

Case study: Translating research into real-world culinary applications

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Disclosures:

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Received Funds from Abbott Nutrition for ELANS data analysis and Systematic Literature Review of Obesity in LATAM

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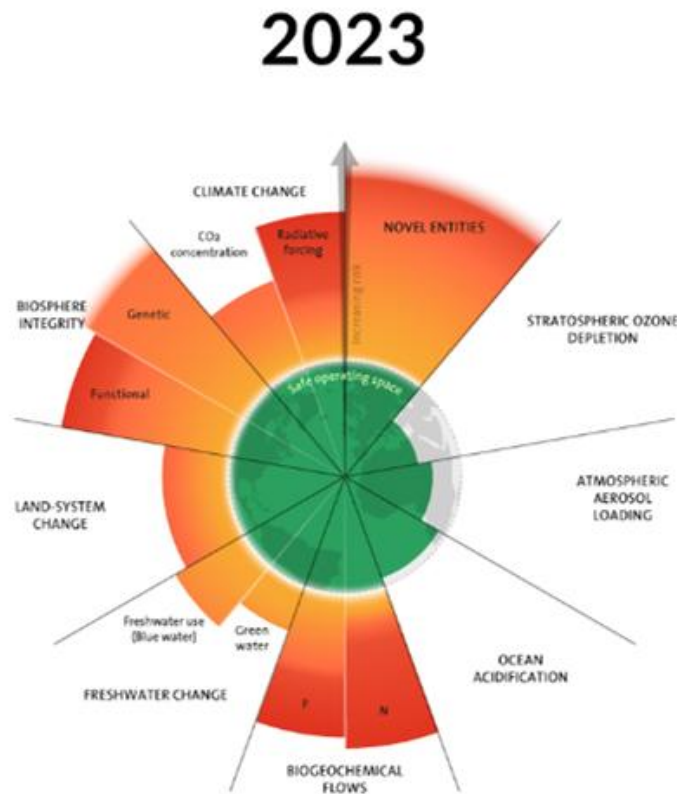
WFP Consultant 2025

“*It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change*

CHARLES DARWIN

A polycrisis world

Human Rights Human Right to Food

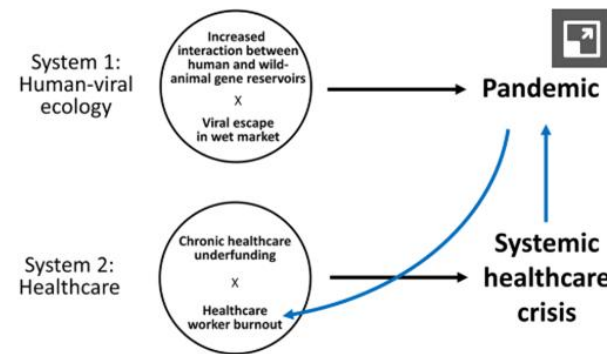


9 Boundaries Assessed 6 Crossed Based on Richardson et al. 2023
<https://www.stockholmresilience.org/research/planetary-boundaries.html>

A polycrisis world



Social order / Disruptions /
Economic turndowns / Wars /
Food security / Insecurity /
Violence / Drug trafficking /
Human trafficking.



The environment as a key factor for good nutrition and health

- Environment will be a determinant of living conditions
- Epigenetic is the temporary alteration of the DNA without impairing the genome
- The epigenetic mark will exist as long as the stimulus is present
- The environment is exposure to adequate foods, sanitation, access to health care
- Early life disadvantages are related to chronic diseases later in life



Photography by: Marianella Herrera

Implementing changes

In disadvantaged, low-income environments:

- We went to local foods, nutritionally adequate, based on the needs for recovering the nutritional status of children under 5
- Culturally appropriate
- Incorporate the community
- Challenging the use of RUTF and RUSF
- Needed to be Evidence based



Photography by: Marianella Herrera

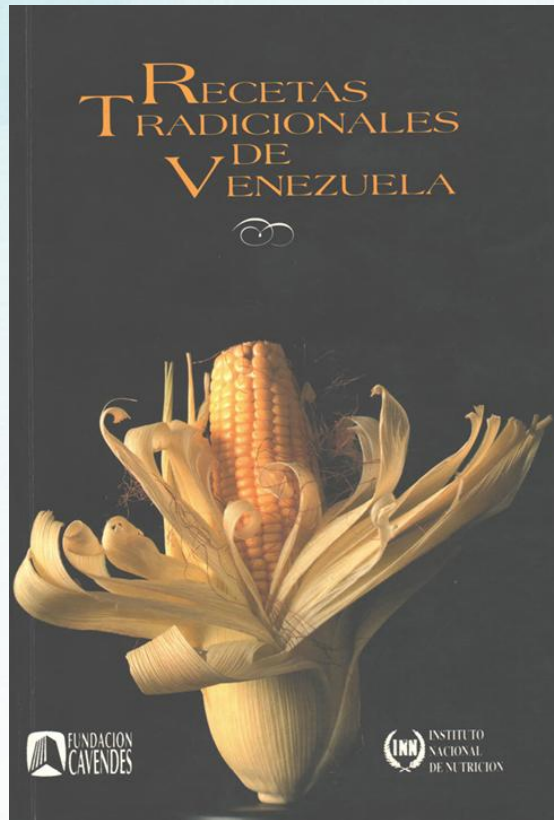
The need for supplementation



Implementing changes



Implementing changes



RECETA
FRESCO DE AUYAMA

5

INGREDIENTES

Auyama en trozos	2 tazas
Agua	4 tazas
Leche	4 tazas
Canela molida	1 cucharadita
Azúcar	4 cucharadas

PREPARACION

- Monte al fuego la auyama en la cantidad de agua indicada hasta que ablande.
- Deje enfriar, retire la concha de la auyama.
- Licúe la auyama con la leche y agregue la canela y el azúcar.
- Sirva con hielo



Accepted the challenge:

- Integrated approach
- Created a home made RUSF/RUTF
- Needed to establish who would be receiving

Identifying those at risk: The objective was to recover and stop the deterioration

NO RISK

- ♦ Normal weight for height (WHO $\pm$ 2 DS)
- ♦ The team of experts decide to take those between -1 – 2 SD to prevent deterioration

AT RISK

- ♦ -1SD to -2SD W/H
- ♦ Below -2SD W/H, H for age or W for age (mixed indicators)

Identifying those at risk:



Those who received and continue to receive the “squash smoothie” (batido de “auyama”)

NO RISK

- ♦ Normal weight for height (WHO ± 2 DS)
- ♦ The team of experts decide to take those between -1 – 2 SD to prevent deterioration

AT RISK

- ♦ -1SD to -2SD H/A and W/H
- ♦ 60.54% we expect to deduce to 30% (H/A)
- ♦ W/H 33.48% at risk and 8.55% with moderate or severe malnutrition expected be corrected in 12 weeks

Implementing changes



Training was performed at the Soup Kitchen networks in Venezuela.

Including:

- Identifying local foods
- Give children real foods
- Food Safety
- Team work
- Identifying beneficiaries
- Follow up

Serving the “to go” smoothies



To this date:

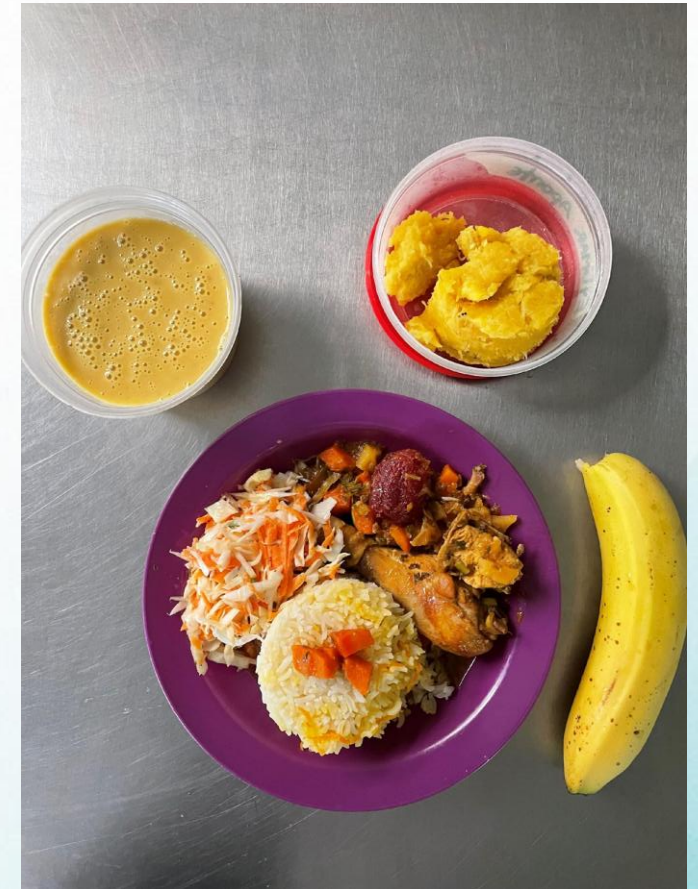
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Smoothies have been served

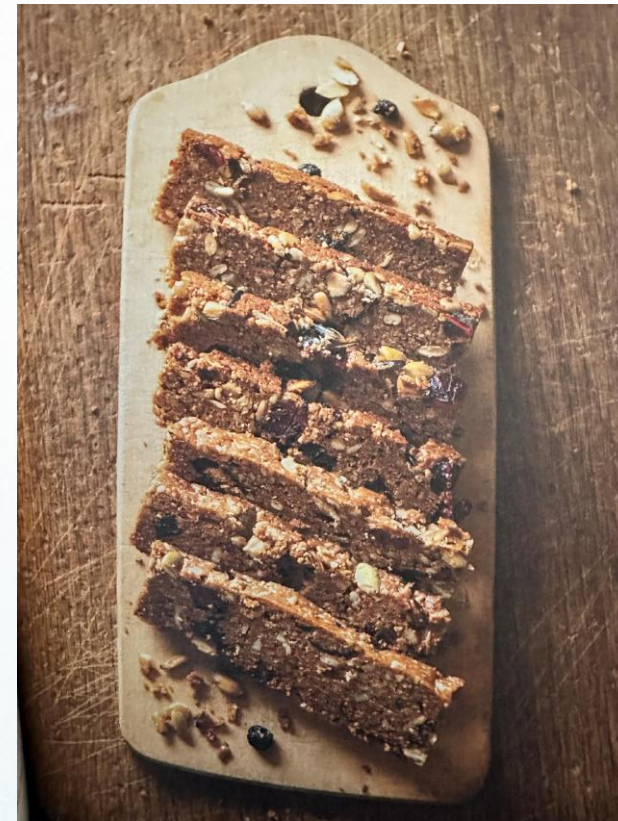
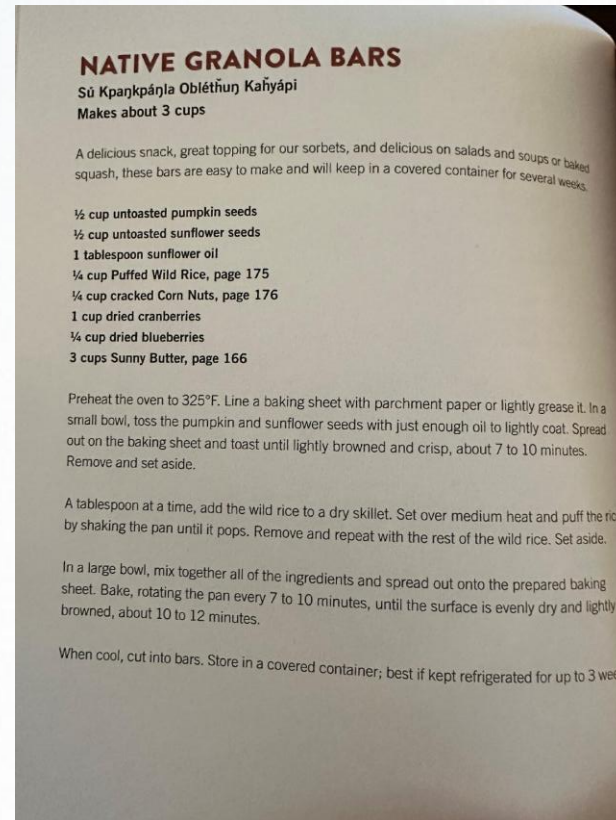
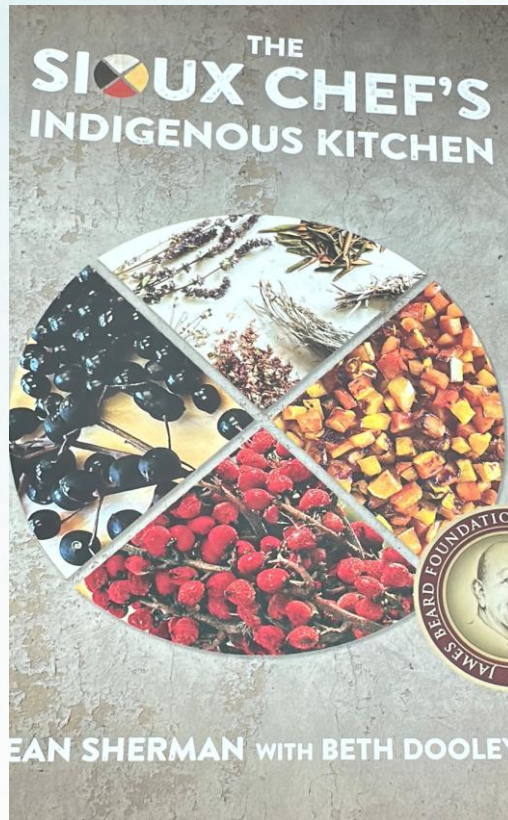
Implementing changes



Everyone
deserves
a meal served
with dignity, full
of colors and
balanced in
nutrients



More ideas: retaking indigenous foods



Conclusions

Challenges for feeding the world are arising, and particularly for those living in vulnerable conditions

Climate change intersections with pandemic consequences, decreasing global humanitarian funds and social inequities contribute to the existing of malnutrition

Creative, innovative solutions might include the use of local funds, community workers inclusion, and empowering women can be the source of solutions in the quest for the treatment and control of chronic and acute malnutrition

THANK YOU!

Do you have any
questions?



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