

Making yogurt from a slice of bread?

Question: Is it possible to make yogurt using a slice of bread with some milk as a starter culture?

Motivation: Allow people who live in countries – like my hometown, Venezuela - where it's not easy to find ferments like natural unsweetened yogurt or lyophilized to make homemade yogurt using as a starter a slice of bread, an easy and common ingredient.

Hypothesis: There are enough lactic acid bacteria in bread to use it as a ferment to make yogurt. Probably they are not to be the same strands present in commercial yogurts but they will produce enough lactic acid from lactose to acidify the milk.

Procedure/Recipe: Put a piece of bread in a small bowl of milk for 24 hours to 48 hours, depending on the ambient temperature, then discard the bread and use the curdle as a starter culture. From this point I used the yogurt recipe from "Food Fermentation: The Science of Cooking with Microbes" course.

Control: Just milk

Variables: Milk and a slice of bread white bread (wonder)

Milk and a slice of baguette

Type of milk: Dairy

Measurement tool: pH strips

Starter information			
Starter	Milk and a piece of white bread (Wonder)	Milk and a piece of baguette	Milk
Initial pH	7	7	7
Temperature	28°C	28°C	28°C
Incubation	24 h	24 h	24 h
Final pH	5	5	7
Final texture	Curdle	Curdle	Slightly curdle
Taste	Slightly sour	Slightly sour	Not sour
Yogurt information			
Incubation to 43°C	8 h	8 h	8 h
Final pH	~4	~4	~6
Texture	Creamy, semi solid	Creamy, semi solid	Creamy, semisolid
Flavor	Slightly sour	Slightly sour	Sweet like milk, sourness undetectable by my palate
Personal preferences	This was my favorite, tastes close to commercial yogurts.	Even though I liked it, it was too sour.	It tastes sweet as natural milk, undetectable sourness to refer it to yogurt.

Conclusion: The hypothesis is correct, there are enough lactic acid bacteria in a loaf of bread to use it as a starter culture to make homemade yogurt.