Chapter 1: Making With Mushrooms

WOW! JACK! LOOK— THERE'S CANNIBAS THAT MAKE JACKETS AND SHOES OUT OF MUSHROOMS. BUT IT DOESN'T LOOK LIKE THEY'RE FOR SALE JUST YET...

SO... BARELY YOU TAKE THE...

THE VEGETATIVE TUBES OF A FILAMENTOUS FUNGUS?

YEAH, FUNGI AREN'T PLANTS, BUT A MUSHROOM IS KIND OF LIKE A FRUIT— LIKE AN APPLE, AND THE MYCELIA IS LIKE A TREE. THE SHOES ARE LIKE THE SEEDS OF AN APPLE.

YOU MIX THE MYCELIA WITH A FEEDSTOCK THAT'S BEEN BOILED WITH A LITTLE BIT OF WATER.

A WHAT-STOCK??

Then let's do this!

And... Runner...

Ah, Runner...

Then how are we supposed to get one, yoichii?

He could grow our own, together.

This site says we just need some fungus, a feedstock, a fork, and a way to control the growth environment.
FEEDSTOCK! IT’S BASICALLY FUNGI FOOD. WE COULD EVEN USE WOOD CHIPS OR SOMETHING. AFTER WE MIX THE MYCELIUM AND FEEDSTOCK WE PACK IT IN A GROWTH TRAY. THE MUSHROOM “MAGIC” HAPPENS UNDER THE RIGHT CONDITIONS.

EXACTLY, BUT NOT JUST TEMPERATURE. ALSO HUMIDITY AND ATMOSPHERE.

KINDA LIKE COOKING?

BECUSE FUNGI BREATHE, KINDA LIKE US.

YOU’RE TAKING IN OXYGEN AND RELEASE CARBON DIOXIDE. CARBON DIOXIDE LEVELS HELP REGULATE THEIR GROWTH.

SO THIS IS A KIND OF FERMENTATION?

YEAH, BUT FERMENTATION IS USUALLY WITHOUT OXYGEN LIKE WHEN PEOPLEREW SEED.

KINDA LIKE COOKING?
Yup! But in this case, the mycelium grows in and around the solid feedstock. The fungus breaks down and converts the feedstock into more mycelium.

And— the fungus doesn’t have a mouth or stomach so it uses digestive enzymes that it secretes out its cells.

Yeah! Hecka intriguing! Huh?

Enzymes are special proteins that help chemical reactions take place, such as breaking down cellulose into simpler sugar molecules that organisms can use to power themselves.
Chapter 1: End