

Exact Number of Days, Time Period, Temperature Taken by the Mold to appear on the Bread Sample and Makes it Spoil

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Abstract: Bread is one of the good food consumed by the human beings of rich, poor communities. Especially in poor countries bread consumption is more because it is very cheap. Here we have conducted an experiment, observation on bread sample for seven days and we have checked the bread sample, observed the bread sample and has got some facts about the microbial contaminants like mold attacking bread sample and making it not good for use, not consumable. We have also known the exact time period required for the bread sample to get spoil. The bread sample was observed day to day temperature has been noted everyday and can able to say exactly it takes 7 days for the bread sample to get spoil.

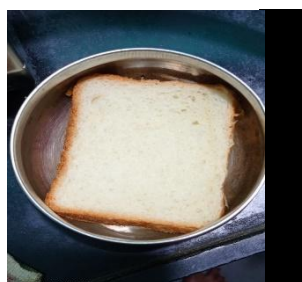
Keywords: bread, mold, microbes, spoiling, temperature, physical texture of the bread

1. Procedure

1) Fresh bread sample was brought which has following physical nature. Soft, tasty giving good smell, chewable white in color just like the below picture, it was stored in a steel dish, vessel openly for the observation. The bread sample was brought dated 20-01-2021 and the temperature was noted 28 degrees centigrade.



2) On the second day of observation of experiment named "exact time temperature of mold attack on bread sample", we have found that bread sample smell was good, there were no signs of mold, and the bread sample was still soft in texture. The day 2 observation of bread sample dated 21-01-2021, temperature 29 degrees centigrade.



The first and second I have found there are no major changes in the bread sample.

3) The third day we have observed slight changes in the bread sample like Bread sample losing its soft nature, getting hard in its texture. There is no change in the smell. Dated; 23-01-2021, temperature 27 degree centigrade.



4) Fourth day of observation of bread sample we have found



Bread sample becoming harder than the previous 3rd day

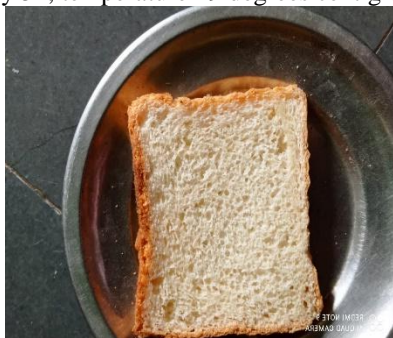
We can notice the remarkable changes in the physical nature of the bread sample it has become hard, no soft, spongy nature of bread, we can notice more air going inside, we can see more hole, pores spots on the bread sample

Fourth Day was dated on 23-01-2021, temperature noted was 28 degrees centigrade.

Still we have not found any remarkable change in the smell, no foul smell was observed.

It was more of same kind on day 5th and 6th tough ness, hardness, more of spots of air on bread, there was foul smell found on the 5th and 6th day of the bread sample.

Day 5th, temperature 29 degrees centigrade



Day 6th, temperature 28 degrees centigrade



7) On the day seven we have observed a clear remarkable change in the bread sample there is a clear. There has been a clear appearance of dark patches on in the bread sample, the entire bread sample was changed it has lost all its physical nature which was existing before like the soft ness, smell, texture, everything has lost on the seventh day, it was visible to our naked eye the bread sample has become hard, we can see dark patches in the bread sample, foul smell because of mold. There are so many pores we can see in the bread sample.



On day 8th the bread sample was broken clear visible of dark marks, losing the soft ness, releasing foul smell, completely lost all its characteristics on day 8th dated 27-01-2021, temperature 29 degrees centigrade.



2. Results and Discussion

At an temperature range of 25 to 29 degree centigrade the bread sample if exposed to atmosphere exactly it takes 7 days of period to appear clear remarkable changes in the bread sample like dark patches, dark marks, tough, hard, no smooth, foul smell in the bread sample, all the above changes in the bread sample because of atmosphere, temperature and microorganisms like mold.

Thus, by the above evidence I can say clearly it takes 7 to 8 days clearly at an average temperature of 25 to 29 degrees centigrade the bread sample gets spoiled.

I can also assume and can conclude that the bread sample on the third day there was no changes, , people if consuming bread which was found to them can be of third day or second day it makes no remarkable health problems in human beings if they consume also.

References

- [1] https://www.researchgate.net/publication/259623726_Breads_Physical_Properties.
- [2] Scienceprojectideas.org.