What traditional cultures can contribute to resolving the obesity pandemic

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Outline

- Background
- Prevalence of Indigenous People with obesity and overweight
- Prevention of obesity for Indigenous People
- Indigenous Peoples' experience can inform solutions



Indigenous and Tribal People in the World Today

- ➤ More than 370 million Indigenous and Tribal People
- >90 countries
- >5% of the world's population, but 15% of the world's poor
- >5000 identified groups
- >4000 languages, most endangered

Cunningham Kain, 2009, UNPFII, State of the World's Indigenous Peoples



Indigenous Peoples' food systems knowledge

- Derived from their collective experience in managing 22% of the world's ecosystems and land mass
- Understanding the animal and plant natural resources in the world's forests, pastures, riverine lands and waters, lakes and seas
- Preserving the majority of the planet's biodiversity/food diversity

Kuhnlein, Eme and Fernandez-Larrinoa (in press)



Indigenous Peoples' globally face intractable poverty, racism and discrimination

- > Lower life expectancy and other health gaps
- Less access to education
- > More unemployment
- More substandard housing
- > More violence and incarceration

Marginalization due to violation of their right to traditional lands and territories.

UNPFII, 2009, State of the World's Indigenous Peoples; UNPFII 2013, State of the World's Indigenous Peoples II; UNPFII 2017; State of the World's Indigenous Peoples III; Egeland and Harrison, 2013.





Victoria Tauli-Corpuz
United Nations Human Rights Council,
Special Rapporteur on the Rights of Indigenous Peoples

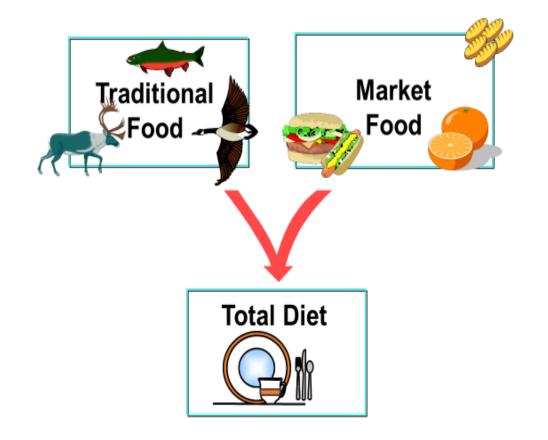


Kuhnlein et al, 2013
http://www.fao.org/doc
rep/018/i3144e/i3144e
00.htm

Total Food Species, Domesticated & Wildlife Animals

Culture	Total N species	Domesticated	Wildlife Animals
Awajún, Peru	223	0	110
Bhil, India	95	3	20
Dalit, India	329	15	25
Gwich'in, Canada	50	0	35
Igbo, Nigeria	220	9	31
Ingano, Colombia	160	2	91
Inuit, Canada	79	0	66
Karen, Thailand	387	5	56
Maasai, Kenya	35	17	2
Nuxalk, Canada	67	0	39
Pohnpei, Micronesia	381	5	157

% Energy from Traditional Local Food and Number of Traditional Species



	% Energy	Species
Awajún	93	223
Bhil	98	95
Dalit	43	329
Gwich'in	21	50
Igbo	95	220
Ingano	47	160
Inuit	29	79
Karen	85	387
Maasai	10	35
Pohnpei	27	381

Kuhnlein et al, 2009

Demonstrating and showcasing Karen traditional foods



Traditional foods in Pohnpei, Micronesia











Risks for Loss of Indigenous Food System Knowledge

- Habitat destruction Ecosystem threats: Resource extraction, dams, land grabs, climate change, contaminants
- > Displacement from indigenous territory
- > Loss of language and culture
- > Urbanization and migration of knowledge holders & youth
- Changing food acceptability; commercial food
- > Loss of seeds and wildlife

UNPFII, as above 2009, 2013, 2017; Kuhnlein et al, as above 2009, 2013



Prevalence of Indigenous People with obesity today

% Obesity and Diabetes for American Indigenous People

	2013-2015 Data	Obese	Obese+Overweight	Diabetes
•	AIAN* Adults	43.7	74.9	17.5
ſ	Non-Hispanic Whites	28.5	61.4	7.3
ļ	AIAN Adolescents	15.9	28.6	NA
1	White Adolescents	12.4	27.6	NA

^{*} American Indian/Alaska Native Obesity and American Indians/Alaska Natives. 2017, CDC/HHS

National examples of stunting in children < 5 years, %

	Indigenous	Benchmark
Colombia	29.5	12.3
Brazil	25.7	7.0
India	51.1	43.1
Peru	22.0	5.0

Anderson et al, 2016, Lancet 338





Preventing the challenges of obesity for Indigenous People

The progression from self-determination to food security and well-being

Self-determination → food sovereignty → sustainable food systems → food security → sustainable diets → sustainably healthy people



- Use community specific information as a platform for health promotion activities.
- Recognize and respect indigenous ways of knowing and being to support sustainable wellbeing for decision making, policy and action.
- > Recognize the global megaforces that undermine Indigenous cultures.



Education and awareness on: Food composition and dietary data to understand impact of commercial foods; NOVA classification* of processed foods;

Impact of dietary diversity and the contexts of cultural food diversity.**

*Mubarak et al, *Appetite*, 2017; Batal et al, *Public Health Nutr*. 2018 **for example, Sasolofoson et al, *Sci. Adv.* 2018

- > Decolonize public health programs to express holistic worldviews to prevent obesity and undernutrition.
- Use the indigenous values of respect, responsibilities, and relationships.
- > Recognize locally specific conditions and the broader historical, political, cultural, economic and environmental contexts.
- > Build the Indigenous public health workforce to promote well-being based on human rights; rebuild cultural morale.

Delormier et al, Maternal Child Nutr. 2018



➤ Indigenous food use in local cultural traditions affects mental, physical, social, and spiritual well-being.



A lesson on banana diversity in Micronesia

The way forward: Indigenous Peoples' experience can inform solutions

- ➤ Document the diversity in Indigenous Peoples' food systems: unique species diversity; cultivation, harvesting and preservation practices; taste and use; composition values; dietary diversity.
- > Document indigenous health strategies.



Diversity of pulses in Zaheerabad, India

- Build an international knowledge platform of traditional and indigenous holistic food system and health system knowledge with ecological sustainability.
- Recognize the value of expanding knowledge and intercultural education for resolution of the obesity pandemic affecting all populations.





Thank you for your attention

www.mcgill.ca/cine/

www.indigenousnutrition.org

