

# Clostridium Tetain

by Tufas

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## General metrics

**3,060**

characters

**440**

words

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**8.8**

Measures average sentence length

words per sentence

# Clostridium Tetain

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Clostridium Tetain

Student's Name

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## Clostridium Tetain

1. Which type of metabolic pathway is preferred for glucose metabolism?

The metabolic pathway has high-energy phosphate groups, including adenosine triphosphate, guanosine triphosphate and creatine phosphate.

2. Does Clostridium tetain use oxygen as a final electron acceptor in the electron transport chain? Yes. This is because oxygen is the final oxygen acceptor due to its higher affinity for electrons and an acceptor for low-energy electrons.

Does Clostridium tetain rely solely on fermentation to regenerate the  $\text{NAD}^+$ ? No  
This is because proteins in the inner mitochondrial membrane accept electrons from  $\text{FADH}_2 + \text{NADH} + \text{H}^+$  to make  $\text{NAD}^+$ .

3. Are there any specific enzymes Clostridium tetain has for identification? No

The dehydrogenase enzyme was removed and today, it is not being used. The tetanus toxin (Tent) causes tetanus that uses the axonal pathway to reach neurons in the spinal cord.

## 4. Biological Molecules

How does Clostridium tetain obtain the requirements to build its biological macromolecules?

(Tent) is a toxin that causes tetanus and leads to the creation of an axonal pathway that locates the presence of neurons in the spinal cord area.

5. Oxygen requirements for Clostridium tetain. Is it a facultative anaerobe, an obligate aerobe, a microaerophile, or an aerotolerant anaerobe?

An obligate anaerobe.

It is because Clostridium tetain grows with a lack of oxygen since the energy metabolic process does not involve oxygen.

6. How does Clostridium tetain deal with the toxic effect of oxygen?

Clostridium tetain deals with oxygen by growing without oxygen presence and by being an obligate aerobe, it requires no sight of any oxygen during metabolism.

7. Discuss the temperature requirements of Clostridium tetain. Explain which main class it falls into and why.

The spores of Clostridium tetain are heat resistant, which means they are sensitive and cannot survive in oxygen presence.

The main class of Clostridium tetain is Clostridia.

It is because it belongs to a family known as Clostridiaceae.

8. Name two methods of control of growth for Clostridium tetain in a patient with the disease and when confronted with the Clostridium tetain outside the host.

Vaccination is a chemical method of control that a Clostridium Tetain patient will be required to be vaccinated in case they are sick.

Evaluation and care in the hospital- It is a physical method where the patients with tetanus should be treated with respect by nurses through nursing their wounds to heal.

## References

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