You can get lots of useful information about alcohol or drug problems by calling the information service in your state. Their telephone numbers are listed below.

AUSTRALIAN CAPITAL TERRITORY

Community Health Helpline

ph: (02) 6207 9977 (metropolitan area)

ph: (02) 6207 9977 (rural area)

NEW SOUTH WALES

Alcohol and Drug Information Service (ADIS)

ph: (02) 9361 8000 (metropolitan area)

ph: 1800 422 599 (rural area)

NORTHERN TERRITORY

Alcohol and Drug Information Service (ADIS)

ph: 1800 131 350 (metropolitan area)

ph: 1800 131 350 (rural area)

QUEENSLAND

Alcohol and Drug Information Service (ADIS)

ph: 1800 177 833 (metropolitan area)

ph: 1800 177 833 (rural area)

SOUTH AUSTRALIA

Alcohol and Drug Information Service (ADIS)

ph: (08) 8363 8618 (metropolitan area)

ph: 1300 131 340 (rural area)

TASMANIA

Alcohol and Drug Information Service (ADIS)

ph: 1800 811 994 (metropolitan area)

ph: 1800 811 994 (rural area)

VICTORIA

DirectLine

ph: 1800 888 236 (metropolitan area)

ph: 1800 888 236 (rural area)

WESTERN AUSTRALIA

Alcohol and Drug Information Service (ADIS)

ph: (08) 9442 5000 (metropolitan area)

ph: 1800 198 024 (rural area)