

INSPIRE THE NEXT GENERATION

Amylase.

Small enzyme. Big possibilities.



NATURE

Seeds unlock stored starch to fuel growth.

STARTING MATERIAL



Starch: long glucose chains

FOOD

Starch processing supports baking, brewing and syrups.

INDUSTRY

Starch breakdown supports biofuels and starch-coating removal.

PRODUCTS



Shorter chains + smaller sugars

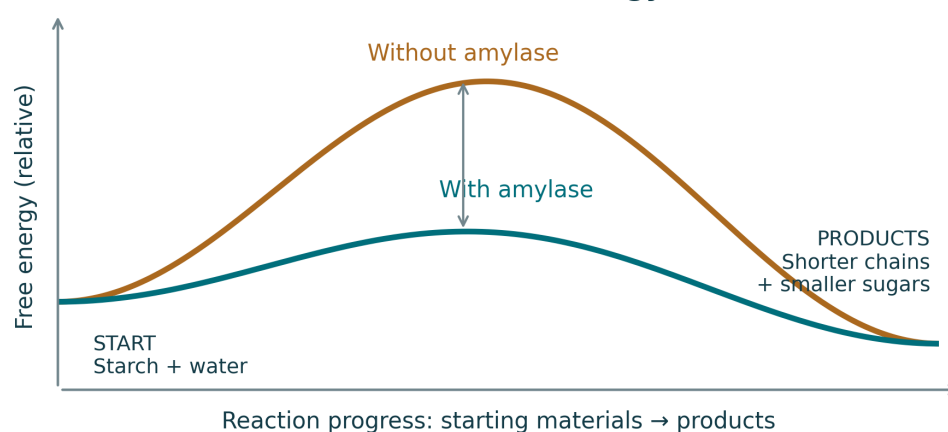
α -amylase



Amylase converts the starting material to products, from left to right.

Water cuts internal α -1,4 bonds. The enzyme works again. Other enzymes can release glucose; yeast can then ferment it to ethanol. Amylase removes starch coatings, rather than paper cellulose.

Same reaction. Lower energy barrier.



1833 → today Payen and Persoz extracted amylase-rich diastase from malt. Today microbes produce amylases for industry.