

# The THC impact on human body systems

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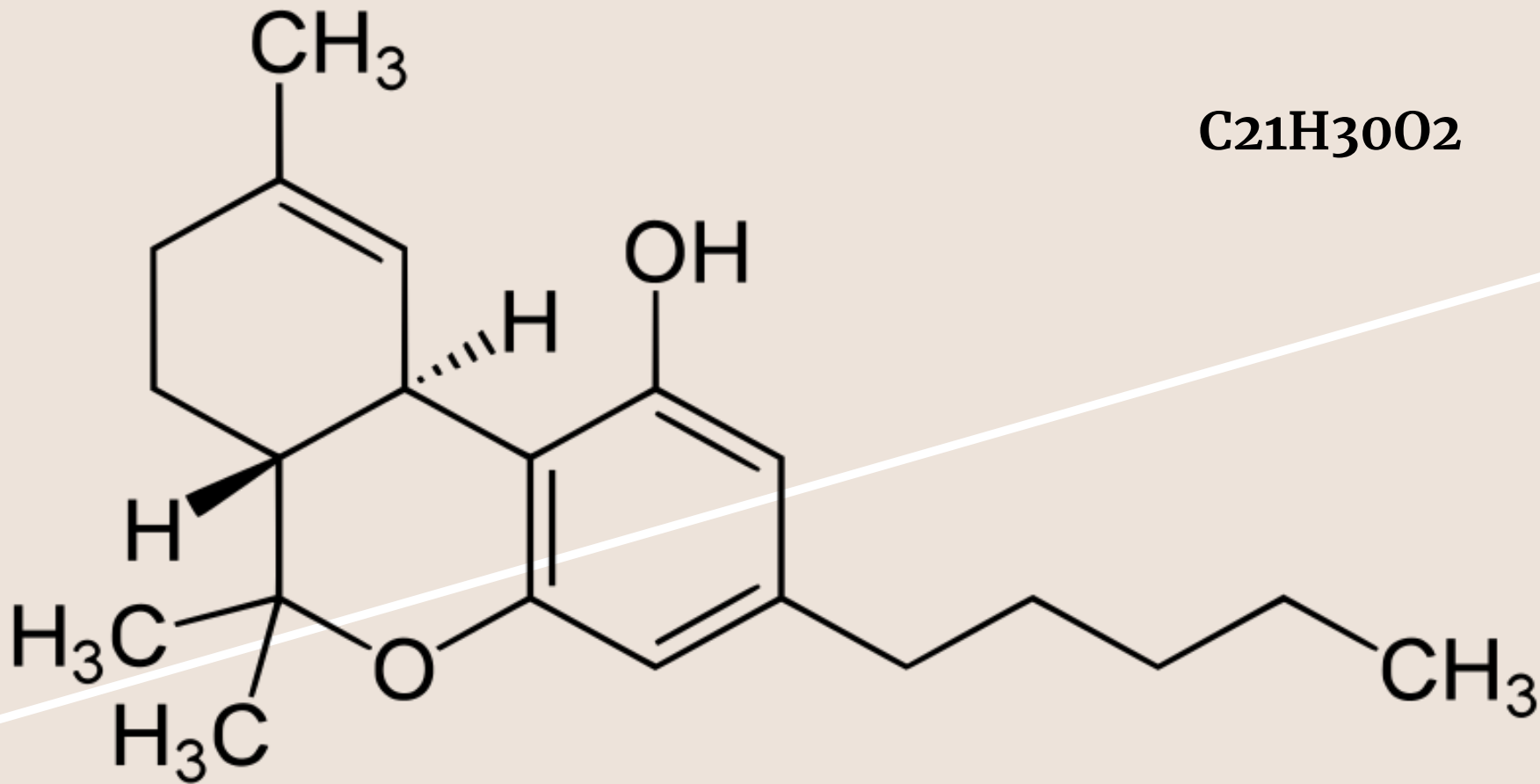
To avoid health problems,  
teenagers need to have a  
knowledge about how  
does THC work.

# What is THC?



THC (abridgement of tetrahydrocannabinol) is an organic compound from the group of cannabinoids. It is a main psychoactive constituent implicit in **cannabis plant**. The substance is insoluble in water whereas is soluble in alcohols or fats.

C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>



# How does THC work



THC is responsible for psychoactive activity in marijuana/cannabis.

THC can stimulate brain cells to release dopamine and bring the state of euphoria and relaxation.

It can also disturb processing informations in one of the brain placements which is responsible for memory and creating new memories.

In people who take THC we can observe for example:

different perception of time,

greater appetite,

problems with concentration,

high pain tolerance

# The composition of medical marijuana.

The main and the best examined components are THC(which is psychoactive) and CBD(without psycho activities). Medical marijuana contains around 19% of THC and less than 1% od CBD.





The active chemicals in medical marijuana are similar to chemicals the body makes that are involved in appetite, memory, movement, and pain. Limited research suggests cannabinoids might: Reduce anxiety, reduce inflammation and relieve pain.

# THC affects human body systems

**Nervous system,  
blood circulatory  
system, muscular  
system, immune  
system**





# THC & nervous system

This substance has the biggest influence on your nervous system. Everything happens in your brain.

Memory problems→ THC changes the way a part of your brain called the **hippocampus** processes informations, so it can affect your ability to form new memories.

The **hippocampus** helps humans process and retrieve two types of memory, declarative memories and spatial relationships. Declarative memories are those related to facts and events. Spatial relationship memories involve pathways or routes.



# Slowed reaction time

Cannabis may alter your balance, coordination, and reflex response. This could affect things such as your ability to drive.



# Dopamine release

Cannabis triggers the release of dopamine in the brain, triggering feelings of euphoria and potentially heightening your sensory perception.



# THC & muscular system

Cannabis is known to have a relaxing effect on the muscles. Which some speculate could help release pain and tension in the muscles. Cannabis and CBD could have anti-inflammatory properties. Anti-inflammatory substances are known to relieve pain. So it's thought that marijuana may reduce pain by reducing inflammation.



# THC & immune system

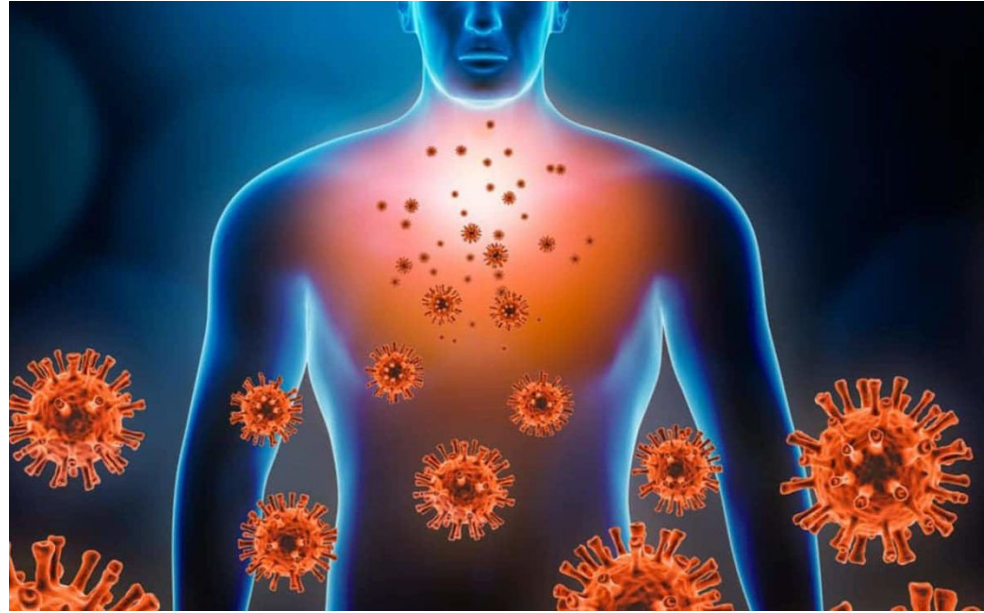
Weakened immune system-  
THC may suppress immune system, making you potentially more vulnerable to infection. However, this may also be beneficial if you are living with an autoimmune condition.





# Respiratory effects

Cannabis smoke contains a mixture of chemicals that can irritate your lungs and bronchial passages, similar to tobacco smoke. You may experience a burning mouth or throat, a phlegmy cough, or an increased risk of bronchitis.



# THC affects blood pressure

Effects on circulation.  
Smoking cannabis causes an almost immediate jump in your heart rate and expansion of your blood vessels that may result in a redness of the eyes.



**Teenager's  
knowledge about THC  
and how does it work.**



# The survey

The main goal of survey was to test the knowledge of polish teenagers about THC and how does it work.

The survey:

[https://docs.google.com/forms/d/e/1FAIpQLSeF3cvisslXRWNWtFfjNzAJ4rsh3S0flc\\_Jidl9Md-IK6qc-w/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSeF3cvisslXRWNWtFfjNzAJ4rsh3S0flc_Jidl9Md-IK6qc-w/viewform?usp=sf_link)

# CONCLUSION

**The most problematic question was**

**→ If marijuana can be used by person with anorexia?**

12/28 people have answered wrong.

The correct answer is YES.

People with anorexia of course can use marijuana. Anorexia is an approved condition for medical marijuana treatment in many states with medical marijuana programs. Studies support that **THC improves weight gain and also improves your appetite.**

# Why is it important for teenagers to have a command of how marijuana works?

Incorrect employing of marijuana can lead to many unwanted effects on your physical as well as mental health. Marijuana contain the most known psychoactive substance(THC). Nowadays many teenagers want to try something new for fun. However, sometimes they have different reasons such as their own problems, therefore most of teenagers reach for stimulants to “escape for a second”. Maybe if they would know how does it work and how it take a hold on our systems they would wonder twice before trying it with no medical recommendations.

# SOURCES

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- <https://www.medexpress.pl/sprawdz-swoja-wiedze-o-medycznej-marihuanie/74612>
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- my own knowledge

**Thank you for  
listening :)**