

Microorganisms in bread & cereal grains

The cereal include: rice, corn, wheat & starch.

***there are two factors which control on microbial growth & reproduction in cereal grains:**

- 1) Moisture.
- 2) Storage temp.

***the toxin production by fungi when the cereal stored in a moist place.**

The most important microbes which cause spoilage:

Mold	Character of Spoilage
Penicillium	green growth
Mucor	white growth
Aspergillus niger	black growth
Rhizopus	white growth with black spots

Bread microbial spoilage

Molds+ yeasts+ bacteria



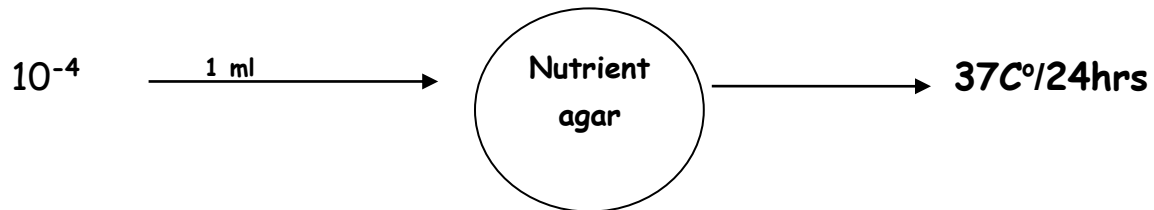
If transfer from flour to dough when adding the water



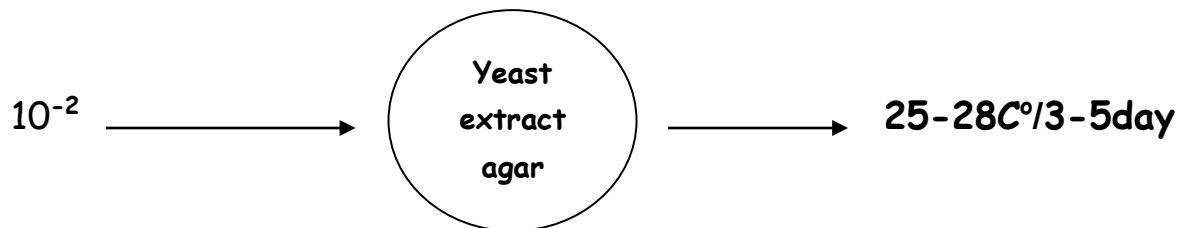
Spores begin to grow

LABwork

General microbes (aerobic plate count)



Detection Of the molds & yeast



Detection Of spore- forming bacteria

