Journal 04 - Finding the Way

CONTEXT:

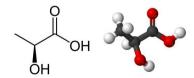
- Culturally: I am Korean-American and kimchi is a key part of my diet, yet I do not know much about it chemically
- Academically: This semester I am taking a food science class and have recently been learning about various processes of preservation, including pickling, fermentation, etc.



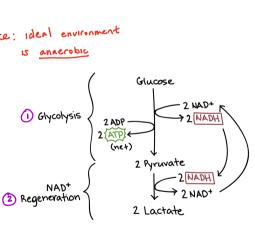
* Note: Ideal environment

QUESTION: Where does kimchi get its distinct taste/flavor, and why does it last so long?

ANSWER: Lactic acid produced by Lactobacillus plantarum



Lactic Acid



GLUCOSE

Pyruvate

NADH NAD+

CO,, H,O

NADH

PYRUVATE

DEHYDROGENASE

Acetyl CoA

Aerobic glycolysis

CITRIC ACID

CYCLE

NAD+

NADH

LACTATE

DEHYDROGENASE

LACTATE

Oxidative phosphorylation

(cytosolic only)

1 GLYCOLYSIS Based on Lecture 19

NAD+

LACTIC ACID

PYRUVIC ACID