



**JNFLS IC BC Club**



# The Formaldehyde Chaser

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001

Hello! I'm Formaldehyde.  
Well, you must know me, and  
I was almostly represented by  
this. What irony, right?

$\text{HCHO}$



A pungent, toxic, colorless gas, soluble in water, ethanol and acetone. The solubility of Formaldehyde in water is about 40%, producing the formalin. The formaldehyde is also a strong reductant.



People always think about how to 'kill' me, or lock me up, very terrible!

Active Carbon

Active carbon can adsorb formaldehyde, but as long as the adsorption is saturated, formaldehyde will be released out.

Formaldehyde dehydrogenase(FDH)

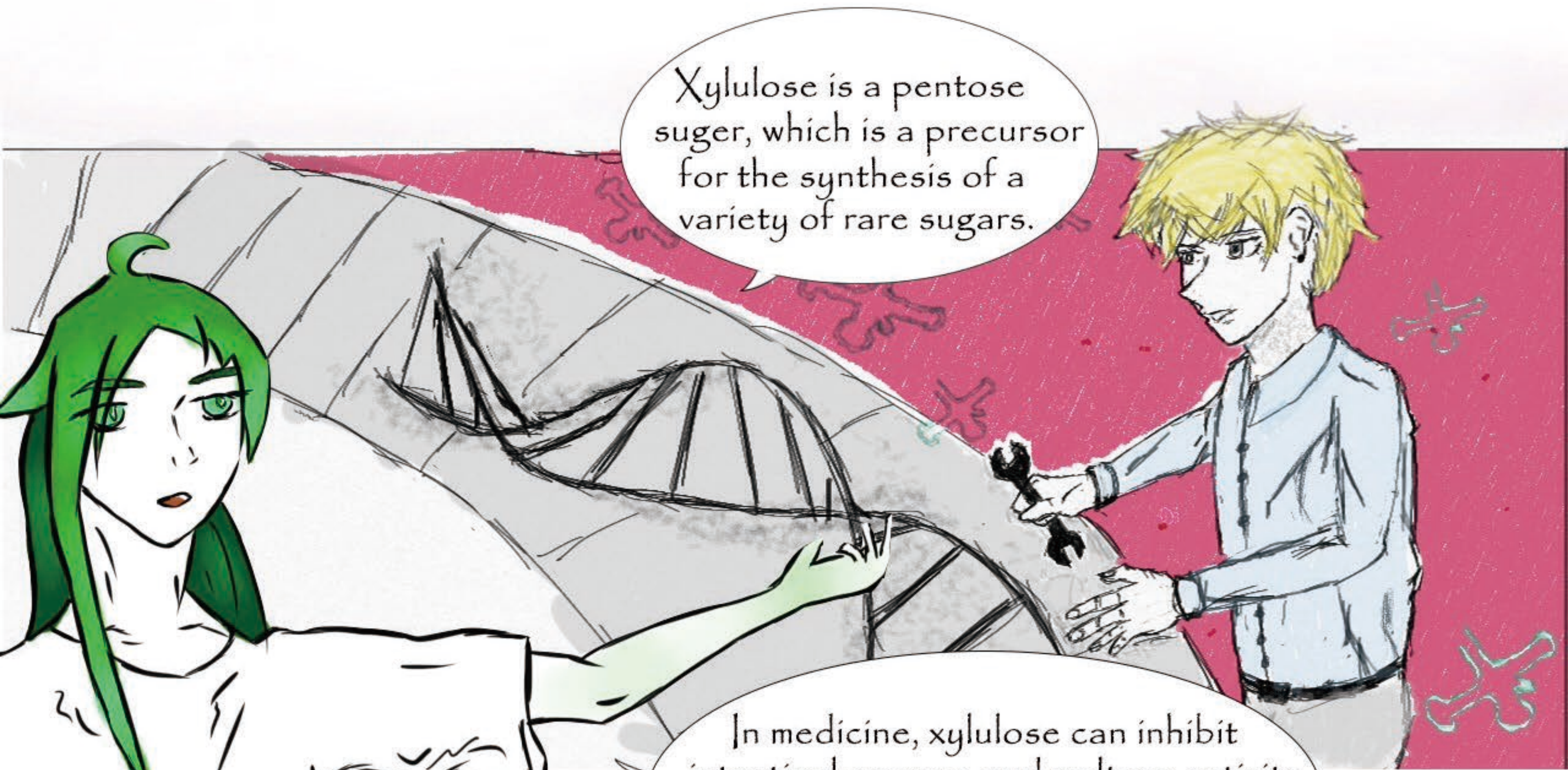
Alcohol dehydrogenase(ALDH2)

Although it's a little trouble to 'kill' me, I think people will be always enjoy that. Look! My family had dead in a massacre of those 'vampires', ALDH2 and FDH.

$\uparrow$   
 $H_2O + CO_2$

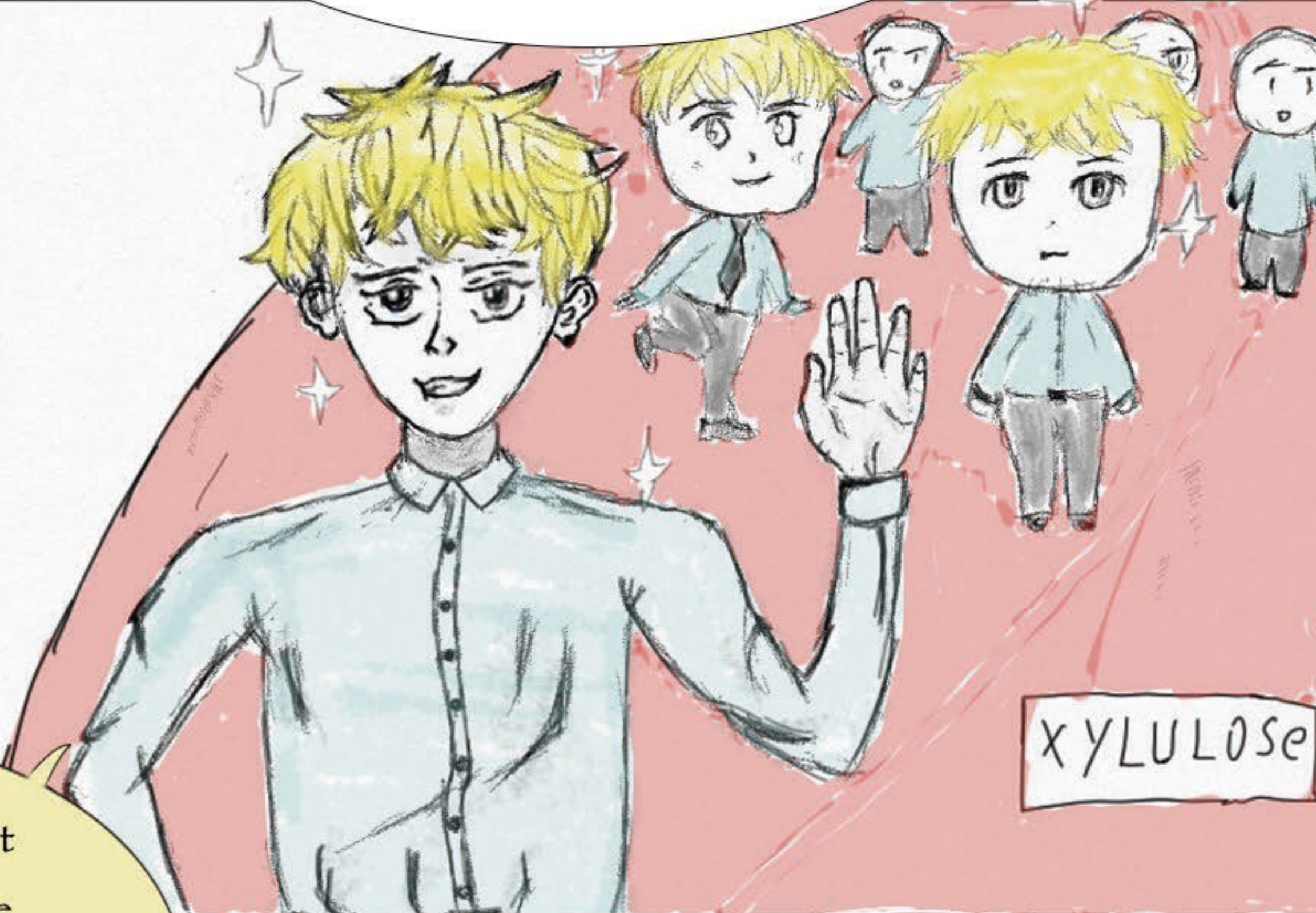
To be honest, I envy the easy life.  
Just like xylulose...





Xylulose is a pentose suger, which is a precursor for the synthesis of a variety of rare sugars.

In medicine, xylulose can inhibit intestinal sucrase and maltase activity, thereby inhibiting postprandial blood sugar rise.



XYLULOse

Right, I can also react with ATP to enter the pentose phosphate pathway and participate in the central metabolic pathway.



Ok, I make a decision,  
I want to become the  
xylulose, having an  
easy life. I'll try to  
GET MYSELF  
OUT OF THE  
ENEMY OF  
STATE!!!

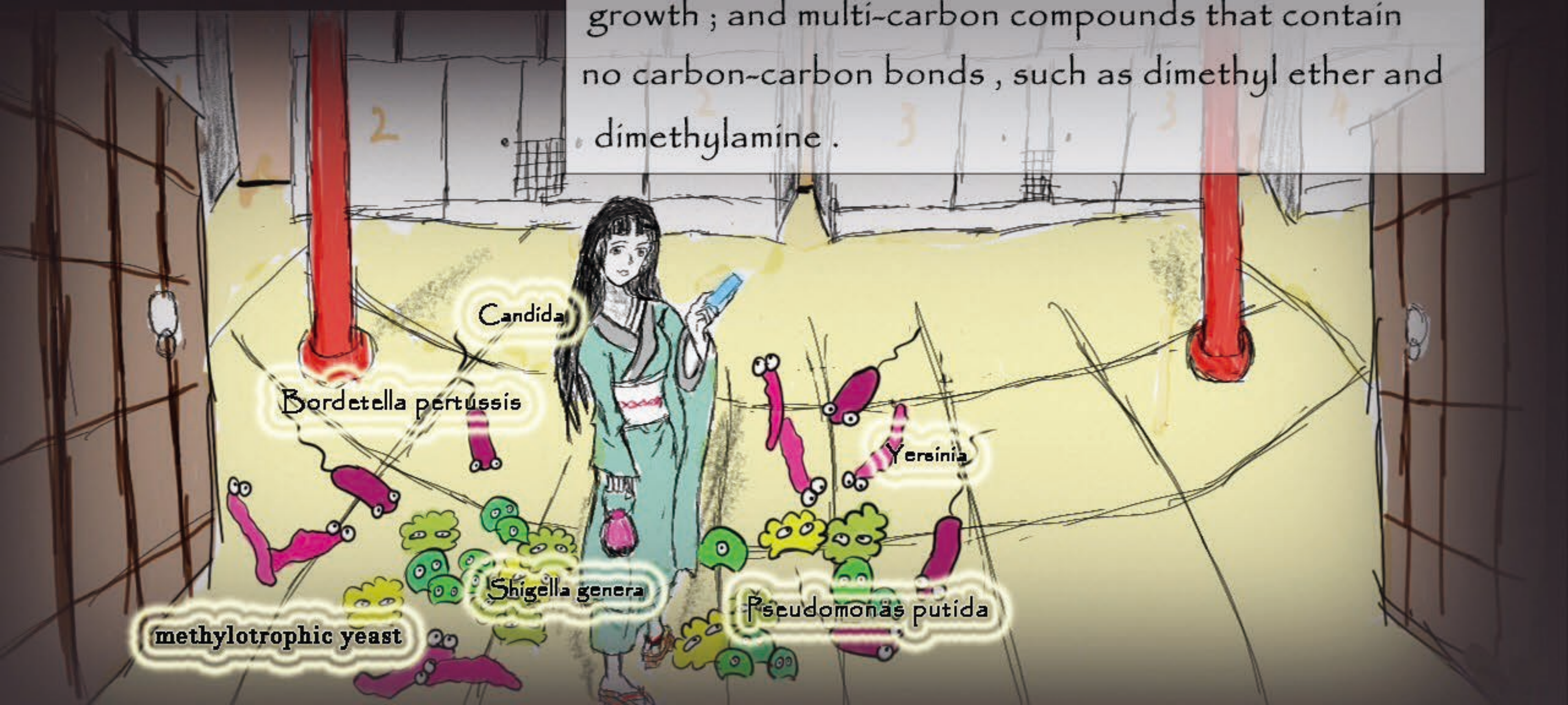




Over sea from coast to coast,  
Formaldehyde comes to an  
eastern architecture..



Methylophilus are a diverse group of microorganisms that can use reduced one-carbon compounds , such as methanol or methane , as the carbon source for their growth ; and multi-carbon compounds that contain no carbon-carbon bonds , such as dimethyl ether and dimethylamine .





WOW~

Look that!

He's so handsome.

What is he?

He looks very beautiful!

Who?

Let's guess..

Another bacteria?

Is he our food?

Umm..

Food?

Food...

I'm hungry..

He looks very  
YUMMY!

FOOD...

Oh! Food!!!

FOOD!

Delicious!

Let me  
transform  
you!

I'm hungry..

Food...

FOOD!

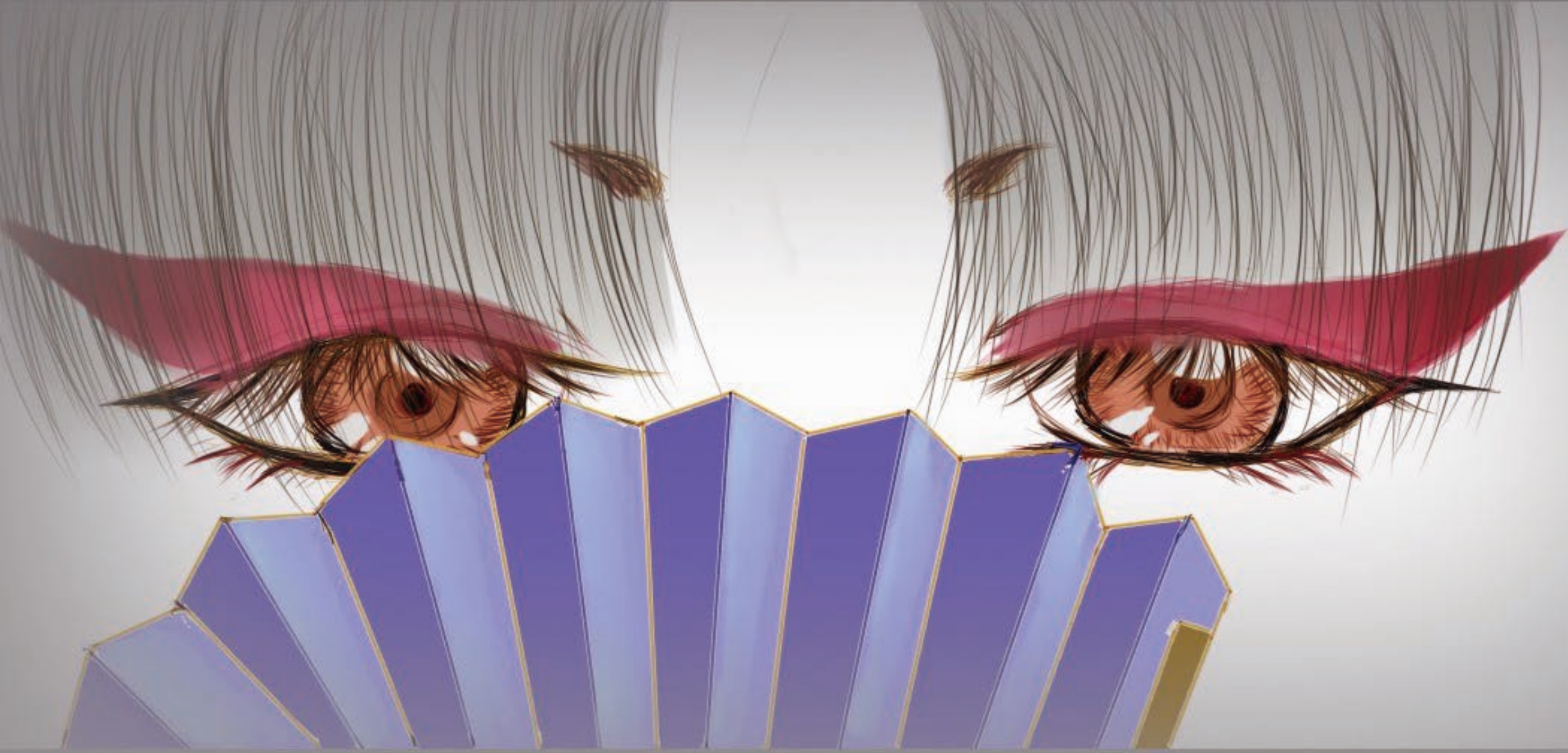
Eat...

FOOD...

Yummy!

*Calm down!*





*A handsome man?*





Hum...





预知后事如何，来生化社吧！  
BC社（QQ）：  
10月17，我们等你！

We also used the comic for school recruitment to spread information about our project.



BC Club 2019  
扫一扫二维码，加入群聊。

快来支持iGEM team of JNFLS  
在评论区献上你宝贵的建议吧！



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