

CF BEHIND THE SCENES WITH EUGENE

IMPACT ON BONES, KIDNEYS, AND HEARING

Welcome back

to another cystic fibrosis (CF) lesson with me—Eugene!

In other editions of *CF Behind the Scenes*, we learned about what causes CF, what it means for your body, and how CF progresses in the lungs and digestive system.

Let's continue our journey and explore the impact CF can have on the bones, kidneys, and hearing.



**Eugene
THE GENE**

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Start here

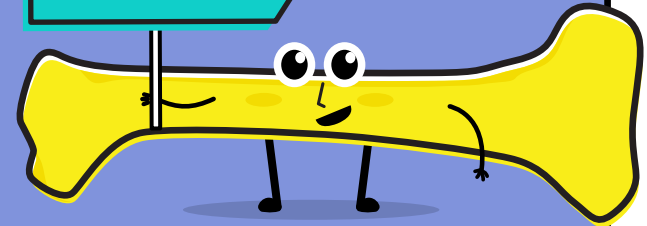
CF can affect parts of your body you might not think about, like your bones. This can be caused by the progression of the disease or the effects of necessary medicines used to treat it.



Impact on other parts of the body

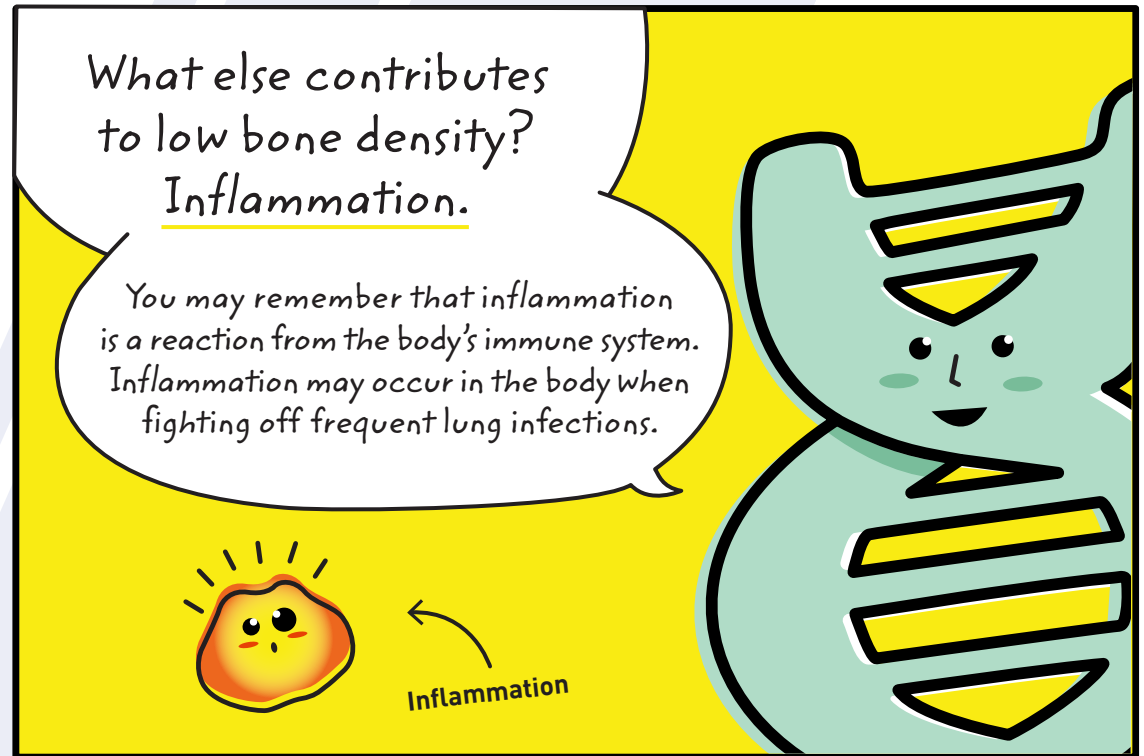
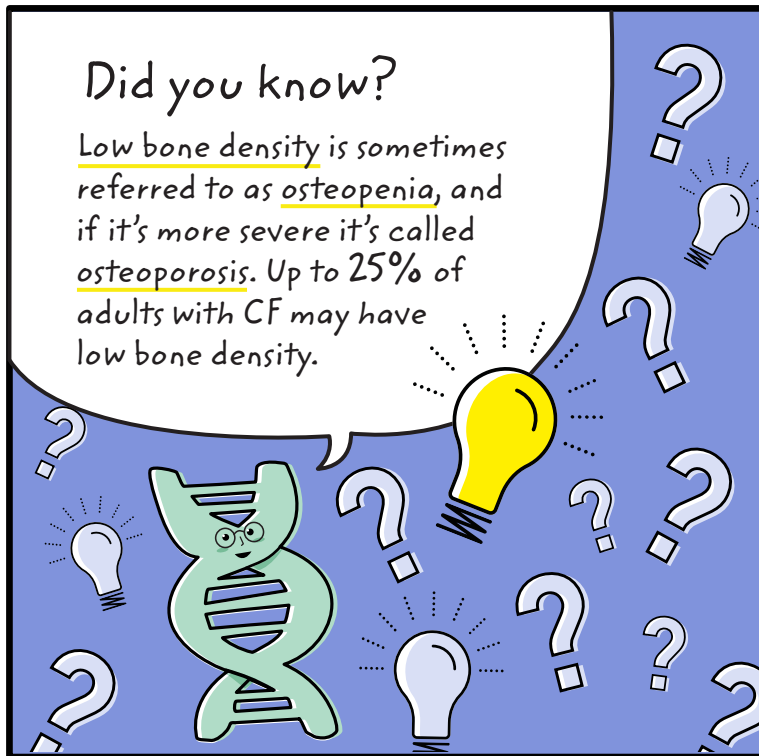
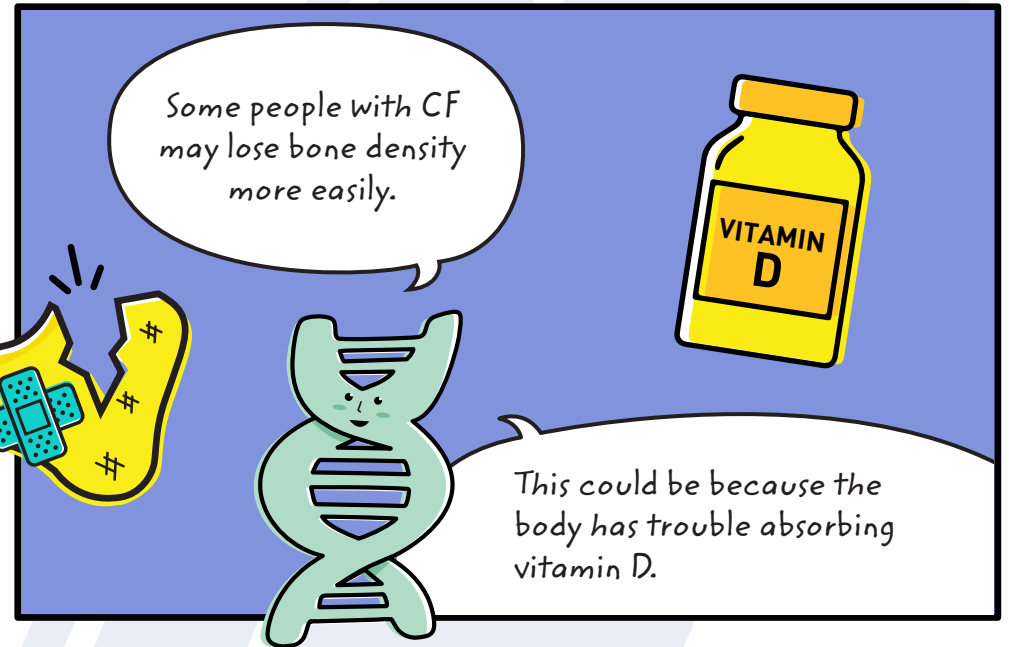
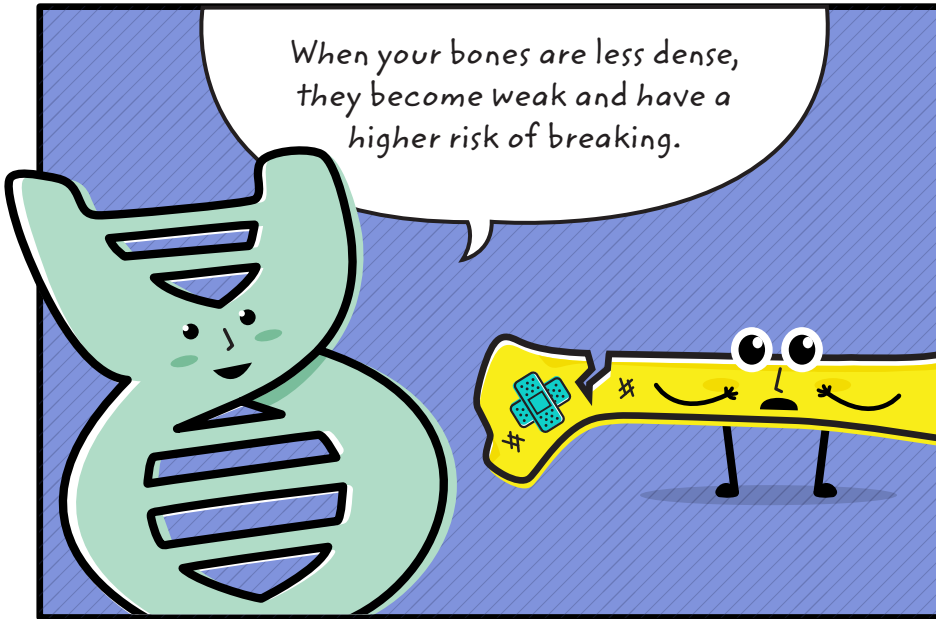
Let's start with your bones.


Bones



We want our bones to be dense because it keeps them strong.









Increased inflammation throughout the body may contribute to low bone density.

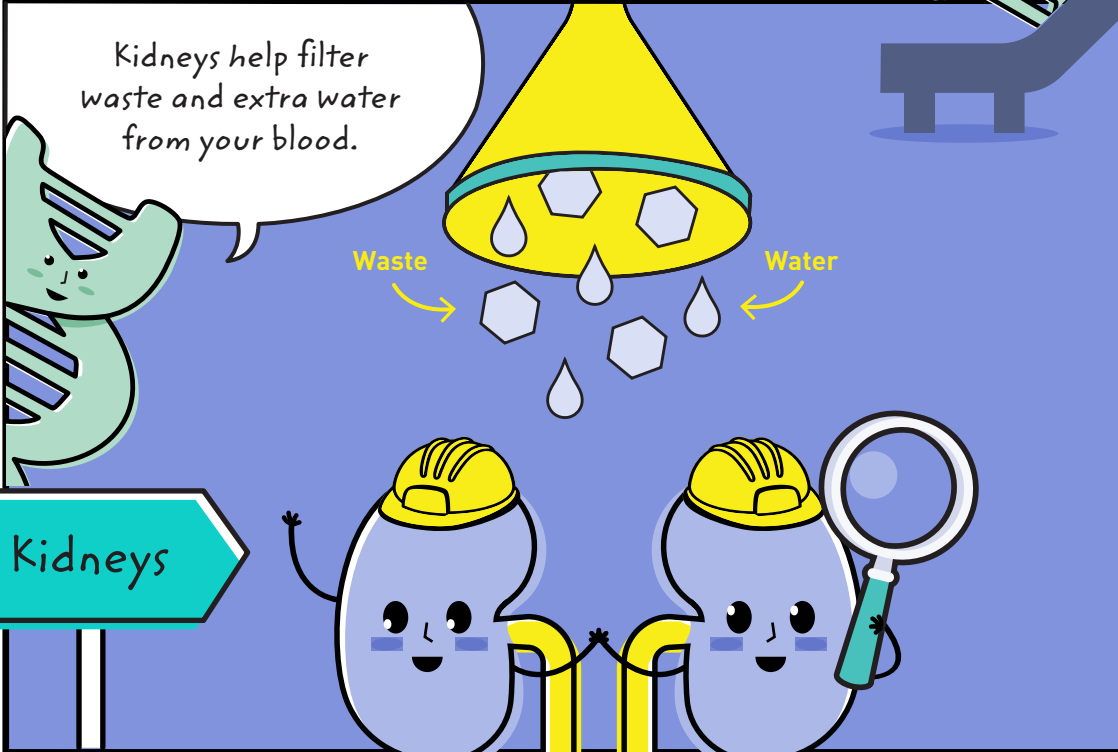
It's important to start bone density screening early. Your doctor may suggest a vitamin D supplement to keep your bones strong.



Ready to move on to the kidneys? Wheeeee!



Kidneys help filter waste and extra water from your blood.



Waste

Water

Kidneys


For some people, CF and the medicines used to treat it can impact the kidneys.




Did you know?
 About 2% of people with CF between the ages of 25 and 35 years have chronic kidney disease (CKD).

Risk Factors

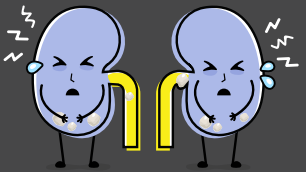
Well, there are some risk factors that can lead to CKD in adults.

 **Treatments with certain medicines people with CF may need to take**

- Treating other CF-related conditions with medicines, such as antibiotics, for an extended period of time can affect the kidneys

 **Progressive CFRD, or cystic fibrosis-related diabetes**

- Over time, high blood sugar in people with CFRD can lead to CKD
- Need a refresher on CFRD? Check out our previous lesson, "Impact on the Digestive System" at cfsource.com/digestivesystem

 **Kidney stones**

- People with CF absorb minerals differently. This may result in a buildup of minerals inside the body that causes kidney stones
- Kidney stones can cause pain and blood in urine

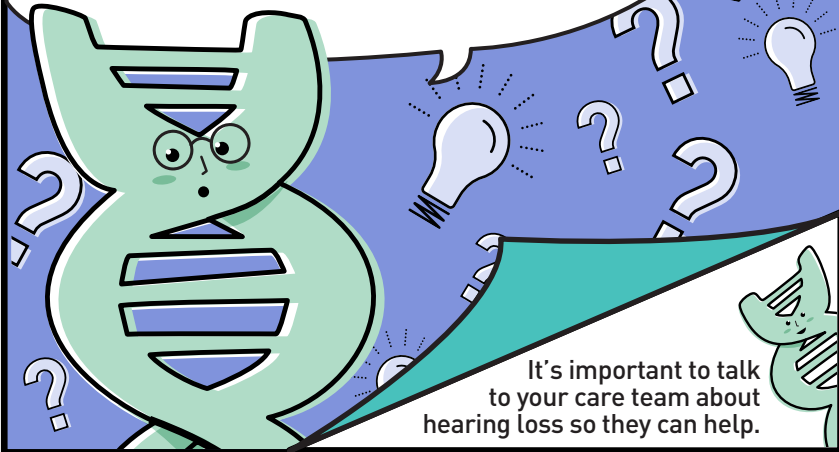
We have one more stop on our journey today. Let's move on to how CF can affect your hearing.

CF does not directly impact hearing. But, some of the medications and treatments that are very important for people with CF can affect hearing over time.



Did you know?

People with CF who take certain necessary antibiotics may experience a 20% loss in hearing.



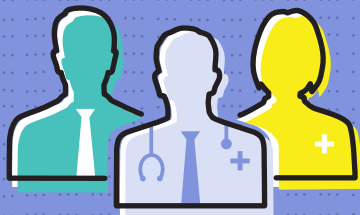
It's important to talk to your care team about hearing loss so they can help.

Eugene's Big Ideas

- People with CF can have trouble absorbing vitamin D and may lose bone density more easily
- People with CF may need to take a vitamin D supplement
- A small percentage of adults with CF will develop Chronic Kidney Disease (CKD)
- Some medications and treatments that people with CF may need to take can affect the kidneys and hearing over time

Let's go over what we've learned so far.

Talk to your care team to learn more about how CF can affect your body, and be sure to let them know any time you feel a change in your symptoms.



Visit [CFSource.com](https://www.cffsource.com) for more videos and resources on CF progression throughout the body.

