

Using Innovative and Participatory Methods To Capture the Contribution of Local Food Biodiversity in the Diet In Vietnam

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Overview

Dietary Diversity is an important indicator of diet quality in developing countries¹. Agricultural biodiversity has a critical role to play in diversifying the diet².

In Vietnam food diversity is high and dietary habits largely variable between regions and ethnic groups³. This makes dietary intake assessments difficult resulting in few published intake data. Main challenges are:

- i) Identifying and estimating unique food variety consumed in a context with vast species diversity as not all species are likely to appear in a 24-hour recall
- ii) Estimating portion sizes as chopsticks are used and preferred pieces (e.g. meat) self-selected from common pot.

	Women (%)		Children (%)	
	Did not Reach Min DDS	Reached Min DDS	Did not Reach Min DDS	Reached Min DDS
Starchy Staples	100	100	99	100
Legumes & nuts	3	33	8	25
Dairy	0	1	4	15
Eggs	7	41	20	54
Flesh Foods	78	96	70	93
Dark Green Leafy	9	45	3	20
Vit A Rich Veg	76	90	15	57
Vit A Rich Fruits	3	3	1	6
Other Vegetables	90	99	35	81
Other Fruits	7	48	20	40

% of women and children that consumed each food group

Method

A three step mixed method approach was developed to overcome these challenges.

1. Inventory of local foods (FGD 1)
 - Administered at the community level
 - **local foods consumed** from the farm, wild & markets.
2. Quantitative 24-hour recall (Ferguson/Gibson).
 - **Method adapted through a consultative process** with local stakeholders to identify strategies to overcome survey barriers in Vietnam.
 - Administered to 410 women and children
 - Validated by a repeated recall on a non-consecutive day, and covered two seasons.
3. Usual intake of local species (FGD 2) .
 - It was expected that **participatory discussion and censuses building would identify the norm for habitual consumption** in the community.

Results

In total 347 foods from 257 species were identified in the first FGD. Over 50 additional foods and species were identified through the recalls.

Not all FGD inventoried foods were captured in the recall, largely due to seasonal availability.

Women and children not reaching minimum dietary diversity missed the following food groups:

- Dark green leafy veg
- Vit A rich fruit & veg
- Legumes, nuts & seeds
- Milk & Dairy
- Eggs

Fewer Women than children reached Estimated Average Requirement (EAR), and for fewer micronutrients.

Nutrient	Proportion reaching EAR (%)	
	Women	Children
Vit A	60	43
Vit B1	95	100
Vit B2	65	100
Vit B3	97	94
Vit B6	93	100
Vit B12	51	73
Vit C	72	38
Folic Acid	32	32
Ca	4	46
Fe	13	87
Zn	100	96

EAR of key nutrients from 24hr



Women participating in 1st FGD: Biodiversity in the food system

Conclusion

This mixed method is expected to provide an efficient and accurate way to conduct diet assessments and **capture local biodiversity's role in the diet more completely** than existing intake assessment methods.

Bibliography

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