

Pauline Zurmühlen

moodsandfoods

Hello, there.

feeling blue?

a little under the weather?

moodsandfoods got you covered ✨

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Supercharge your mood +
productivity with
personalized nutritional
recommendations.

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\$3.5 TRILLION

**annual global
economy loss**

(World Bank)

66 %

**productivity decline
at workplace**

(NIH National Institute of Health)

due to productivity impact of malnutrition

YOUR DIET

**nutrients,
deficiencies,
surplus**

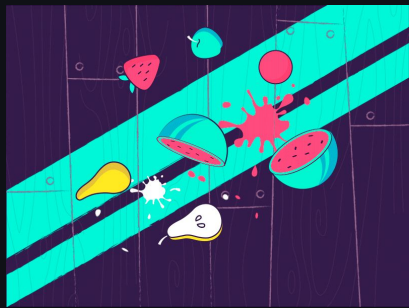
IMPACTS YOU

**focus,
energy,
well-being**

YOU MOOD

WHAT YOU

EAT



PERSONALIZED NUTRITION RECOMMENDATION TOOL FOR EVERYBODY.

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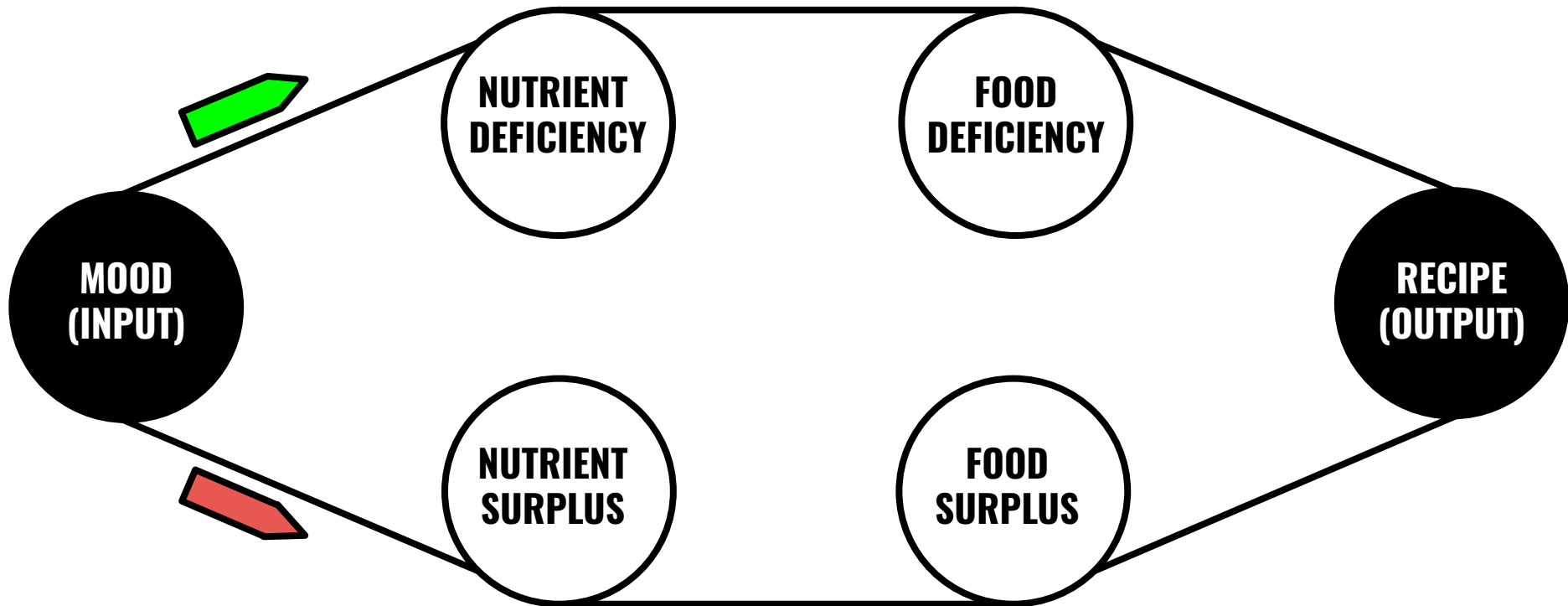
DEMO



METHODOLOGY

ADD

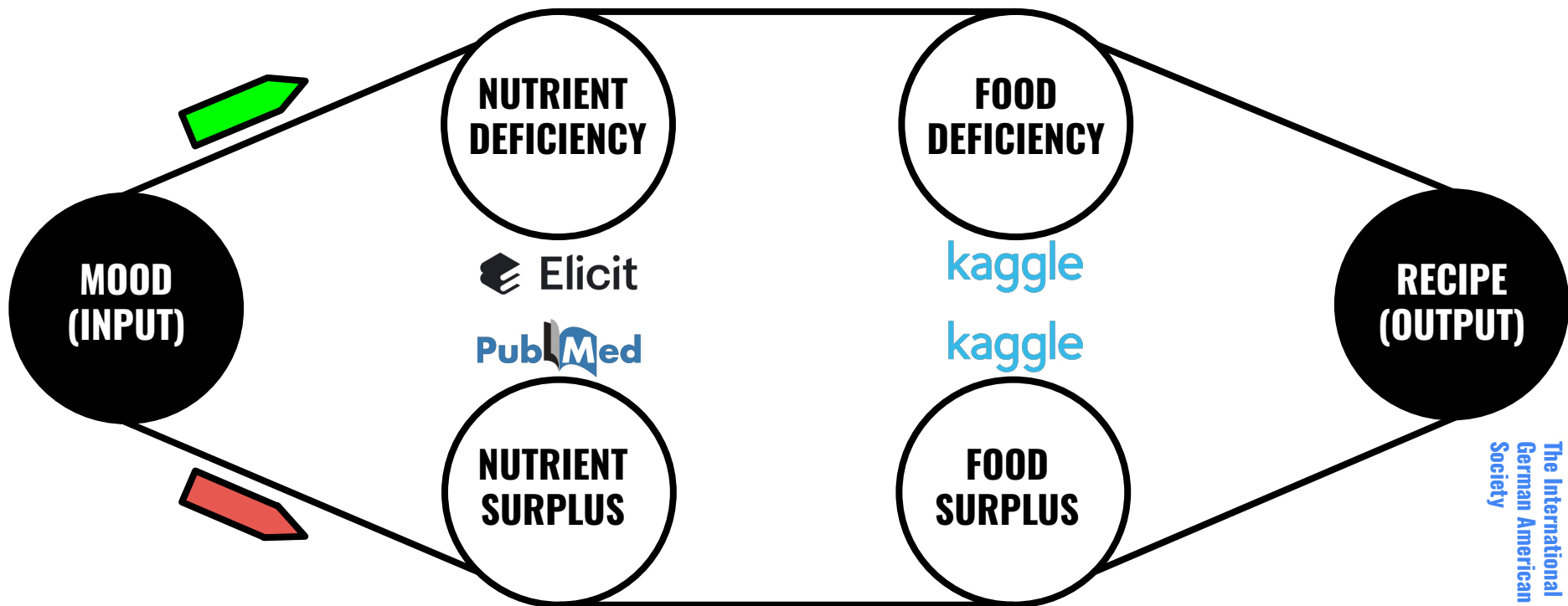
AVOID



DATA

ADD

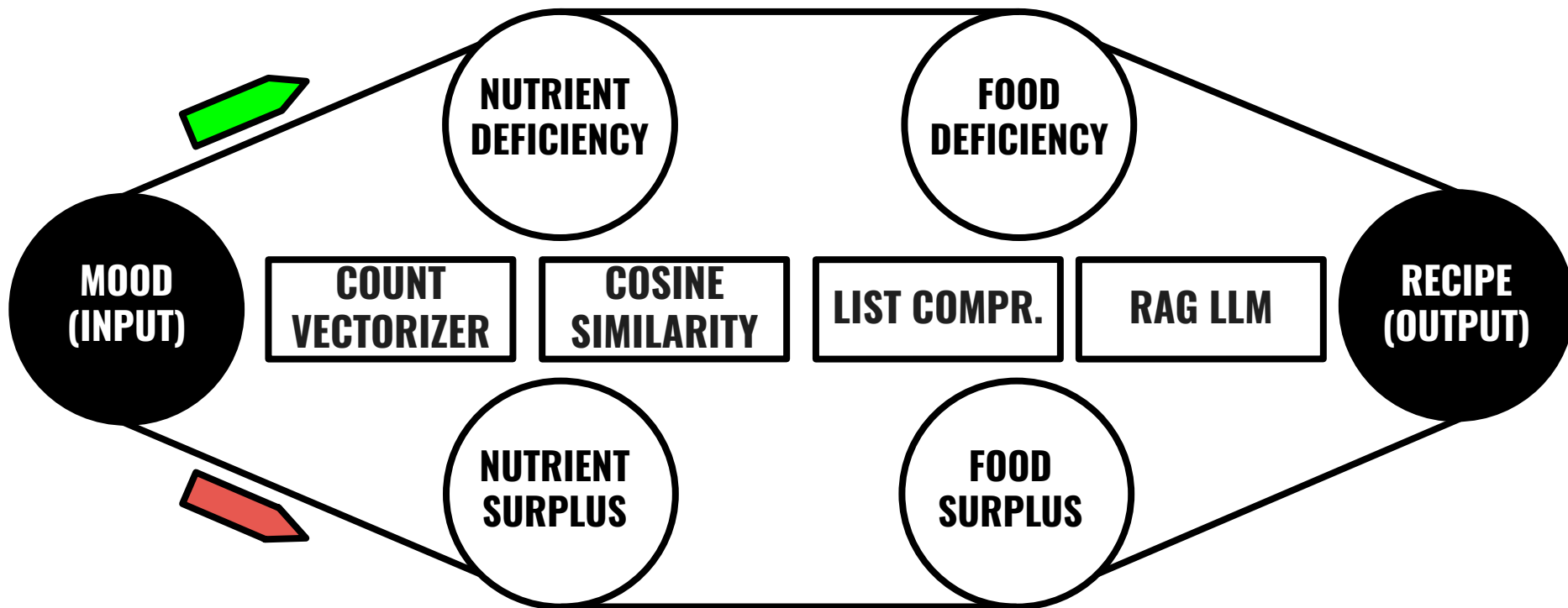
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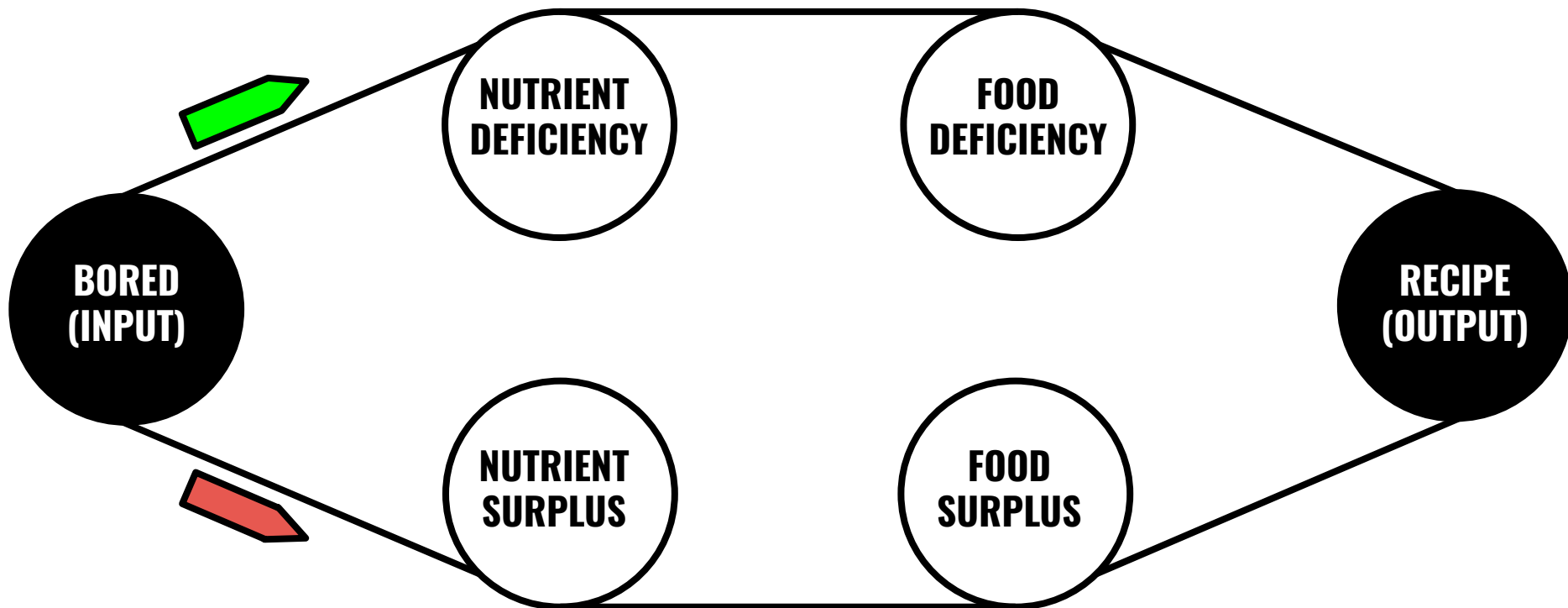
MODEL

ADD

AVOID



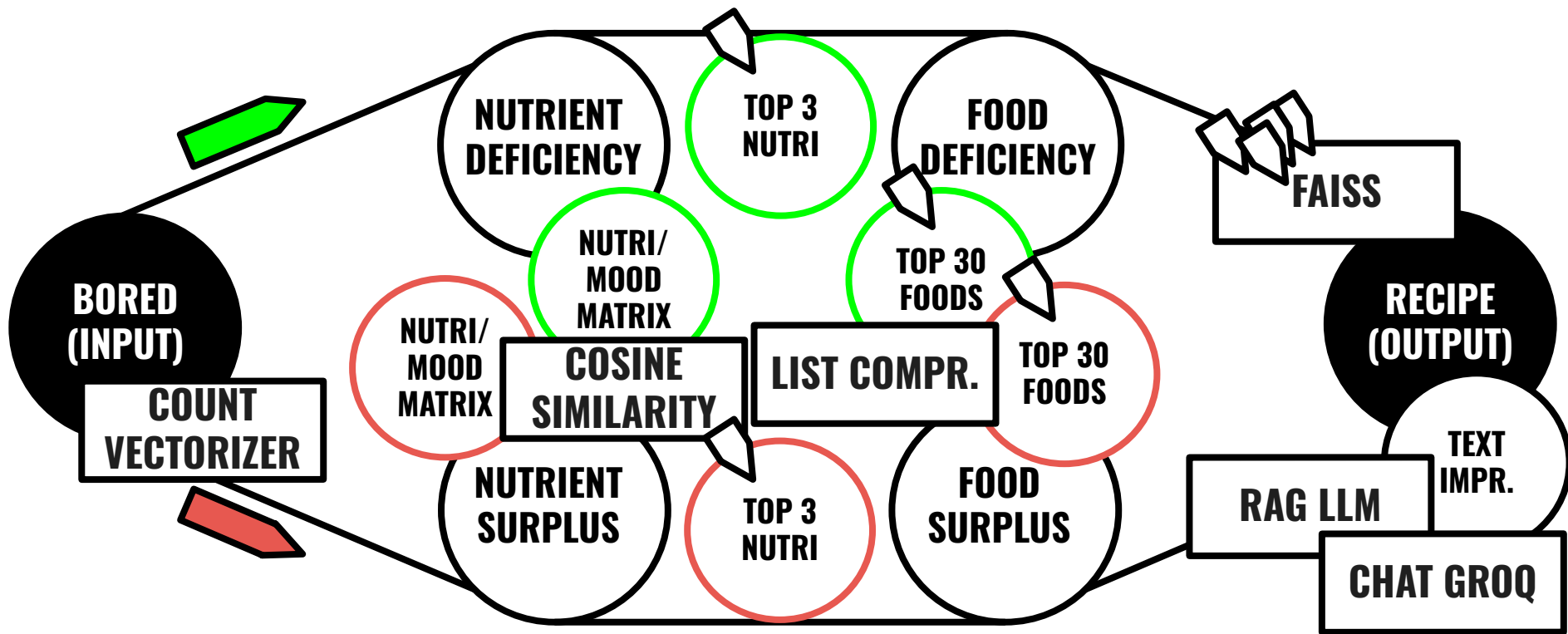
EXAMPLE



EXAMPLE

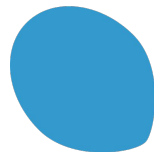
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TECH STACK

groq



pypdf2



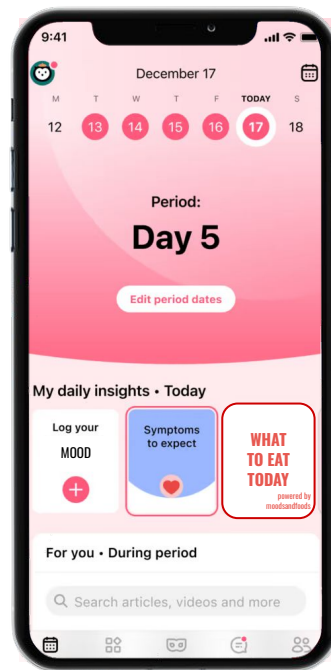
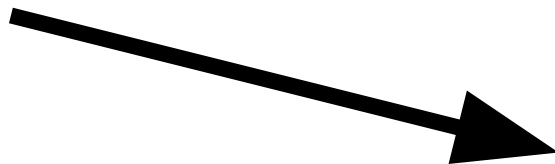
Streamlit

CHALLENGES

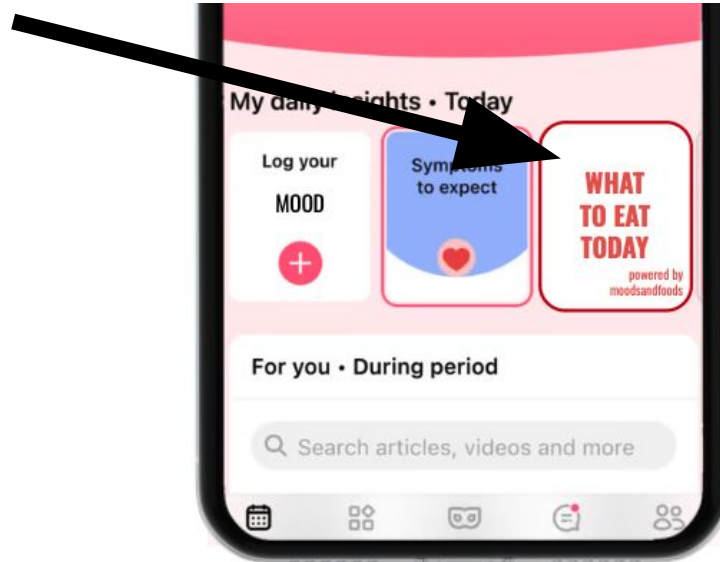
data insufficiency,

limited individualisation,

FUTURE GOALS



FUTURE GOALS



THANK YOU!

Q&A



THANK YOU!

Q&A



Pauline Zurmühlen
Senior Operations Manager



\$3.5 Trillion
annual global economy
loss
due to productivity impact of
malnutrition (World Bank)

66%
productivity decline at
workplace
strong correlation with
presenteeism
being present but unproductive

(NIH National Institute of Health)

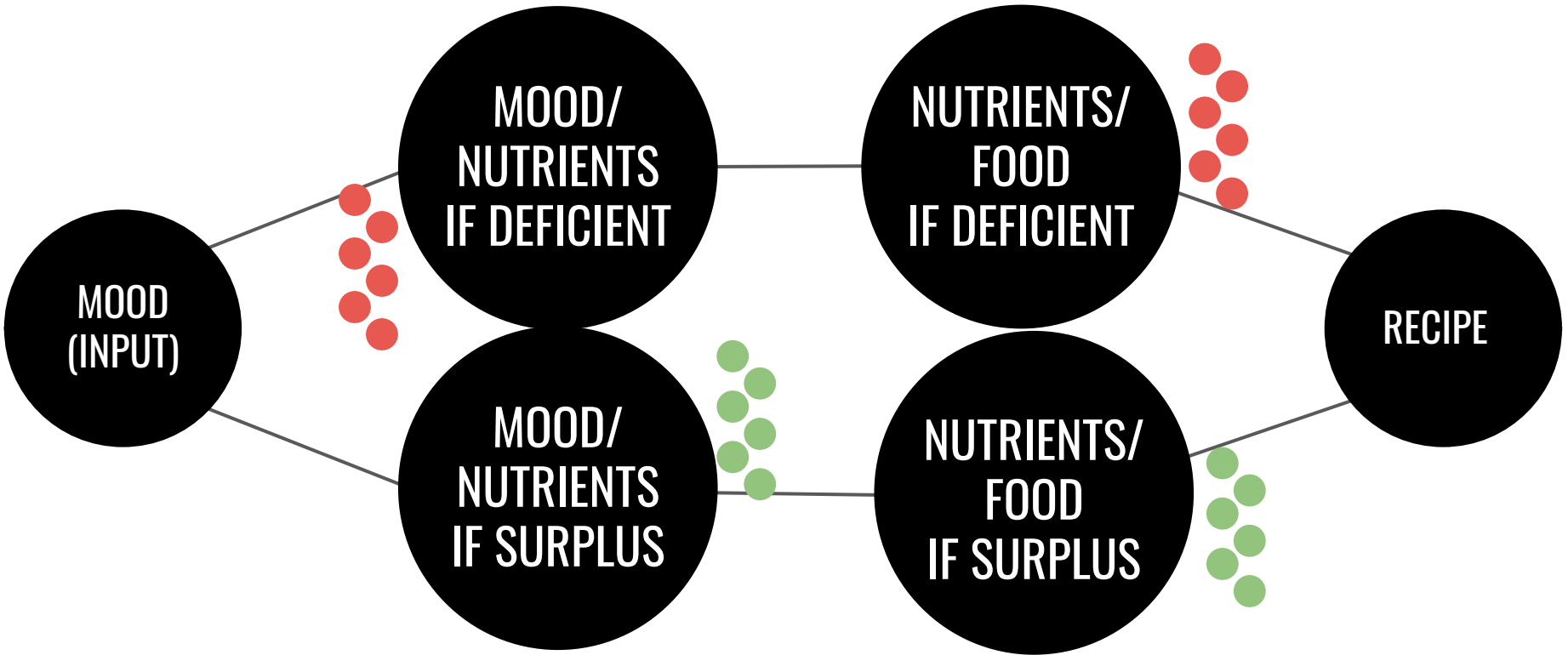
YOUR DIET

**NUTRIENTS,
DEFICIENCIES
/SURPLUS**

IMPACTS YOU

**FOCUS, ENERGY,
MENTAL WELL-BEING**

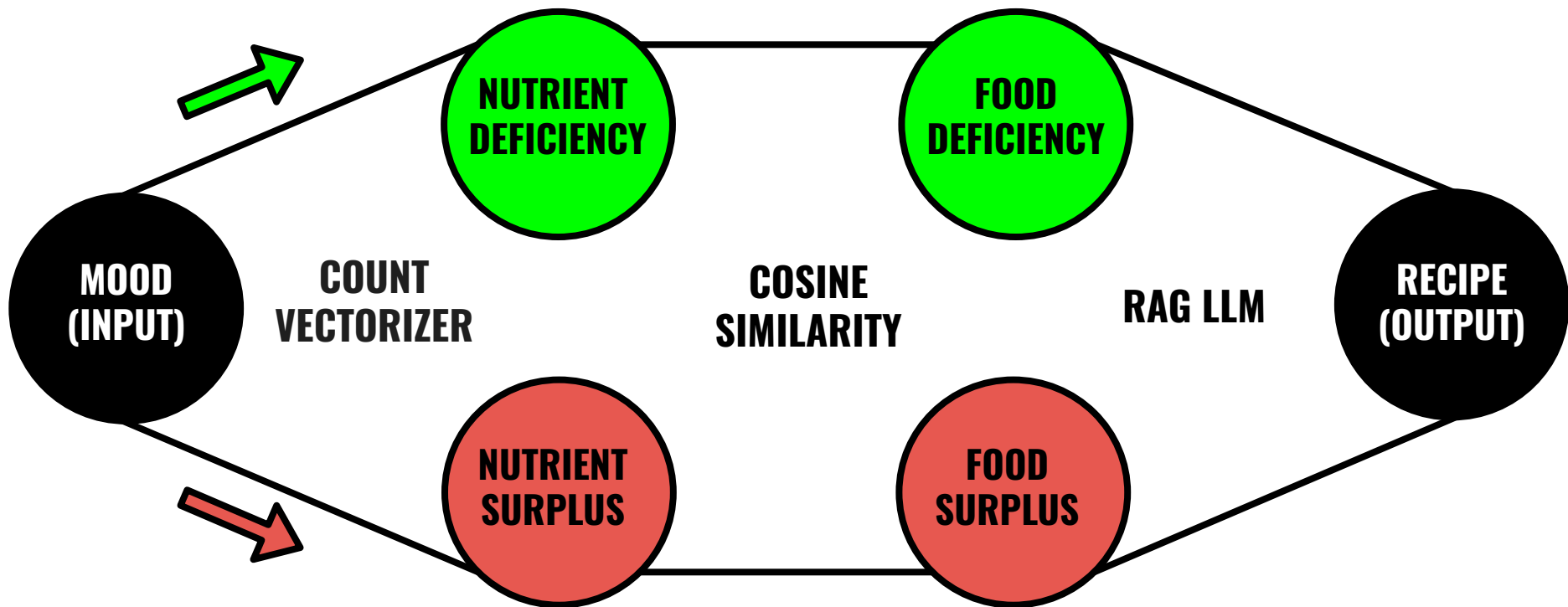
METHODOLOGY



MODEL

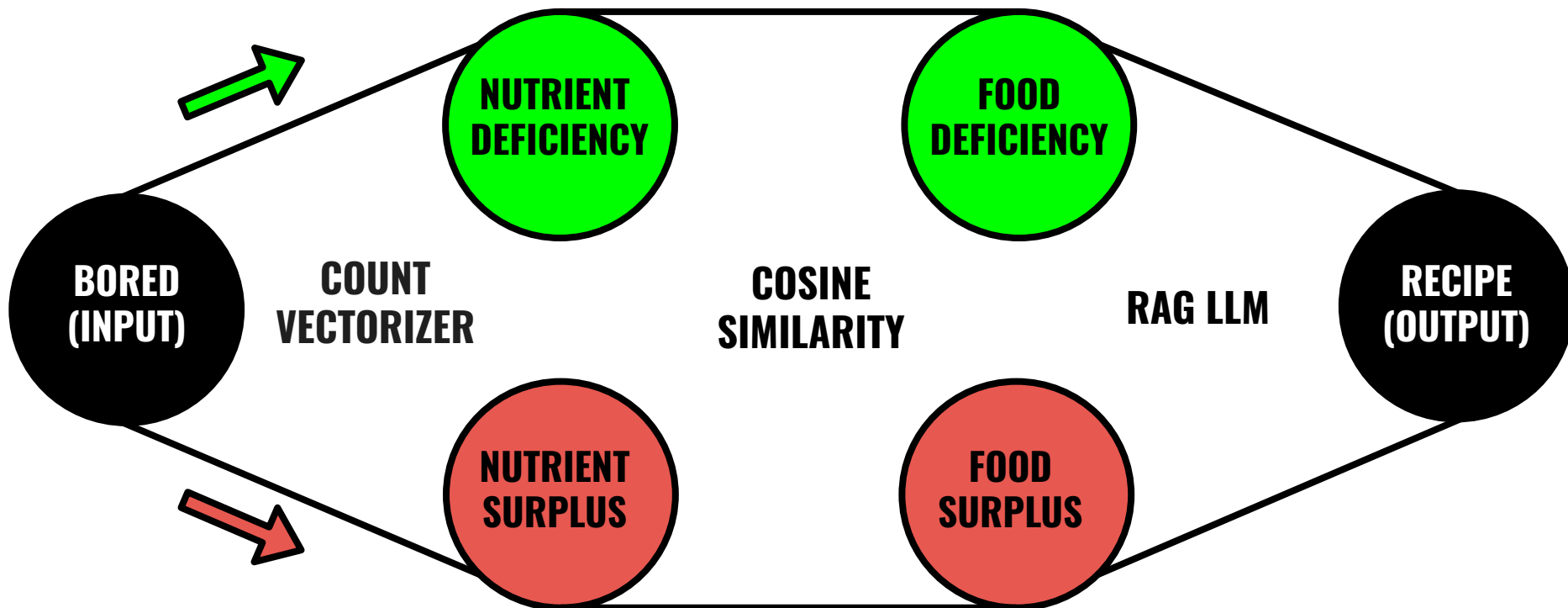
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AVOID



OLD

EXAMPLE





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Supercharge your mood & productivity with
personalised nutritional recommendations

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business problem

\$3.5

Trillion loss

Estimates indicate that the **global economy** loses over \$3.5 trillion annually due to malnutrition-related productivity losses and healthcare costs. (World Bank)

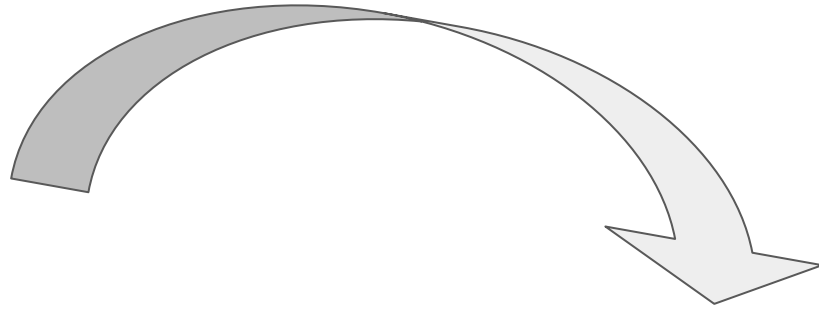
66% likelihood of
productivity decline at
workplace

In workplace settings, unhealthy diets correlate strongly with presenteeism (being present but unproductive), a leading cause of productivity loss. For example, employees with poor diets are 66% more likely to experience productivity declines than those with healthier diets. (NIH National Institute of Health)

moodsandfoods motivation

diet today

mostly nutrient-poor, leading to major deficits
or surplus in essential nutrients



focus, energy & mental well-being

affected by diet, impacting daily productivity

Goal

Improve productivity and health by aligning food recommendations with moods and nutrient needs, building a personalized approach to dietary health.

moodsandfoods data & challenges

kaggle

data

sourced from publicly available platforms like **Kaggle**, **PubMed**, and **Elicit** ensuring quality and relevance

PubMed

Elicit

challenges

Finding adequate data (quality and consistency)

Integrating diverse data formats from studies and datasets (esp. for mood relationship)

Providing all moods to choose from/ to enter - LLM required

Providing possibilities for real-time feedback loop - limiting the scope of immediate application

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methodology and technology stacks used

week 1

Data cleaning & EDA, organize data, assess relationships between nutrients and moods and foods

week 2

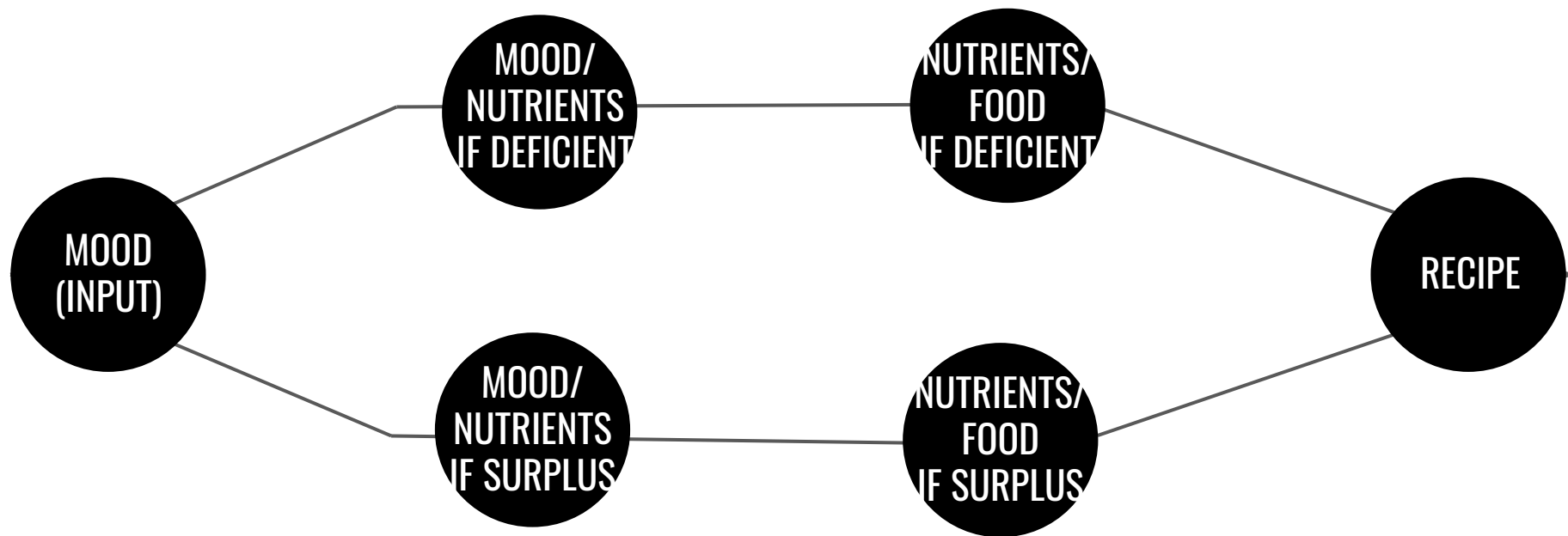
Vectorization of moods and nutrients – vectorizing text data, exploring **cosine similarity** as a baseline

week 3

Model refinement and food input processing
– Explore other opportunities, refine recommendation model, evtl test accuracy with **A/B testing**

week 4

Build user interface using **Streamlit**
design simple, accessible app for real-time recommendations

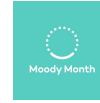


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future goals

femtech platforms

Leverage mood tracking from existing femtech apps for more personalized and cycle related recommendations



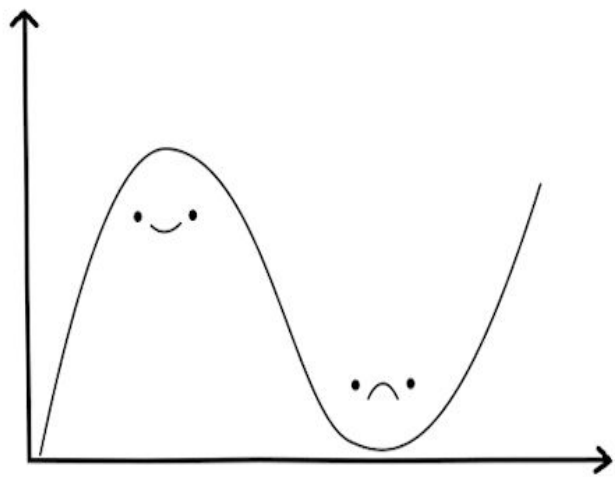
government funding

Collaborate on public health initiatives to boost workplace productivity and reduce healthcare costs

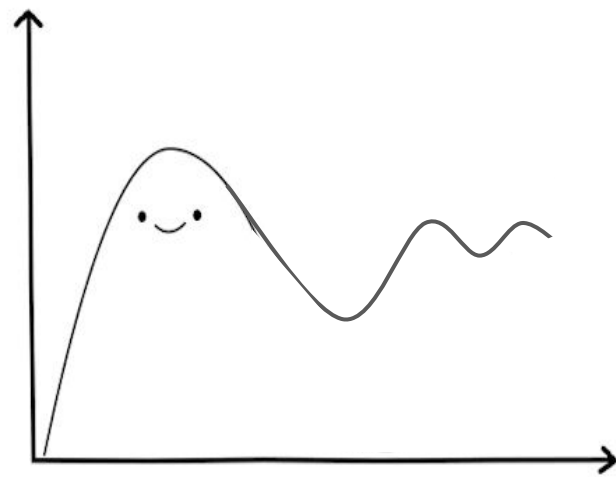


exit strategy

Aim for strategic partnerships or acquisition by health-tech or productivity-focused platforms, expanding the reach and impact of personalized nutrition recommendations.



mood now



future mood

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Live App demo



Streamlit

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Tech Stack



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Q&A

Thank you :)

business problem

“Quote” Meta level

the problem of insufficient public spending on female menstrual solutions -> 30 billion in economic loss because cycle dependent productivity

“Quote” Mid level

x percent of female employees say that during menstrual cramps they only do 50% work.

Spending in health tech / health optimisation on an all time high - quote

business problem 2

Research consistently shows that healthier nutrition is closely linked to improved workplace productivity. Studies indicate that employees who eat nutrient-dense foods experience enhanced cognitive performance, higher energy levels, and fewer instances of illness, all of which contribute to greater productivity and reduced absenteeism. For example, balanced diets rich in whole grains, lean proteins, and healthy fats have been associated with sustained energy and improved focus, leading to higher work output. One study highlighted that **employees in companies with workplace wellness programs focused on nutrition saw a 66% reduction in absenteeism and a 50% improvement in productivity when compared to those without such programs**

[Oxford Academic](#)

[Corporate Wellness Mag](#)

Further evidence underscores the effectiveness of nutritional interventions in the workplace. A systematic review including over 39 studies on nutrition and physical activity found that **workplaces offering balanced nutrition options and health education saw significant improvements in productivity, with some companies reporting measurable gains as high as 20% in employee efficiency.** The productivity gains stemmed from lower fatigue, better cognitive functioning, and even mood improvements among employees who adopted healthier eating patterns

[Corporate Wellness Mag](#)

According to WHO, optimal nourishment can raise national productivity levels by 20%.
- (Forbes, 2019)*

<https://www.forbes.com/sites/alankohl/2019/07/17/nutrition-the-missing-piece-of-the-corporate-wellness-puzzle/>

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Live App demo



Streamlit

moodsandfoods
Live App demo



Streamlit

enter mood get food

(e.g., “low energy”), and the app instantly
recommends foods with nutrients known to
boost energy

rate

recommendation systems’ output for future
recommendations

- All members to each team must present together as a team, with each member having a fair share of speaking about certain part of the project
- Presentations should be somewhat high level, and must be done with proper slides (no jupyter notebook or python script)
- The introductory speaker of each team should spend some time in the beginning to very briefly introduce the members
- The following point should eventually be included in the presentation:
 - a. Definition of business problem
 - b. Motivation/ what is it good for?
 - c. Data source/ data collection / challenges
 - d. Methodology and technology stacks used
 - e. modelling
 - f. demonstration of the model, ideally with an app
 - h. future goals and open questions