

Fermentation

Fermentation is the transformation of sugar and other nutrients into something that is beneficial to humans through the action of microorganisms

Food and alcohol

Yeast



Lactic-acid bacilli



Bacillus natto (fermented soybeans)



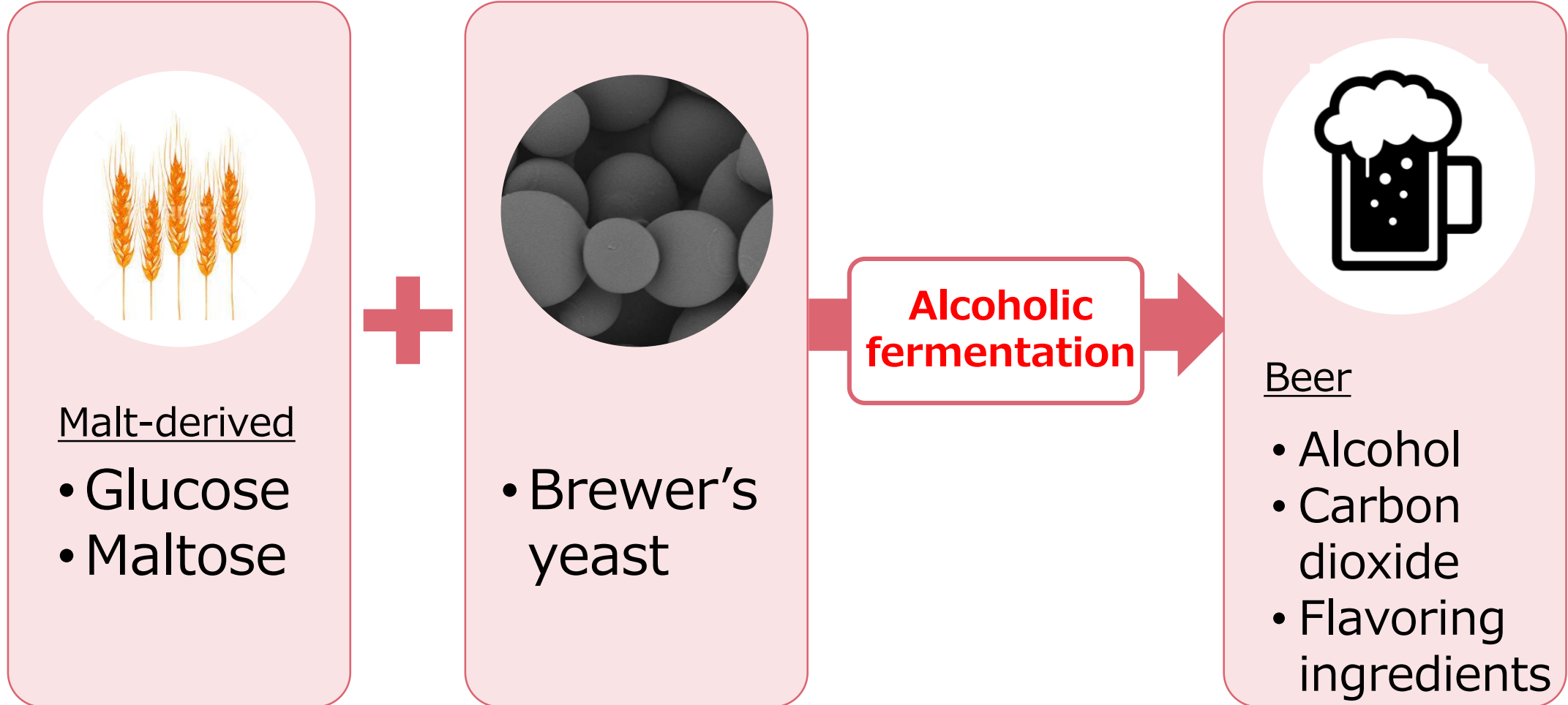
Raw materials for foodstuff and pharmaceuticals

Amino acid-producing bacteria

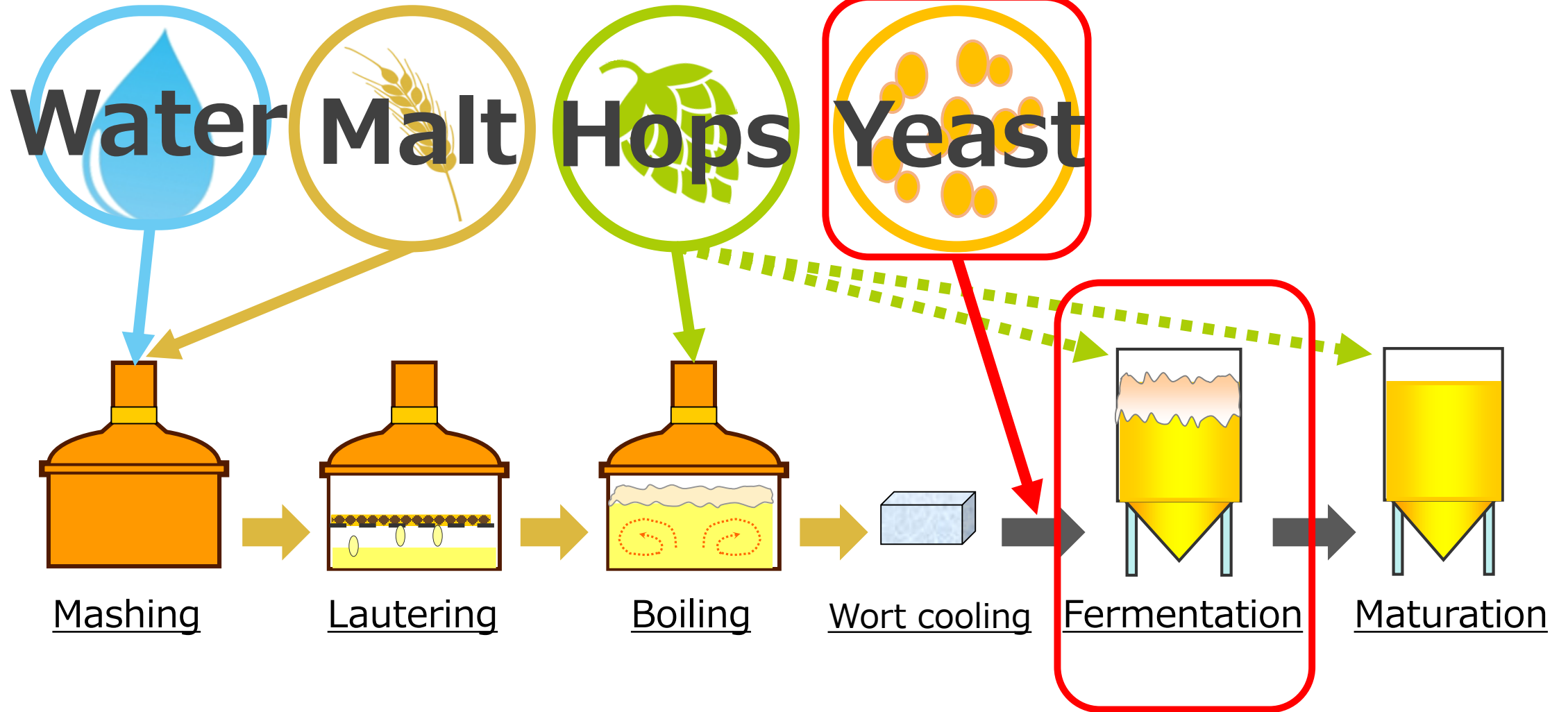


Fermentation in beer

Beer is made by alcoholic fermentation with brewer's yeast



Fermentation in beer

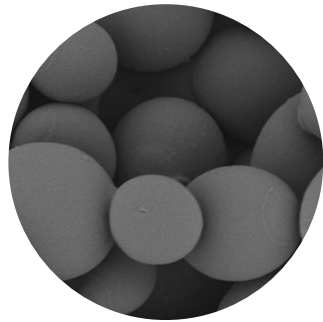


Fermentation in beer

The flavor of the beer will vary depending on the type of brewer's yeast and fermentation conditions

Main yeast types

Lager yeast



Lager beer



• Refreshing
and easy-to-drink

Ale yeast



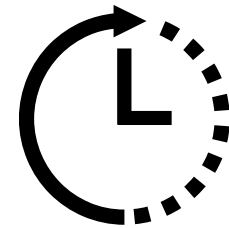
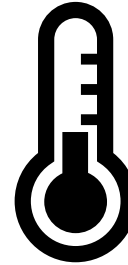
Ale beer



• Rich taste

Fermentation conditions

Temperature



Aroma

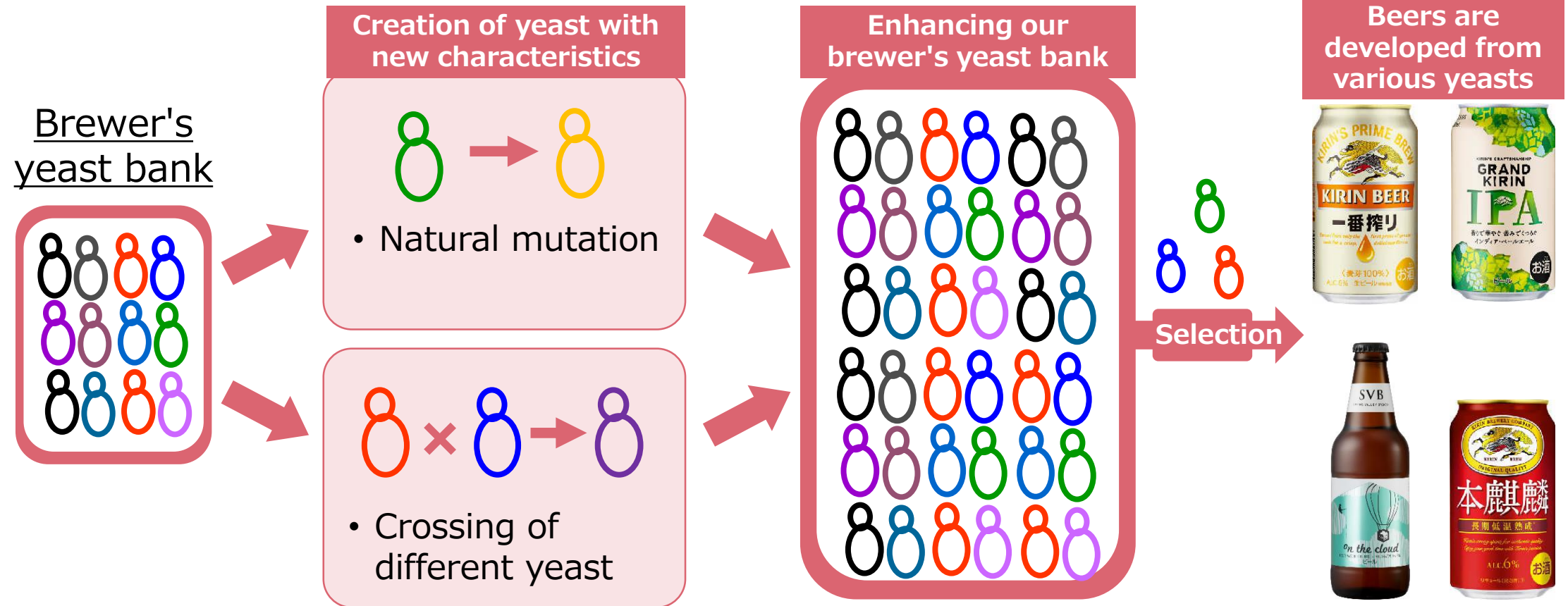
Taste

Smoothness
going down

etc...

Kirin's unique technologies (1)

We have produced various types of yeast using our unique technology
Currently, we have about 1,000 varieties of brewer's yeast at our disposal



Kirin's unique technologies (2)

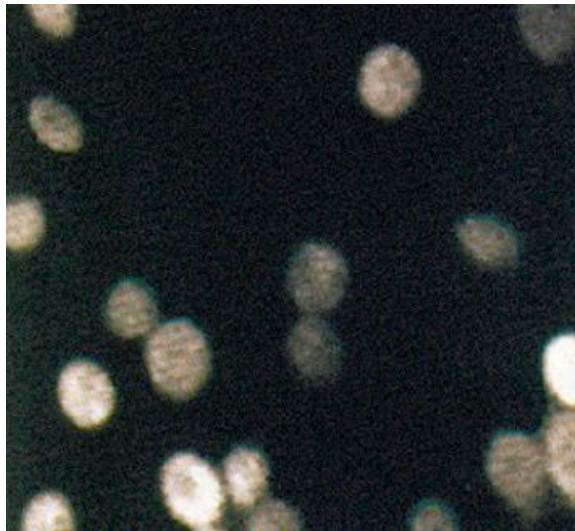
We have the technology to visualize and appropriately control the "health status" of brewer's yeast, which affects the taste of beer

Healthy yeast



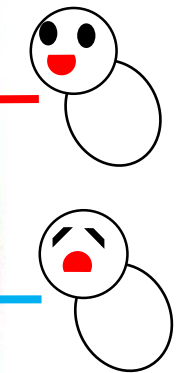
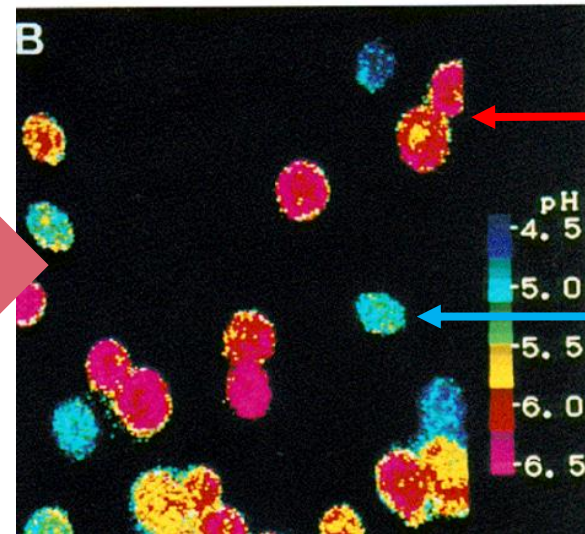
Unhealthy yeast

Cannot be identified with a normal microscope



Color-coded by pH, which serves as an indicator of yeast health

Health status can be distinguished based on color !



Red: Healthy
Blue: Unhealthy

Application of the technology to other microorganisms

We have expanded our yeast technology by applying it to other microorganisms

