A glass of iced tea with lemon and mint on a wooden surface. A thought bubble points to the glass.

Finally, a
healthy sugar
substitute

Fitting proteins to the mass food market

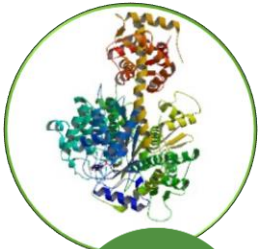
Amai
Proteins

Amai: Fixing our food system, one protein at a time

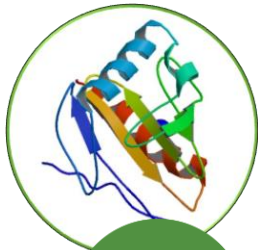
Combining Computational Protein Design with Precision Fermentation

Non-Sweet pipeline Computational phase

Meat



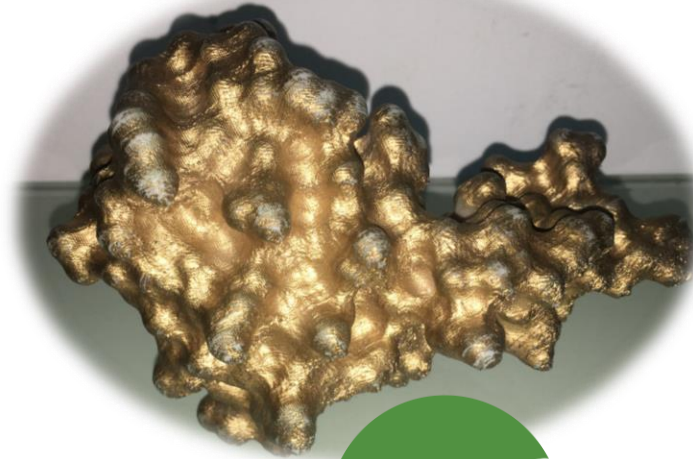
Plant



Milk



Sweet Close to market



✓ Tasty



✓ Stable (T, pH, fat)



✓ Cost-effective



✓ Digestible



✓ Hypoallergenic



✓ Sustainable



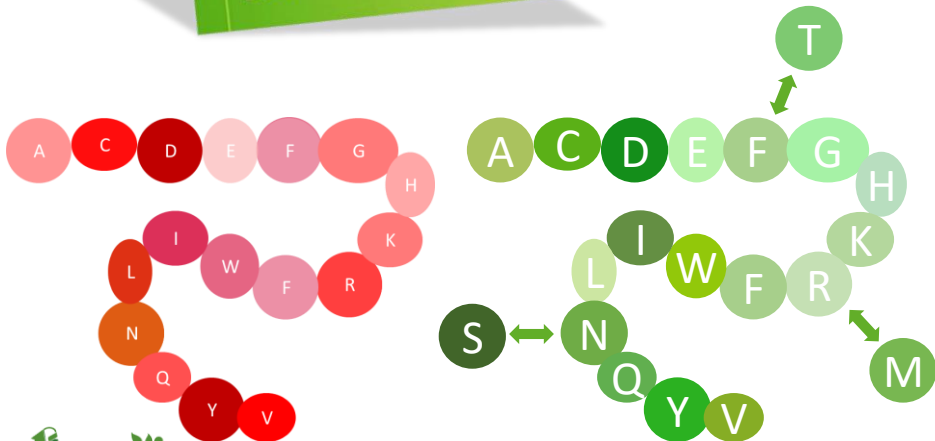
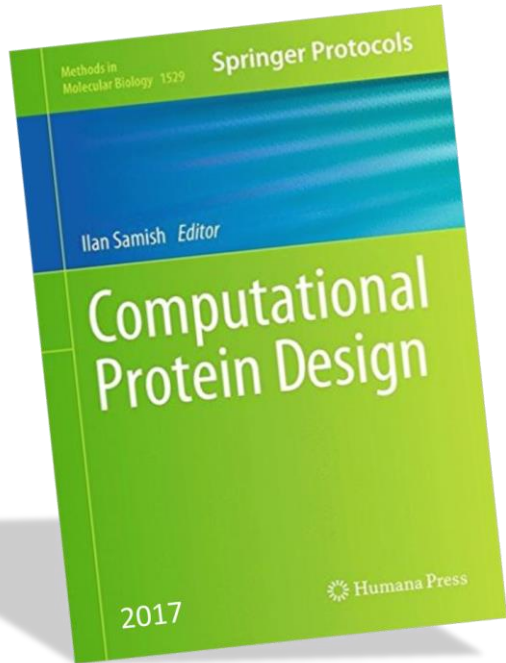
✓ Environmentally-friendly



✓ Proprietary

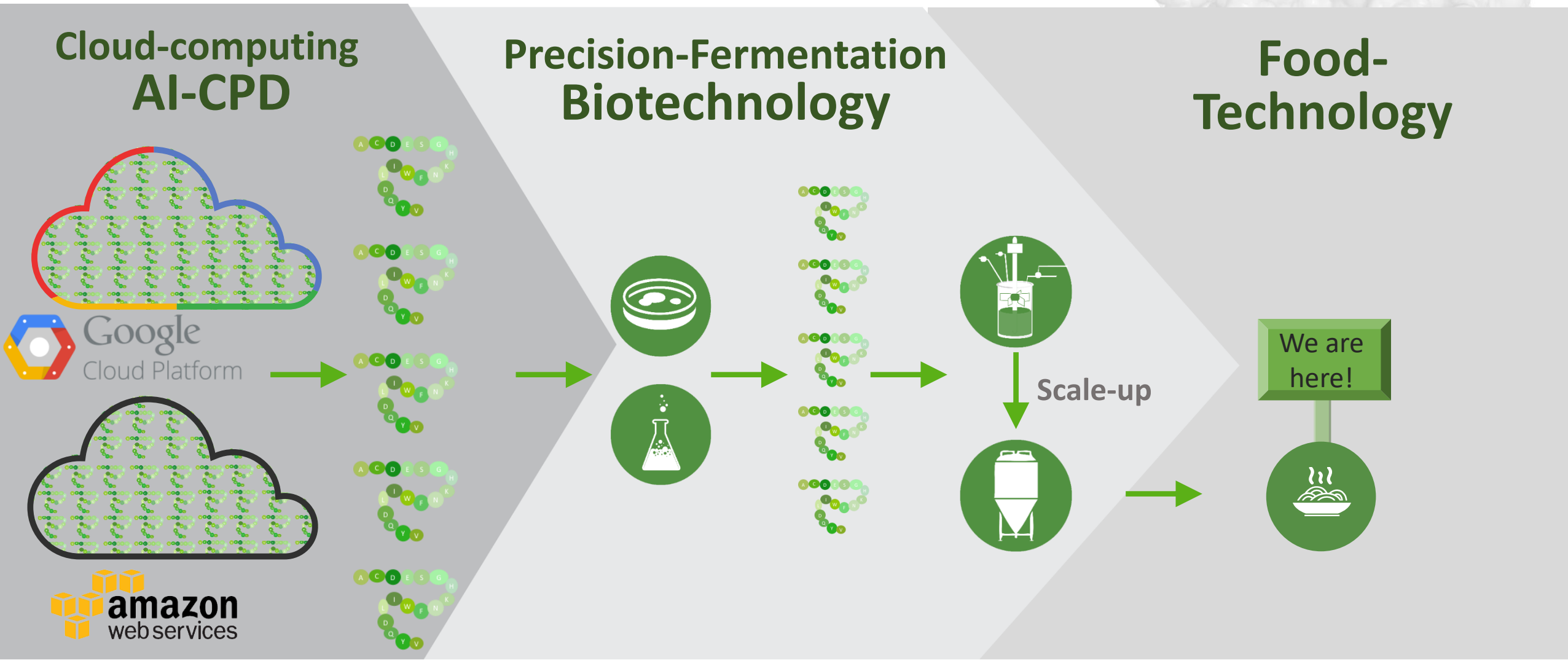
Amai: Fixing our food system, one protein at a time

Combining Computational Protein Design with Precision Fermentation



- ✓ Tasty
- ✓ Stable (T, pH, fat)
- ✓ Cost-effective
- ✓ Digestible
- ✓ Hypoallergenic
- ✓ Sustainable
- ✓ Environmentally-friendly
- ✓ Proprietary

The Amaï pipeline process:



Combining the benefit of computation and biotechnology with the oldest technology of brewing

The Amai-sweetened Food & Beverages



Beverage (Lemon, strawberry)

Whip cream

Protein shake

Soy drink

ketchup

Tasted by

- ✓ Over 3,000 people.
- ✓ Big-corporate super-tasters
- ✓ Expert super-taster panel



Protein & stevia soda
(Orange, Piña colada)



Sweetened beer
(non-alcoholic)



Yogurt



Chocolate

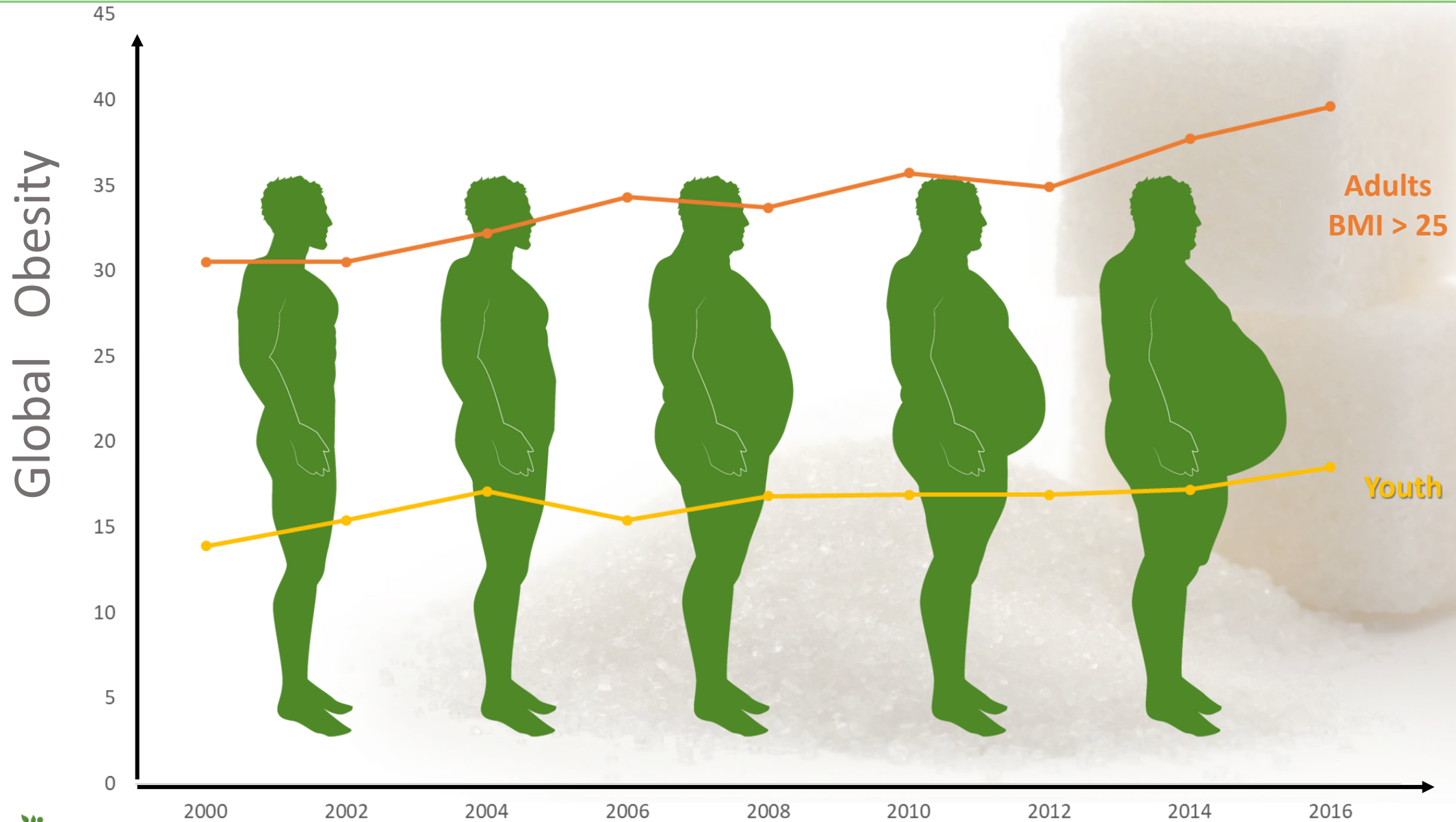
Collaborations:



(Super) tasting our future: Amai's expert panel



The world's heaviest problem



Sugar overconsumption is a leading UN-SDG threat



THE
LANCET

Leading global
health threat

CREDIT SUISSE

**Sugar tax is
needed**



Effects
numerous SDGs

Amäi
Proteins

Quantitative impact
plan is available upon
request

Many routes to sugar reduction solutions: No magic bullet. Not good for >30% reduction



High-intensity
artificial



Whole foods



Naturally derived



Sweet proteins



Taste modifiers



Physical
modifications



Rare
monosaccharides



Sugar alcohols



Fail in



xTaste

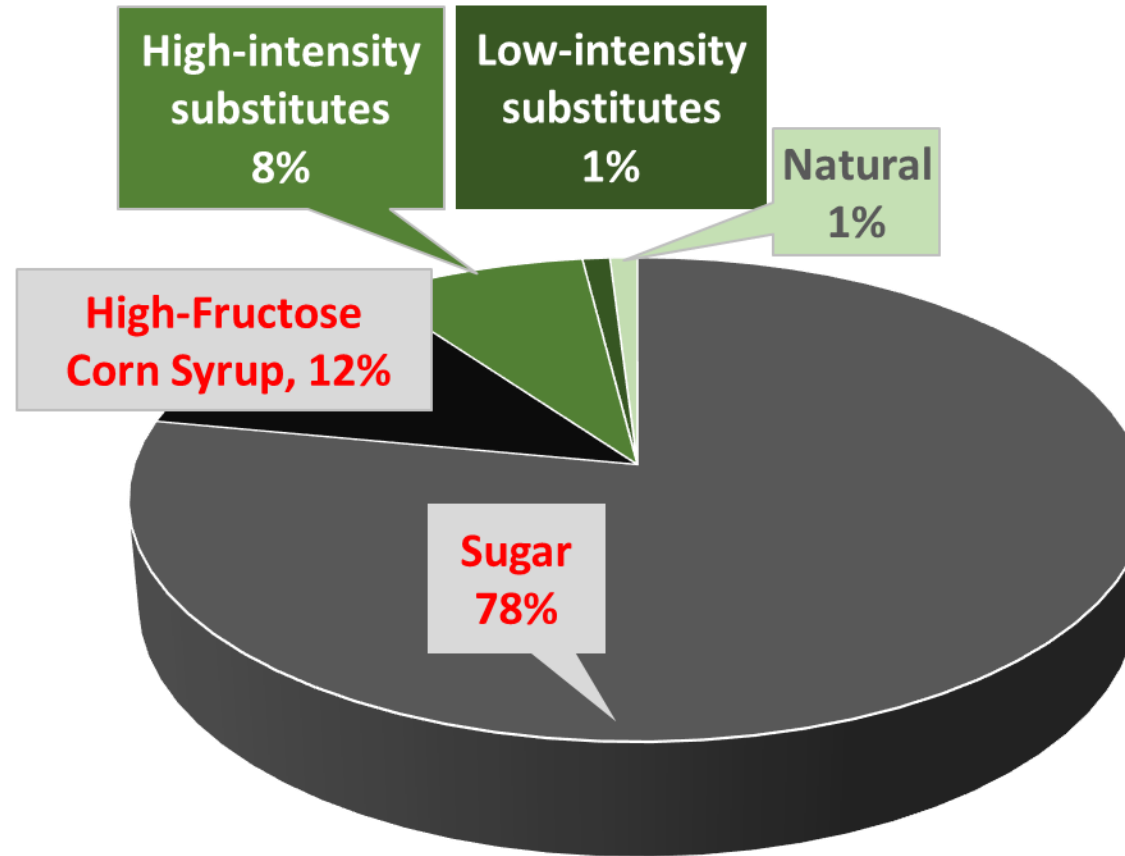
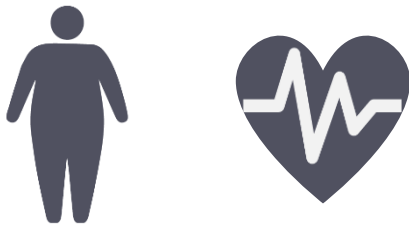
x Cost

x Health

x Product-fit

The \$90B sweetener market is mainly ...sugar

Sugar: Not healthy



Substitutes:
Not tasty, not healthy

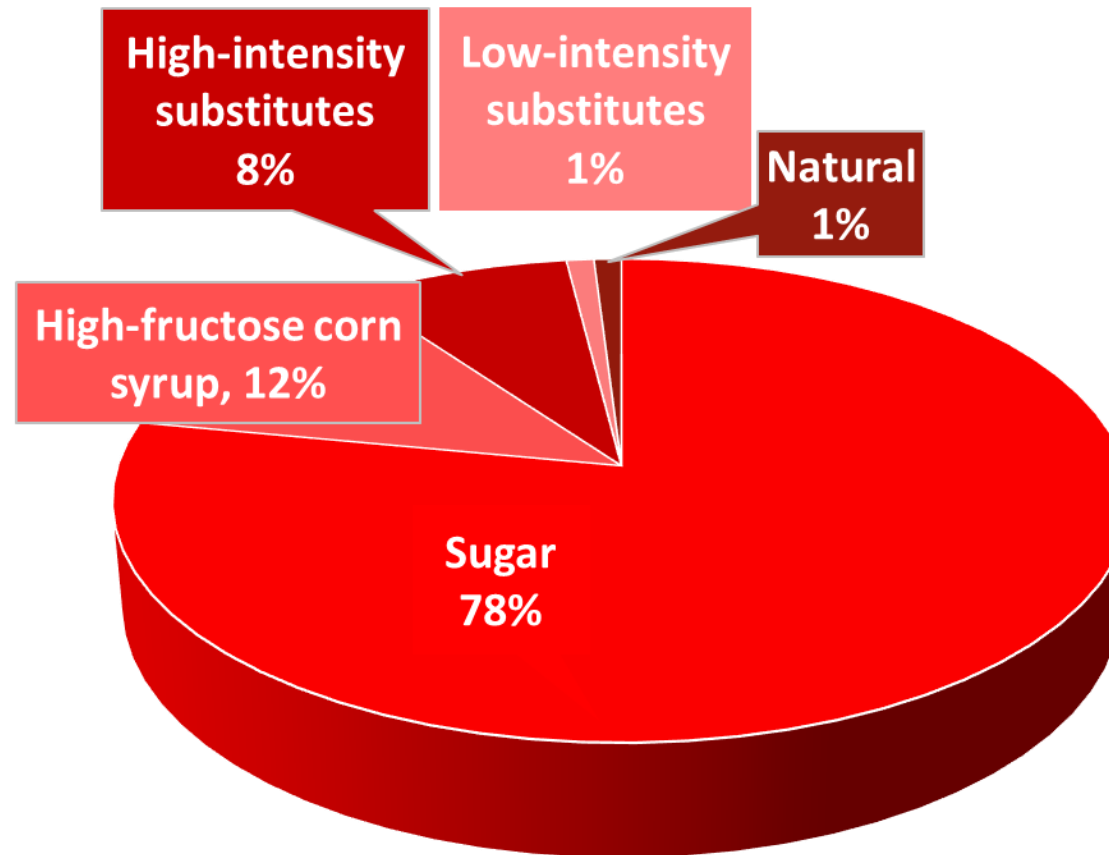


“There is a dearth of evidence on the **potential adverse effects of low-calorie sweeteners**”

Circulation 2018;138:e126–e140

The sweetener market: \$90B

Sugar: Not healthy



Substitutes:
Not tasty, not healthy

Microbiome, Liver, Kidneys

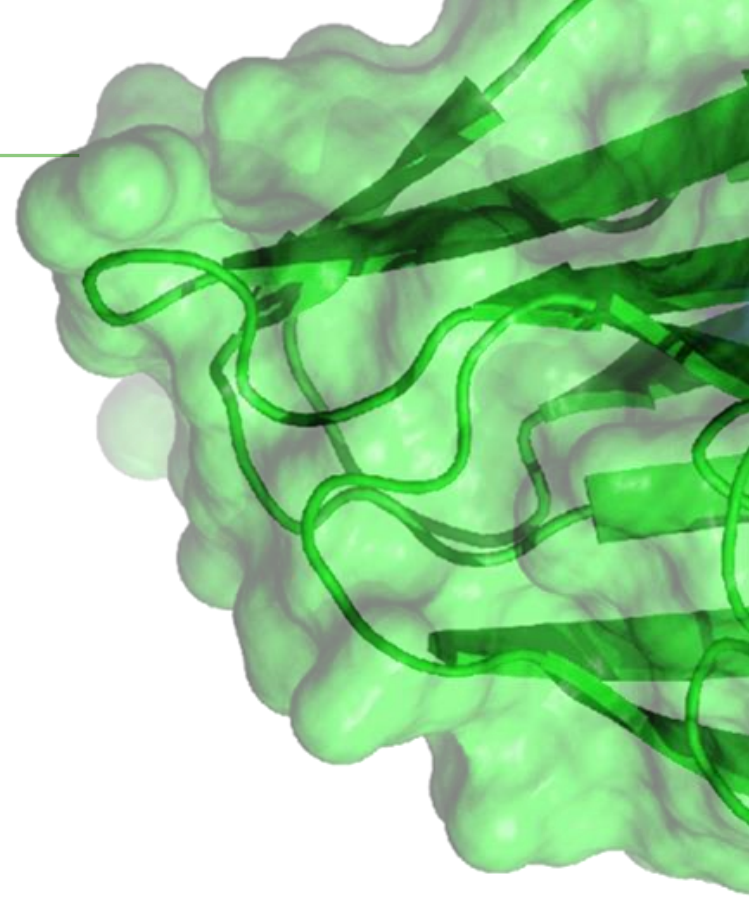


“There is a dearth of evidence on the **potential adverse effects of low-calorie sweeteners**”

Circulation 2018;138:e126–e140

SMALL MOLECULES

Proteins are healthy big molecules

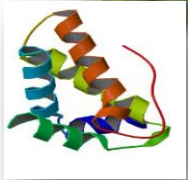


BIG MOLECULES

Building body muscles and tissue

Sweet Proteins

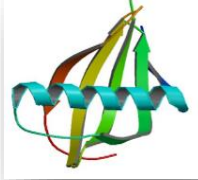
Mabinlin



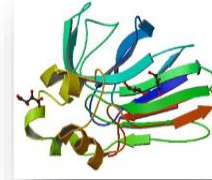
Brazzein



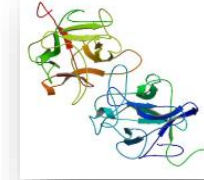
Monellin



Thaumatococin



Miraculin



Curculin



up to **3,000X**
Sweeter than sugar



Healthy

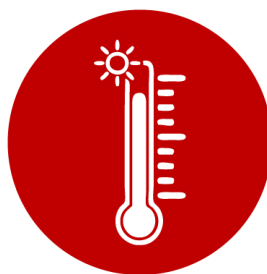
- ✓ No insulin response.
- ✓ No calories.
- ✓ No effect on microbiome, liver, kidneys.

Sweet proteins are not fit for the food industry

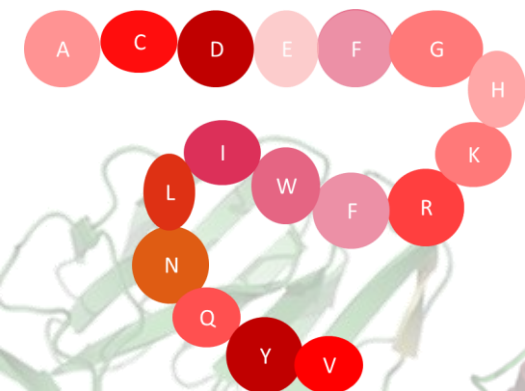
High
cost



Low
stability



Suboptimal
sweetness
profile



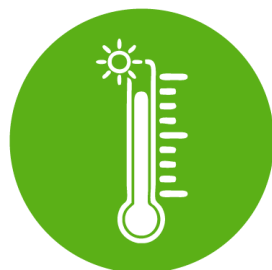
CPD & biotechnology answer the challenge

Much cheaper
than sugar

Low
cost



High
stability



- Stable to pasteurization
- Long shelf-life

Optimal
sweetness
profile



- Sugar-like taste
- Synergy with e.g. stevia



Awards & Recognition: US, EU, Far-East



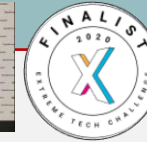
2019 New-Orleans
IFT-Next top-10
Round-2 finalist



2019 Paris, Food
Ingredients Europe
(4/190 startups,
27k-attendees)



2018 TechTour
EFVF, Aarhus,
Denmark



2019 Berlin, Extreme
Tech Challenge at
Disrupt Berlin.



2018 Singapore
FFAA (8/150)



2019 The Journey
Israel's top startup
competition
(1/200).



2018 Düsseldorf
TechTour finals
winner (24/1,125)



2020 Palm Beach
Global Wellness
Summit
1st place (1/84)



2019 San-Francisco
AgFunder 'Most
Innovative Pre-series A
Supply Tech'

The Amai Investors, BoD and SAB

Board of Directors



Rick Greubel
BoD Chair



Dr. Ilan Samish
Director



Dr. Amir Guttman
Director



Shahar Florence
Director



Mor Assia
Director



Lewis Tepper
Director



Vanessa Bartram
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Hsien-Hui Tong
SGInnovate



Meng Xiong Kuok
K3 Ventures

K3 VENTURES



Esther Barak Landes
Japan Israel Fund

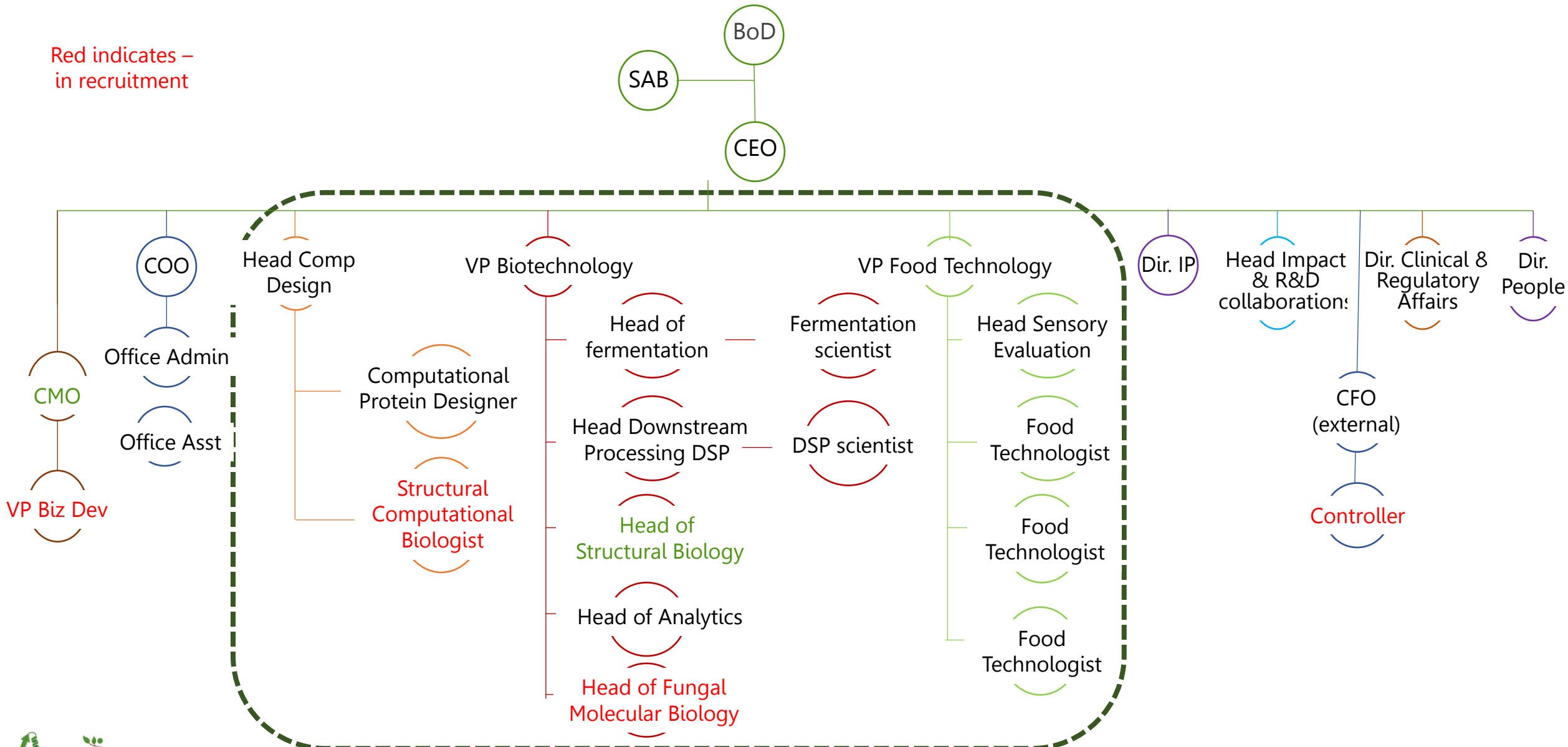


Andres Perez
Dragones Venture Partners

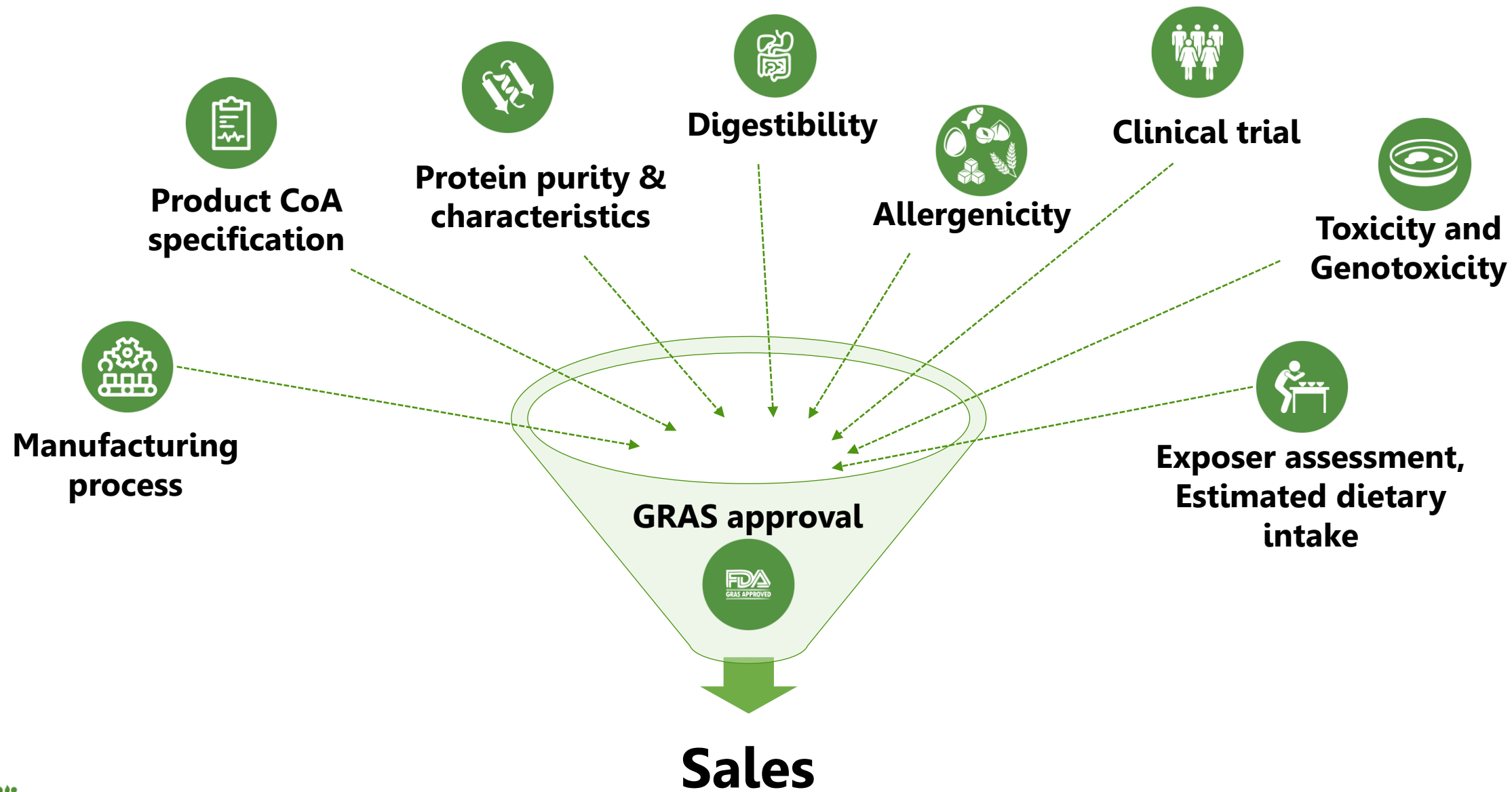


Organizational chart 23 employees, 70% female, 9 PhDs ...and growing

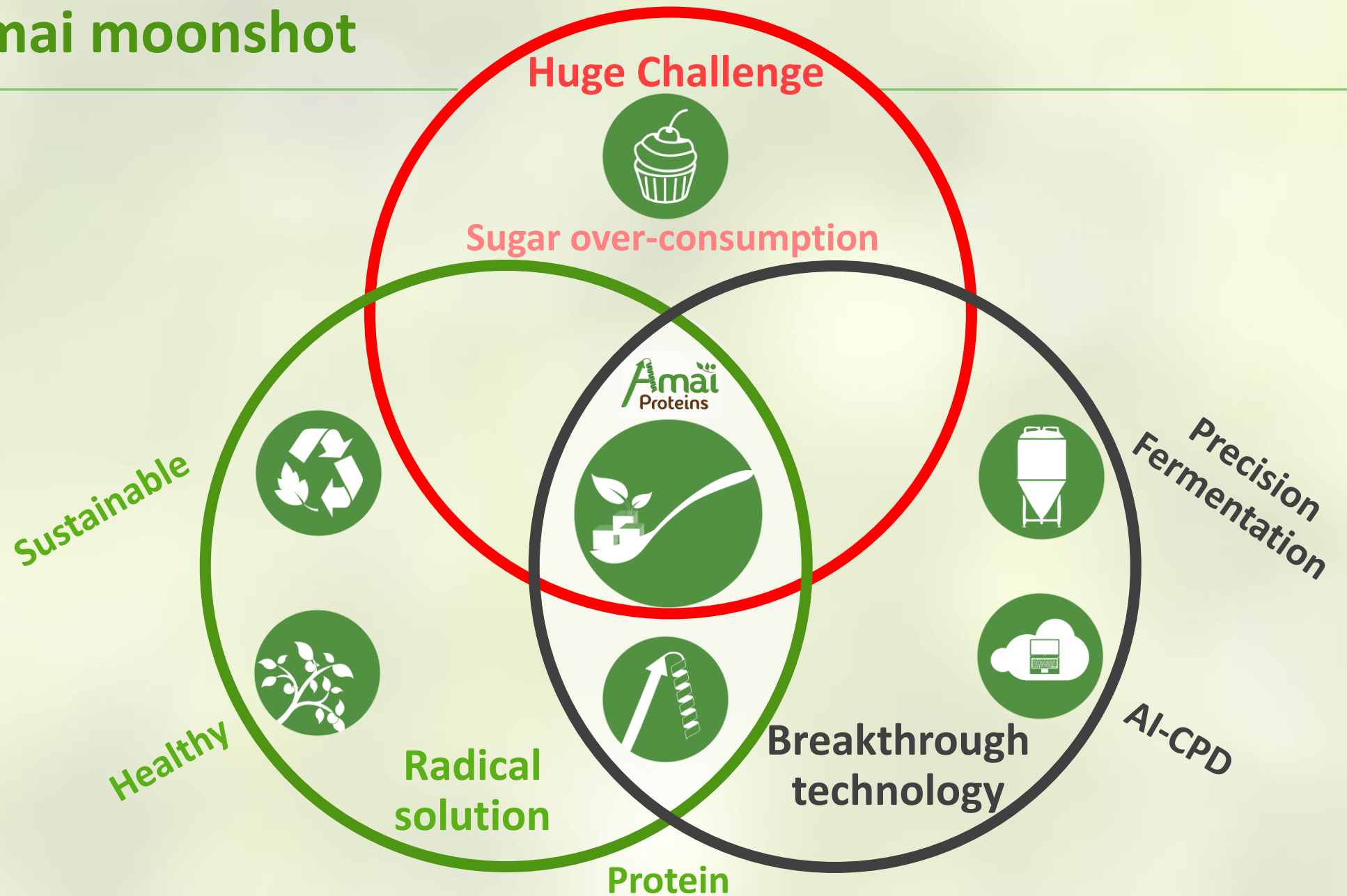
Red indicates –
in recruitment



Regulatory approval: Path to market: enabling sales in <2 years



The Amaï moonshot

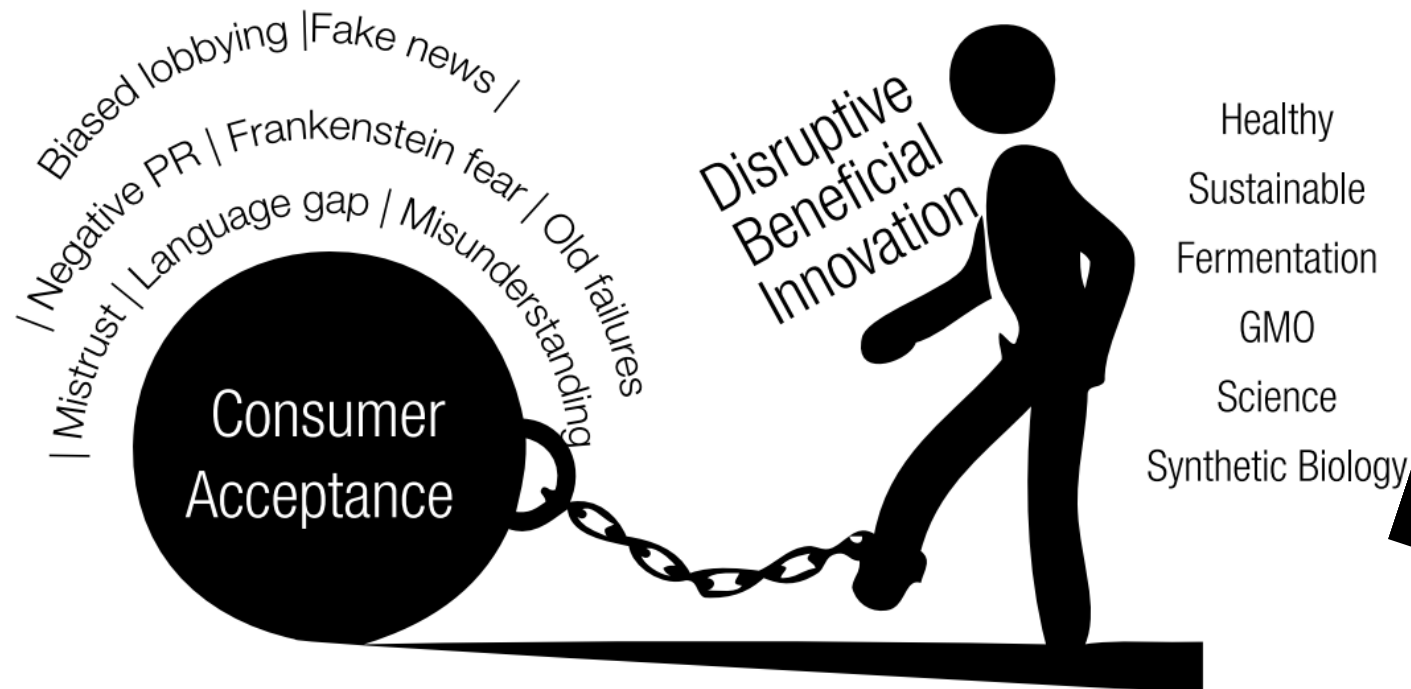


The language of Food 2.0

- Disruptive solutions are challenged by the classic intrinsic friction to change
- Spoke about it at an ISGP FDA-sponsored meeting .

The challenge:

Beneficial solutions are held back by lack of consumer acceptance







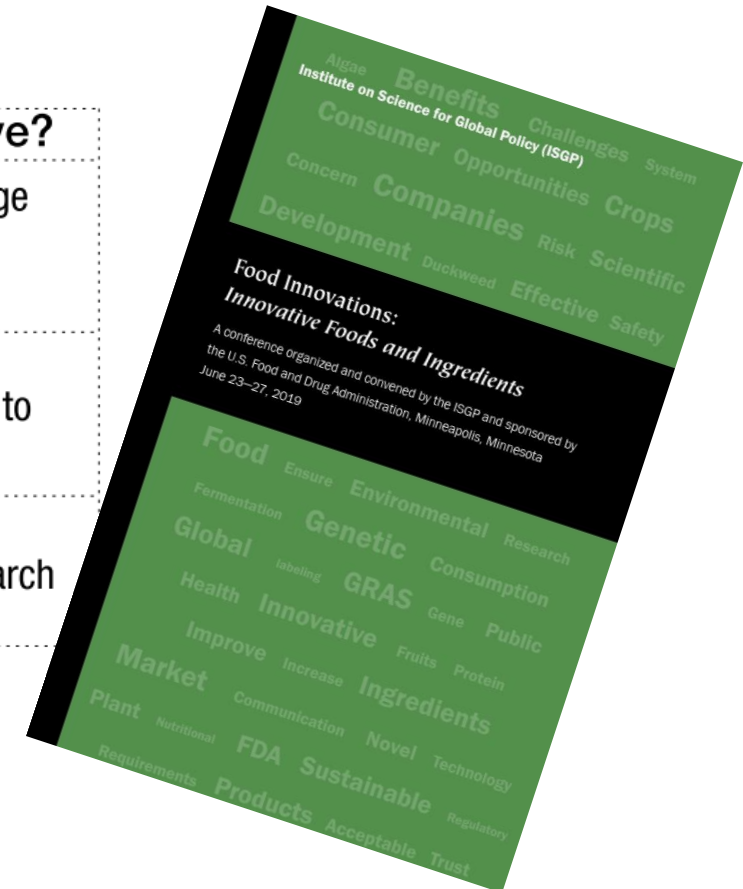
<http://scienceforglobalpolicy.org/conference/innovative-foods-ingredients-ifi/>

The language of Food 2.0

The solution:

Earning back consumer acceptance via regulation,
language and education

Jean-Jacques Rousseau 1754  Augmenting rational language with lost perception of feeling and emotion	Why (Philosopher)?	Why (reason)?	By whom?	How to solve?
	 Noam Chomsky 1986	Focus on internal- and not external language	Regulatory & NGO consortium	External-language rejuvenation
	 Karl Popper 1945	Tolerance paradox	Inter-agency regulatory group	Prescriptive regulatory track to innovation
	 Thomas Kuhn 1962	The structure of scientific revolutions	Non-partisan organization	Consumer perception research & education

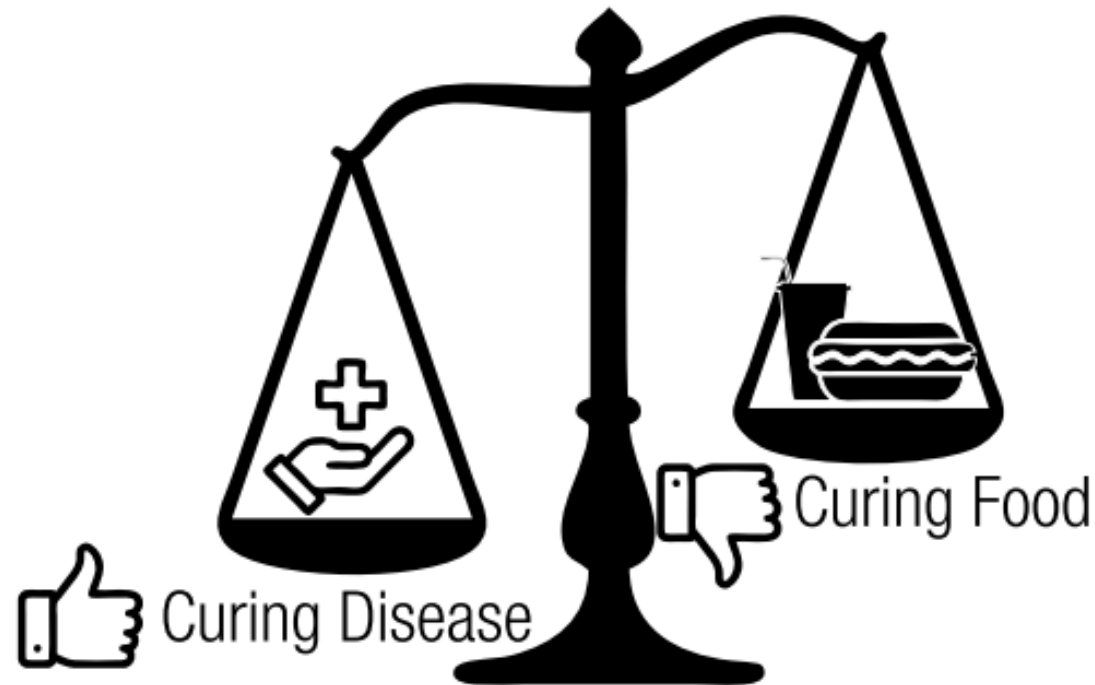


<http://scienceforglobalpolicy.org/conference/innovative-foods-ingredients-ifi/>


Let food be thy medicine (Hippocrates, 400 BC)

Current state:

Success in curing diseases but not in curing food



<http://scienceforglobalpolicy.org/conference/innovative-foods-ingredients-ifi/>



Thanks for
healthy sugar
substitute

<https://www.amaiproteins.com/>

Ilan.Samish@amaiproteins.com

