

Milk from the field not a lab



Natural and Non-GMO Dairy

VS.

Precision Fermented Synbio Dairy

Rich, healthy soil

Perennial grasses

Cows on pasture,
expressing natural
behaviors

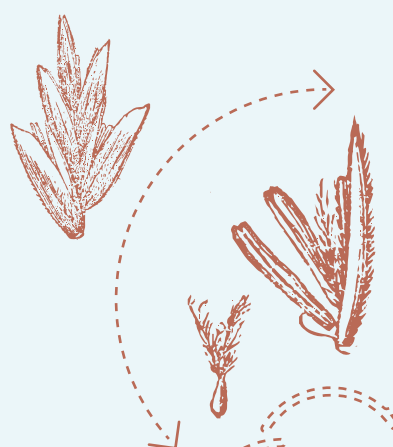


Cows produce whole
milk including
butterfat,
milk solids,
enzymes,
and more

Farmer milks cows

Milk is tested,
bottled, and sold

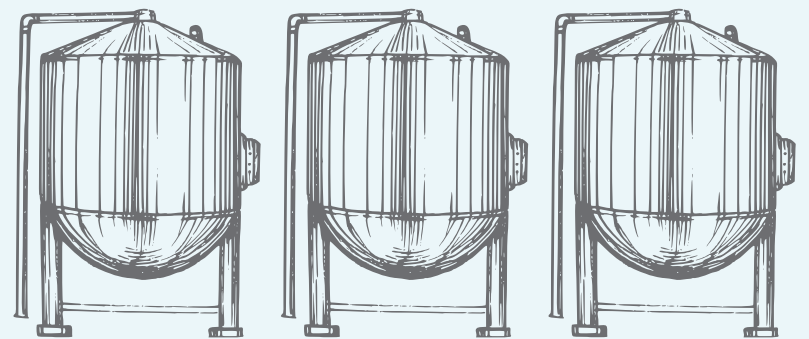
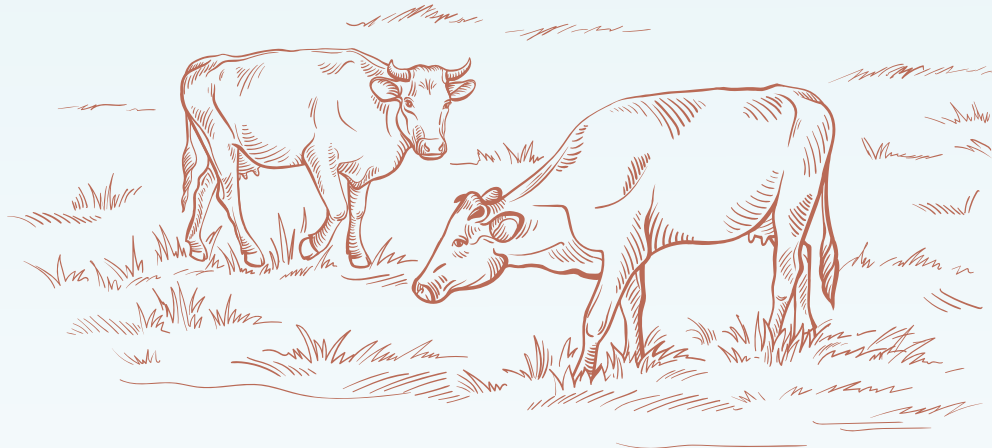
Milk is used to
create natural,
non-GMO
products like
ice cream,
cheese,
cream and butter



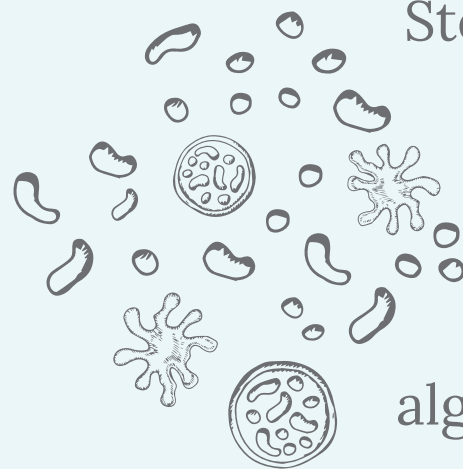
Waste: Manure is
natural fertilizer

The regenerative
cycle starts over

Healthy
perennial
grasses
sink carbon



Sterile laboratory



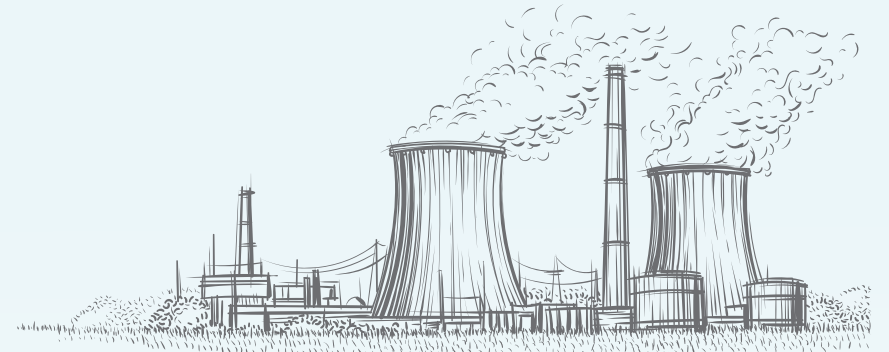
Genetically
engineered
microbes
(such as yeast,
algae, or bacteria)

GMO corn, soy,
or sugar likely used
as growth medium
for microbes.
Microbes
produce “milk”
protein isolates
such as whey



Lab workers skim proteins from
growth medium slurry

Milk protein isolate is combined
with flavorings, other proteins,
colorants, texturizers,
processing aids, etc. into almost
any processed food containing
“animal-free” dairy proteins.



Sludge steam: A significant
amount of biohazard waste
by-product must be incinerated

It's unclear if the novel GMO
microbes are in the final product

Questions about Precision Fermented Synbio

HOW NUTRITIOUS ARE THESE NOVEL ENGINEERED CELLS AND
HOW DO THEY INTERACT WITH OUR GUT MICROBIOME?

WHO GETS PAID FOR THESE PATENTED DAIRY PRODUCTS, AND WHO GOES OUT OF BUSINESS?

WHAT ARE THE BIOSECURITY RISKS IF THESE NOVEL GENETICALLY MODIFIED ORGANISMS
OR MATERIALS ARE RELEASED OUTSIDE THE LAB?

HOW MUCH WASTE MATERIAL IS PRODUCED IN THE SYN BIO PROCESS RELATIVE TO SELLABLE PRODUCT?