

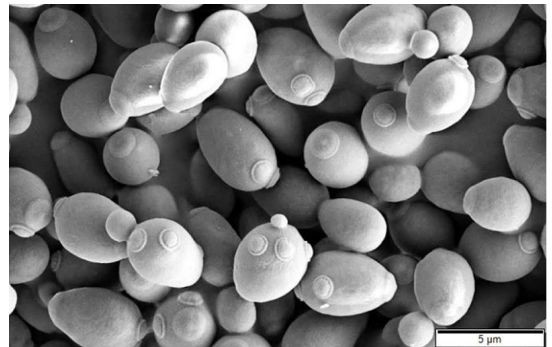
Yeast: Why are there holes in my bread?

Imagine pulling apart a soft, warm loaf of fresh sourdough bread. As you break through the crust, you notice little holes and empty pockets inside the bread. The outside of the loaf is not damaged - no mice or bugs have burrowed into it. So what could cause these holes inside a loaf of bread? It turns out that a single-celled organism called yeast creates those holes.



What is yeast?

Yeast is a type of fungus that is often found on plant leaves, flowers, and fruits. It can also be found in soil and in the intestines of some animals. Yeast is related to other types of multicellular fungi like mushrooms. However, yeast is a microscopic egg-shaped unicellular organism. Like human cells, yeast cells contain a nucleus and are more complex than most bacteria cells. Also like humans, yeast must digest food in order to get the energy they need to grow.



What does yeast eat?

If you have a sweet tooth, you have something in common with yeast! Yeast like to eat all kinds of sugar, like those found in honey, maple syrup, fruits, cane sugar, and baking flour. Yeast cells digest sugar through a process called fermentation, which produces carbon dioxide. When making bread, yeast in the dough eats the sugars in the flour. As it digests the flour, the yeast makes carbon dioxide. This gas expands but remains trapped inside the stretchy dough. The carbon dioxide forms little bubbles which make the dough rise higher. The dough hardens as it bakes and the bubbles burst leaving behind empty pockets or holes throughout the loaf.



Think about the following questions as you complete this reading:

- What do you notice about this organism that's similar or different to the other organisms and cells we've seen?
- Do they relate to our healing story? If so, how?
- How does this organism's structure and function relate to where it lives? Why do you think it lives where it does?

Sources:

- Castro, J. (2013, December 20). What Is Yeast? Retrieved December 21, 2020, from <https://www.livescience.com/42140-what-is-yeast-candida.html>
- What is Yeast? (n.d.). Retrieved December 21, 2020, from <https://redstaryeast.com/science-yeast/what-is-yeast/>