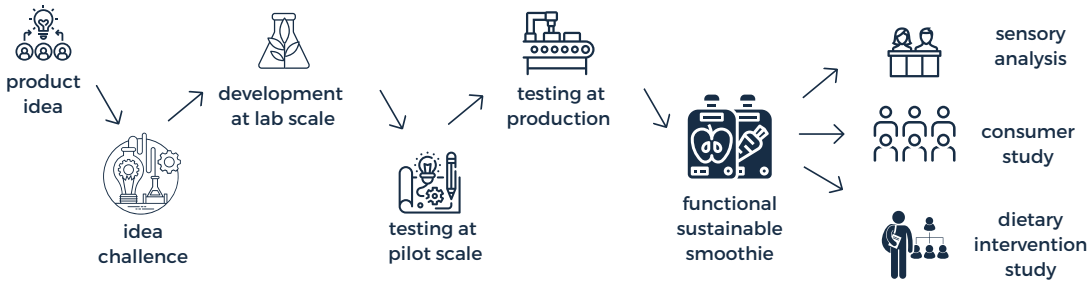
CASE STUDY

FUNCTIONAL SUSTAINABLE SMOOTHIE

AGILE PRODUCT **DEVELOPMENT**



DIETARY INTERVENTION **STUDY**

39 participants
11 weeks
5 periods

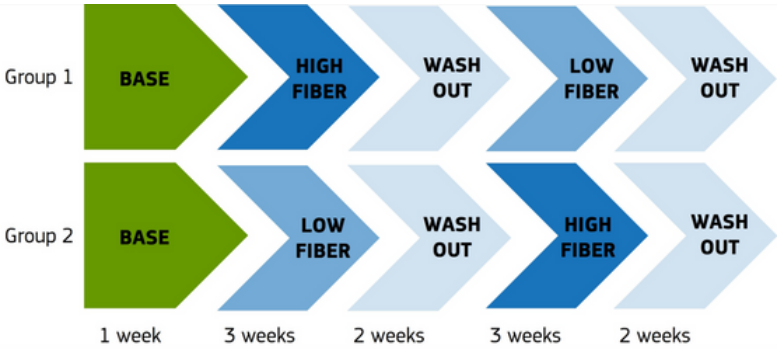
400ml per day
50-50 high fiber &
low fiber smoothie

blood sample
body composition
microbiome sample

results analysis

positive effect proven

results in scientific paper

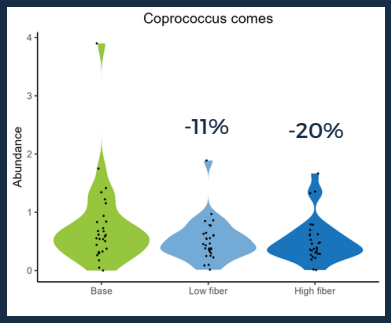


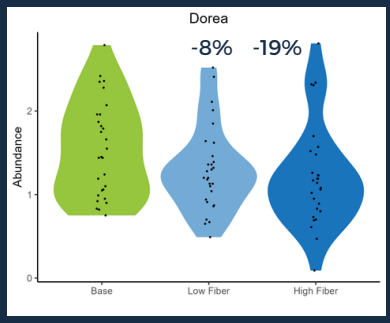
GLOBAL PROBLEMS WE CHALLENGED

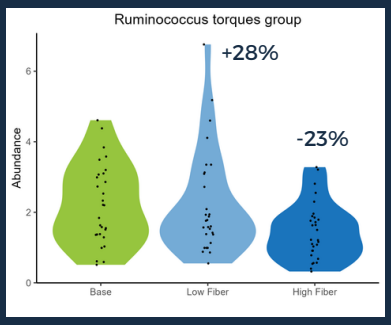
- 5 million tons of waste (apple pomace) produced during apple juice production every year.
- 1/3 of of population in the world is overweight.
- High cholesterol levels among people.
- Global low consumption of fruits & vegetables - 1/3 eat less fiber than recommended.
- Digestive problems increasing globally.
- More gut-friendly functional products needed.

CHANGES IN HEALTH PARAMETERS

Reduction of bacteria associated with overweight or inflammation

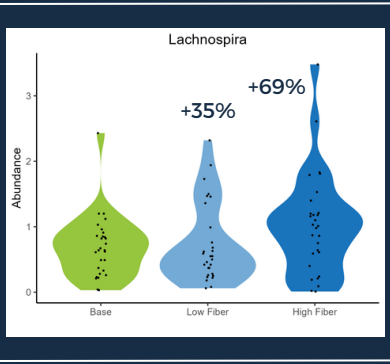


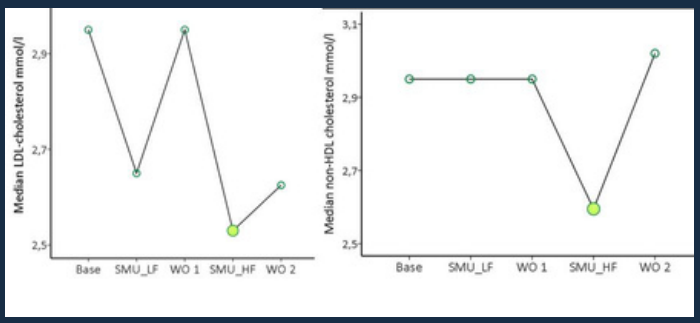




Decreased bacteria = decreased intestinal inflammation.

Increase (2x!) of active fermentative bacterium = potential development of acidic environment in the colon =
- Inhibiting the growth of pathogens in the gut.
- Supporting immune boosting butyric acid producing bacteria.
- Enhancing intestinal peristalsis.
- Indicating of good health.





A trend of a decrease in LDL and non-HDL cholesterol (by an average of 0.2 units) during consumption of a high-fiber smoothie.

MAIN RESULTS

Consumption of functional high fiber smoothies leaded to:

- Growth of beneficial immune boosting butyric acid producing bacteria.
- Reduction of bacteria related to overweight and inflammation.
- Increased gut health.
- Decrease of LDL and non-HDL cholesterol.
- Increase of general well-being of the participants.

CONTACT

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