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# Hunger and Food Security in Northern Ghana

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## Definition of Food Security

- **“Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”.**
  - **Definition adopted at the**
  - **1996 World Food Summit**



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# Pillars of Food Security

Source: Global Nutrition Cluster, seen March 1<sup>st</sup>, 2016



Discussing Progress: PBS 2015



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## Three pillars of food security

- **Availability:** food production, food imports, etc
- **Access:** household food production, reserves, family income, solidarity mechanisms, barter, etc
- **Utilization:** food health situation (diarrhoea, malaria, AIDS), food storage and cooking practices, fuel, age related needs, etc



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## **Household Hunger**

**PBS 2015 used the Household Hunger Scale (HHS) to determine the proportion of Households experiencing Hunger**



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## What is HHS?

**Simple tool composed of three questions about experiences common in households experiencing food deprivation:**

- **In the past [4 weeks/30 days]...**
- **...was there ever no food to eat of any kind in your household because of lack of resources to get food?**
- **...did you or any household member go to sleep at night hungry because there was not enough food?**
- **...did you or any household member go a whole day and night without eating anything at all because there was not enough food?**



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**What is the HHS? cont.**

**If yes, respondent was asked how often this occurred in the past 4 weeks/30 days**

- Rarely (1-2 times)**
- Sometimes (3-10 times)**
- Often (more than 10 times)**



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## What is the HHS? cont

Responses scored:

- No = 0
- Rarely or Sometimes = 1
- Often = 2
- Categorical variable created using scale score
- 0-1 = **Little to no** household hunger
- 2-3 = **Moderate** household hunger
- 4-6 = **Severe** household hunger





## Proportion of Household experiencing Hunger by gender and HH size

Characteristic	Little to no hunger	Moderate hunger	Severe hunger	n
All households	70	28	2	3058
Gendered household type				
Male and female adults	71	27	2	2668
Female adult(s) only	63	32	5	216
Male adult(s) only	75	23	2	140
Household size				
Small (1-5 members)	74	24	2	1399
Medium (6-10 members)	66	32	2	1351
Large (11+ members)	69	30	1	308

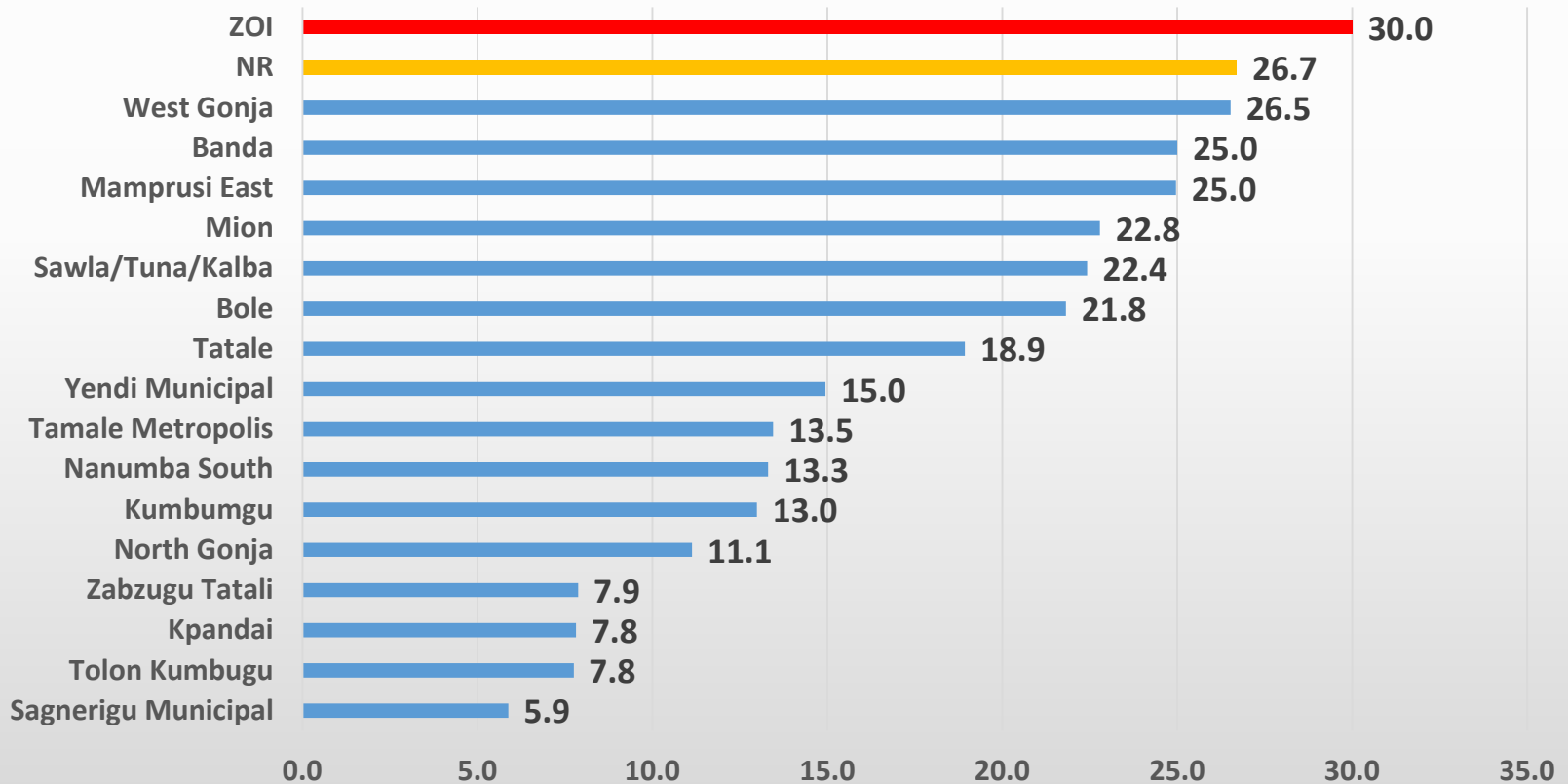


## Proportion of Household experiencing hunger by Education and Regions

Characteristic	Little to no hunger	Moderate hunger	Severe hunger	n
<b>Household educational attainment</b>				
No education	67	31	2	1941
Primary	69	29	2	437
Secondary or more	78	21	1	680
<b>Region</b>				
Brong Ahafo	73	24	4	303
Northern	78	21	1	2011
Upper East	50	47	3	429
Upper West	62	34	4	315

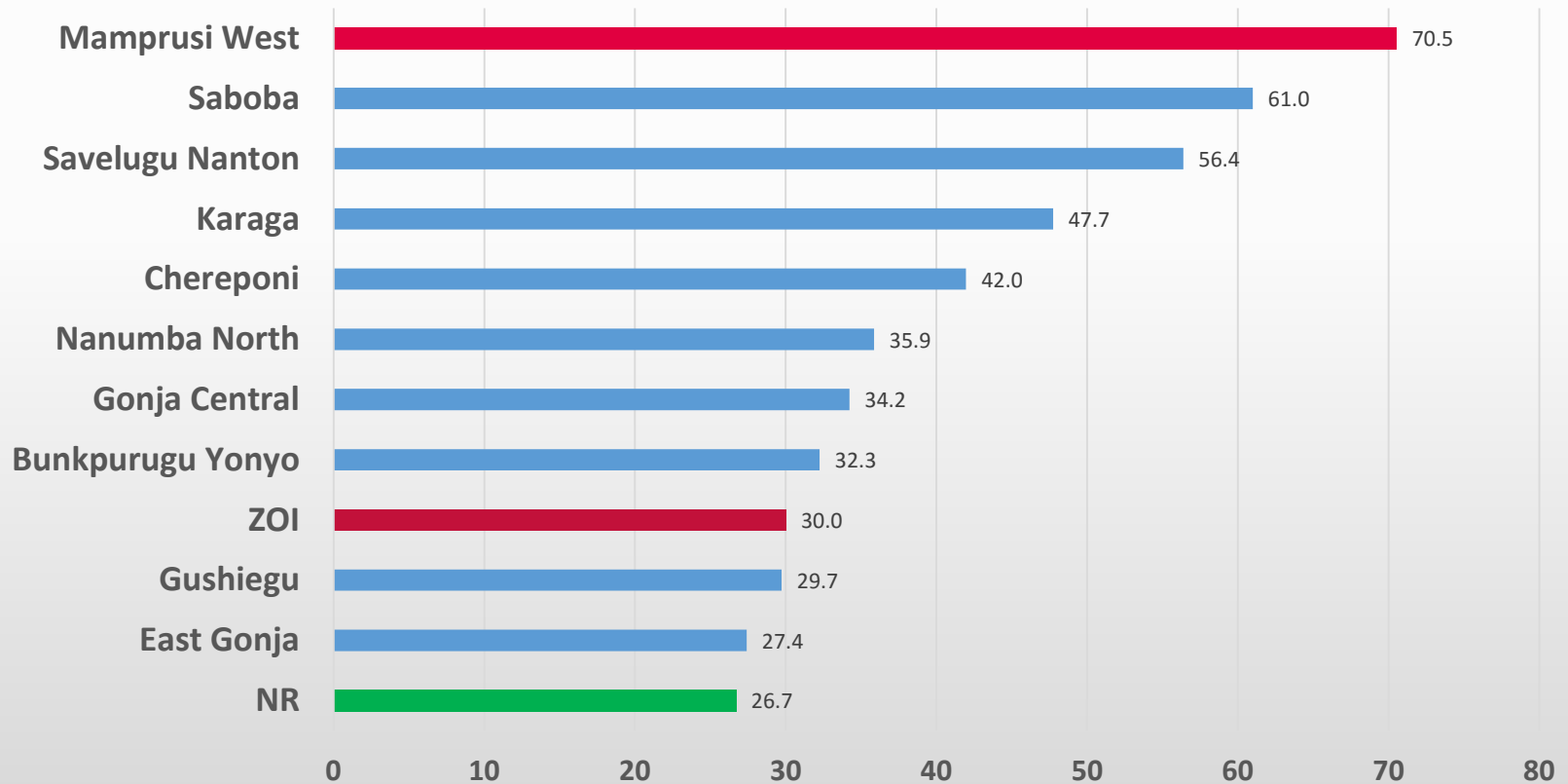


# HH Hunger for districts below Average





## HH Hunger for districts above the NR average





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## Women's minimum dietary diversity (MDD-W)

**Achievement of women's minimum dietary diversity is defined as having consumed foods from at least five of the 10 food groups in the past 24 hours. Thus this indicator is a dichotomous variable, and the measure is reported as **the percentage of women** who achieve a minimum dietary diversity.**



## The MDD-W food groups

**The Feed the Future MDD-W indicator is a new measure introduced in the interim assessments and uses the following 10 food groups:**

- 1. Grains, roots, and tubers;**
- 2. Legumes and beans;**
- 3. Nuts and seeds;**
- 4. Dairy products;**
- 5. Eggs;**
- 6. Flesh foods, including organ meat and miscellaneous small animal protein;**
- 7. Vitamin A-rich dark green leafy vegetables;**
- 8. Other vitamin A-rich vegetables and fruits;**
- 9. Other fruits; and**
- 10. Other vegetables.**



## Proportion of women achieving MDD-W out of TEN foods by age group

Characteristic	Percent	n
All Women 15-49	40.7	3,292
<b>Age group</b>		
15-19	44.5	517
20-24	46.5	472
25-29	42.0	583
30-34	39.1	556
35-39	37.2	519
40-44	38.7	391
45-49	33.3	254



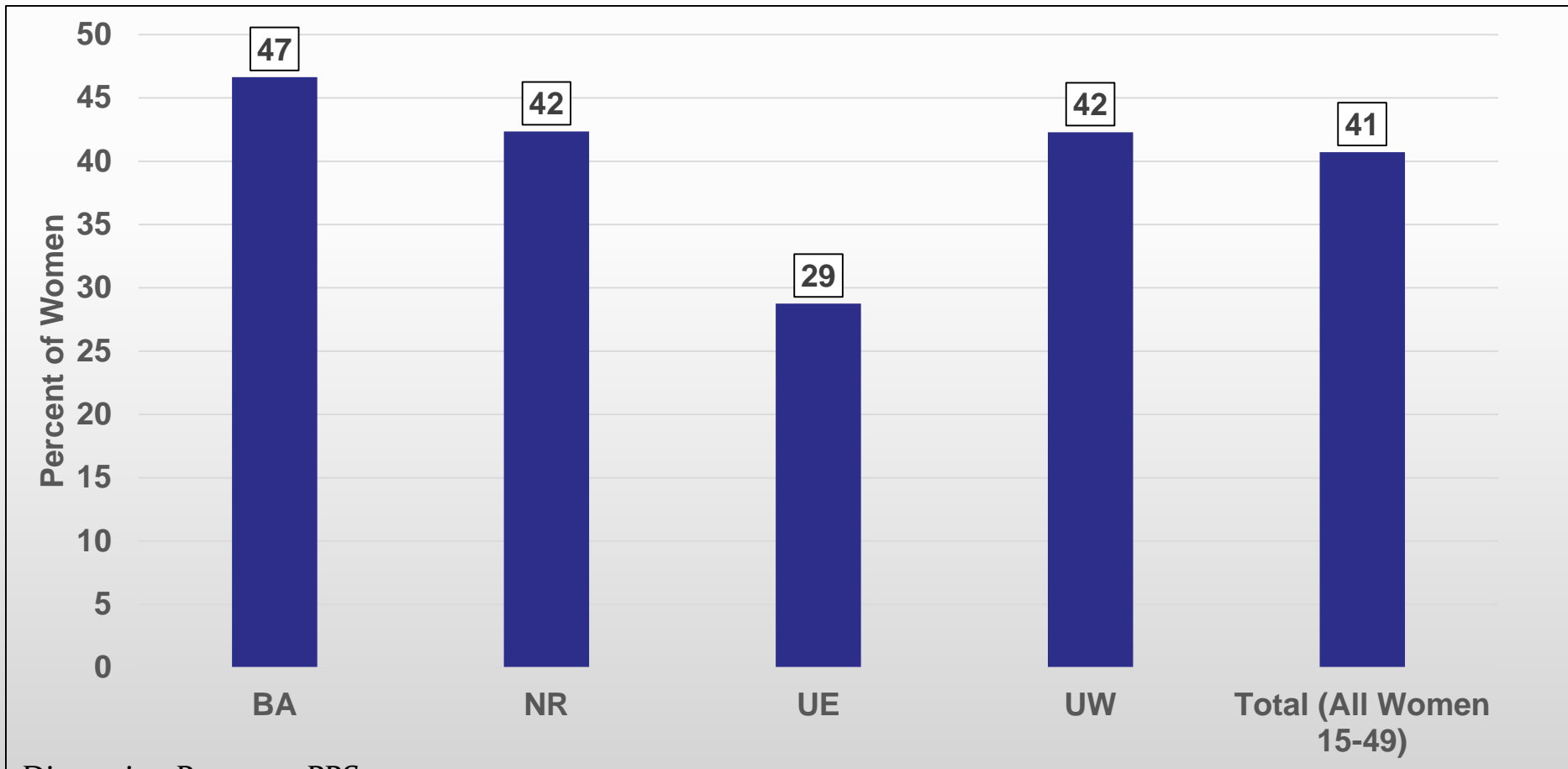
### MDD-W out of ten foods by household characteristics

Characteristics	Percent	n
<b>Educational attainment</b>		
No education	34.7	1,987
Primary	43.6	549
Secondary or more	<b>51.9</b>	756
<b>Gendered household type</b>		
Male and female adults	41.0	3,089
Female adult(s) only	36.7	178
Male adult(s) only	19.8	16
<b>Household size</b>		
Small (1-5 members)	42.0	970
Medium (6-10 members)	40.0	1,642
Large (11+ members)	40.6	680
<b>Household hunger level</b>		
Little to no hunger	46.1	2,290
Moderate or severe hunger	<b>29.5</b>	914



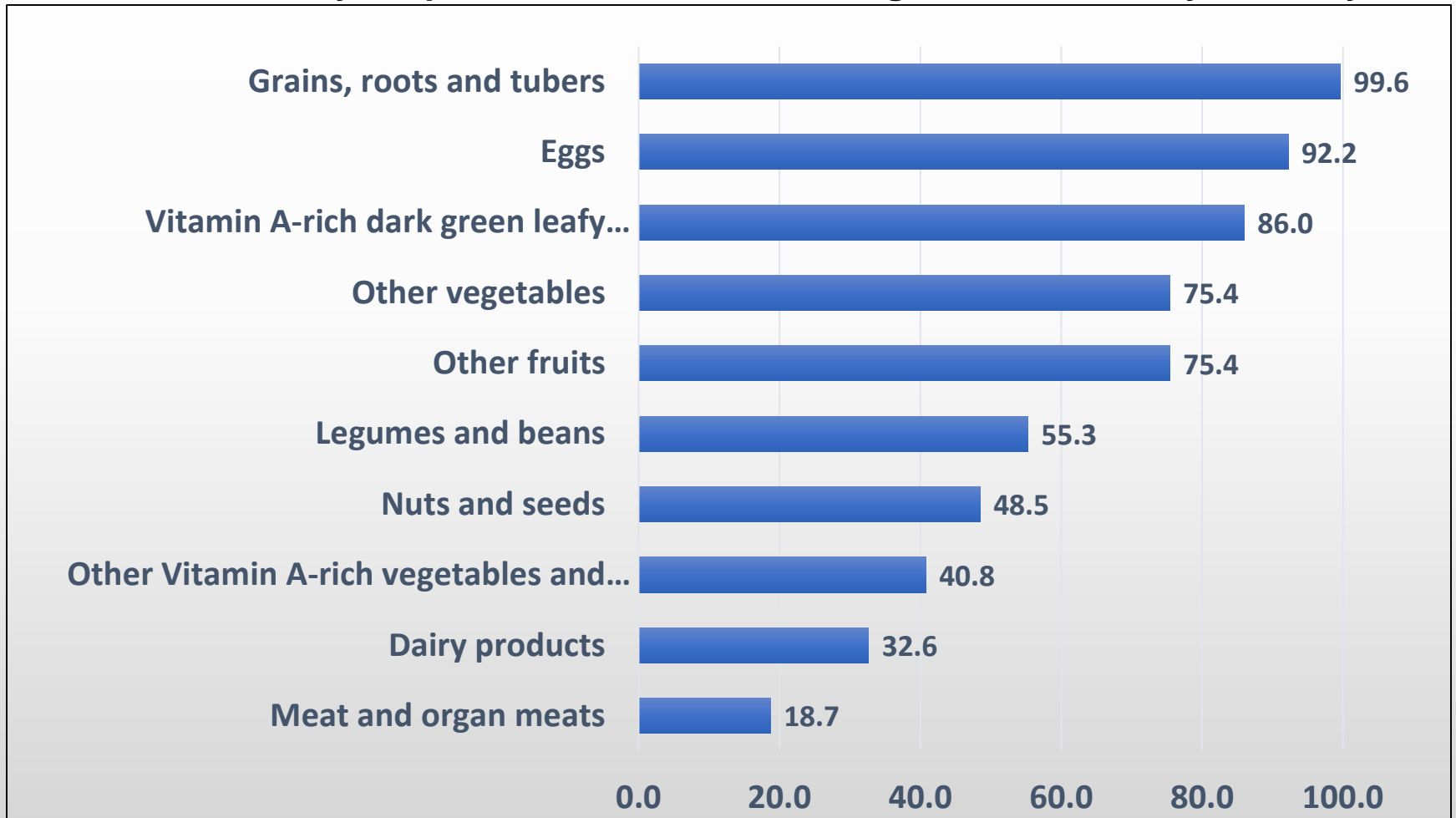


## Proportion of Women Achieving Minimum Dietary Diversity by Region



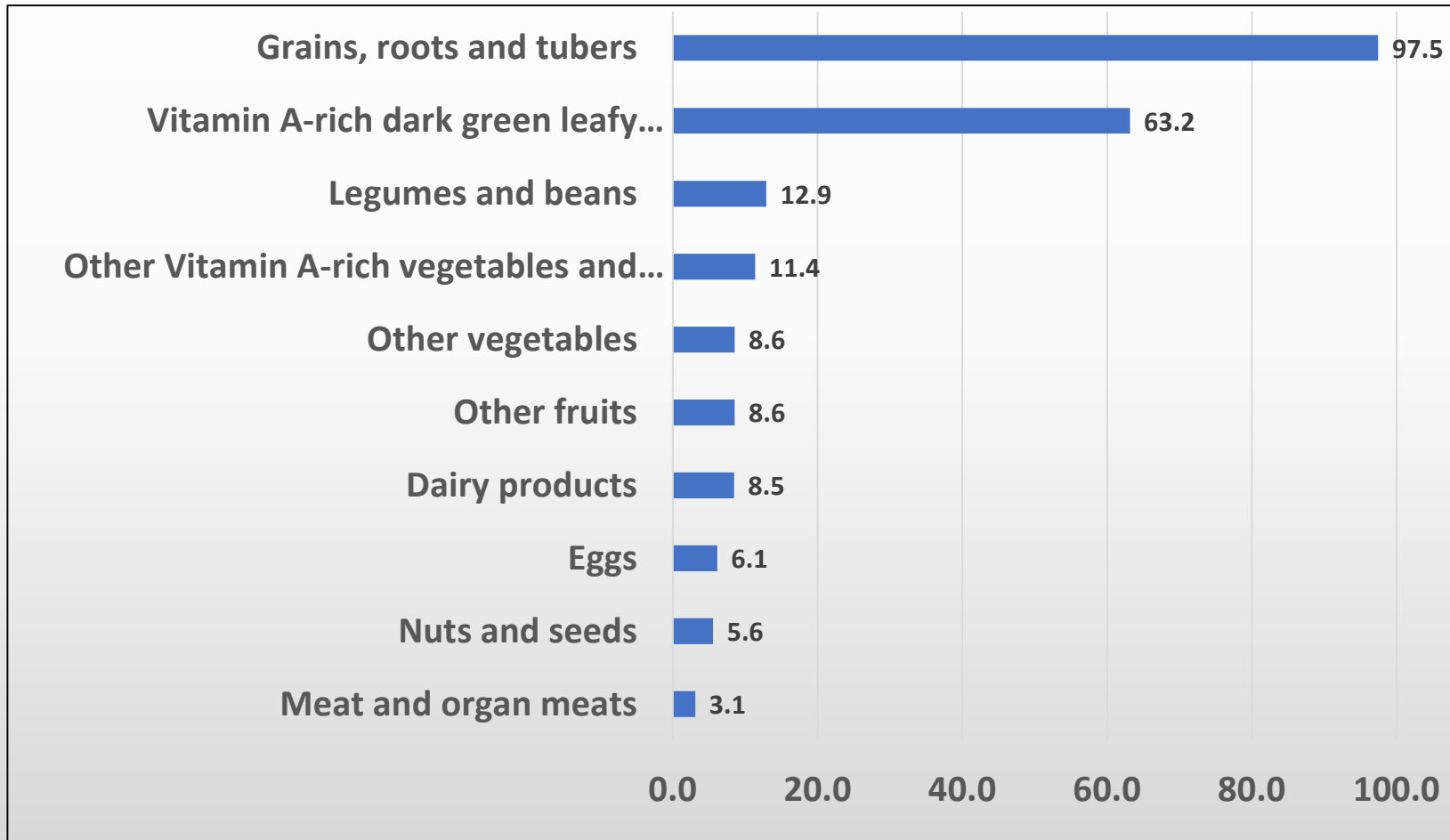


### Foods eaten by Proportion of Women Achieving Minimum Dietary Diversity





## Foods eaten by Proportion of Women Not Achieving Minimum Dietary Diversity





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## Women's Dietary Diversity Score (WDDS)

- **The WDDS indicator is based on TEN (Nine) food groups and measures the extent to which a woman consumes foods from these food groups.**
- **WDDS, hence, ranges from 0 to 10.**
- **A minimum dietary diversity is achieved when a woman consumes at least FIVE food groups out of the 10.**



## DDS (All women 15-49 years old) out of 10 food groups by age

Characteristic	Mean	n
All women 15-49	3.7	3292
Age		
15-19	3.7	517
20-24	3.9	472
25-29	3.7	583
30-34	3.7	556
35-39	3.6	519
40-44	3.6	391
45-49	3.4	254
Brong Ahafo	3.7	290
Northern	3.8	2265
Upper East	3.2	412
Upper West	3.6	325



## Women's dietary diversity score by household characteristics

Level of educational attainment		
	Mean	n
No education	3.5	1987
Primary	3.7	549
Secondary or more	4.1	756
Gendered household type		
Male and female adults	3.7	3089
Female adult(s) only	3.5	178
Male adult(s) only	2.9	16
Household size		
Small (1-5 members)	3.7	970
Medium (6-10 members)	3.6	1642
Large (11+ members)	3.9	680
Household hunger		
Little to no hunger	3.9	2290
Moderate or severe hunger	3.2	914



## Consumption of nutrient-rich foods

- **The interim assessment measured the degree to which respondents in the ZOI are consuming nutrient-rich commodities (NRVCC).**
- **There are three criteria for a food commodity to be considered an NRVCC**



## Percent of Women consuming soybean by age group

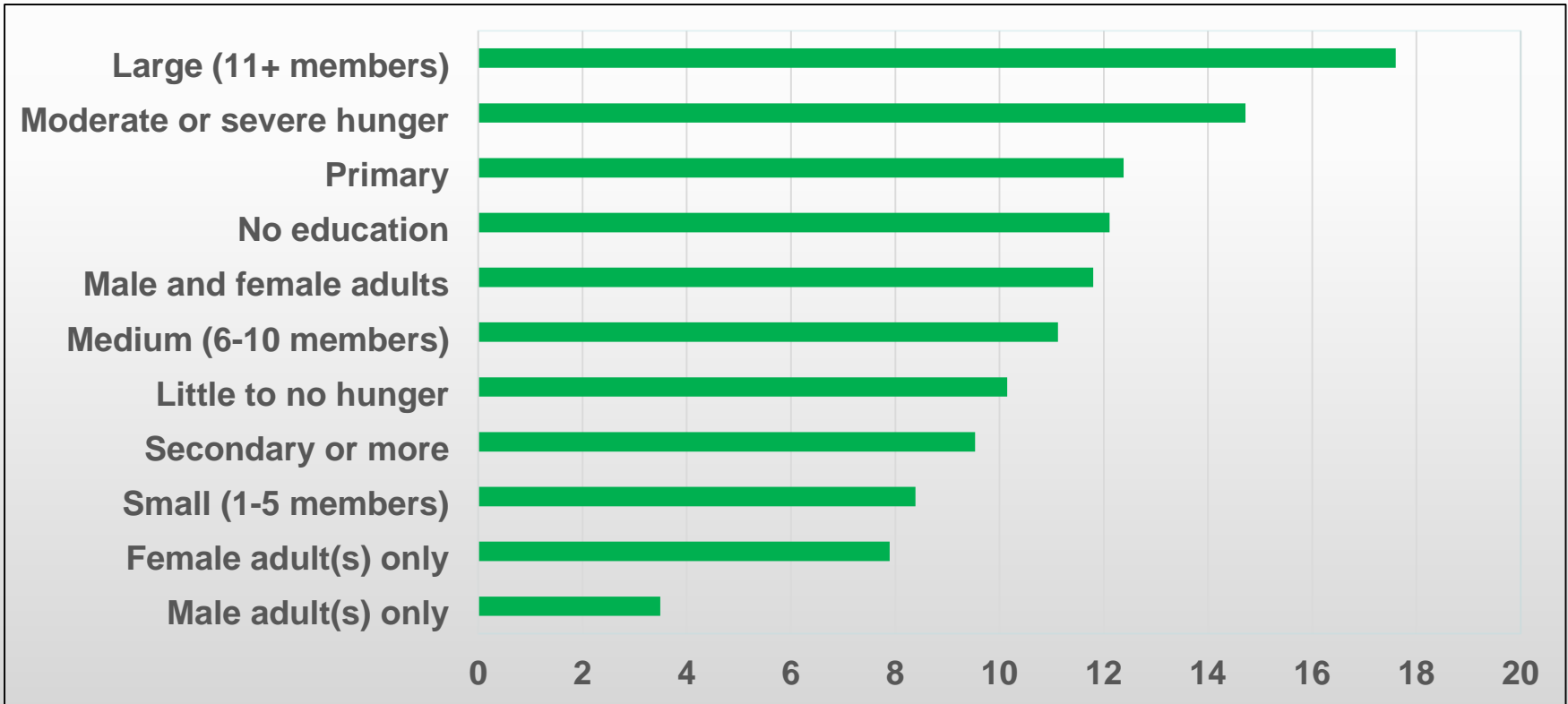
Characteristic	Soya beans	n
All Women 15-49	<b>11.5</b>	<b>3328</b>
Age		
15-19	<b>12.94</b>	<b>522</b>
20-24	<b>8.03</b>	<b>478</b>
25-29	<b>11.33</b>	<b>585</b>
30-34	<b>11.71</b>	<b>569</b>
35-39	<b>12.64</b>	<b>521</b>
40-44	<b>13.42</b>	<b>396</b>
45-49	<b>9.96</b>	<b>257</b>





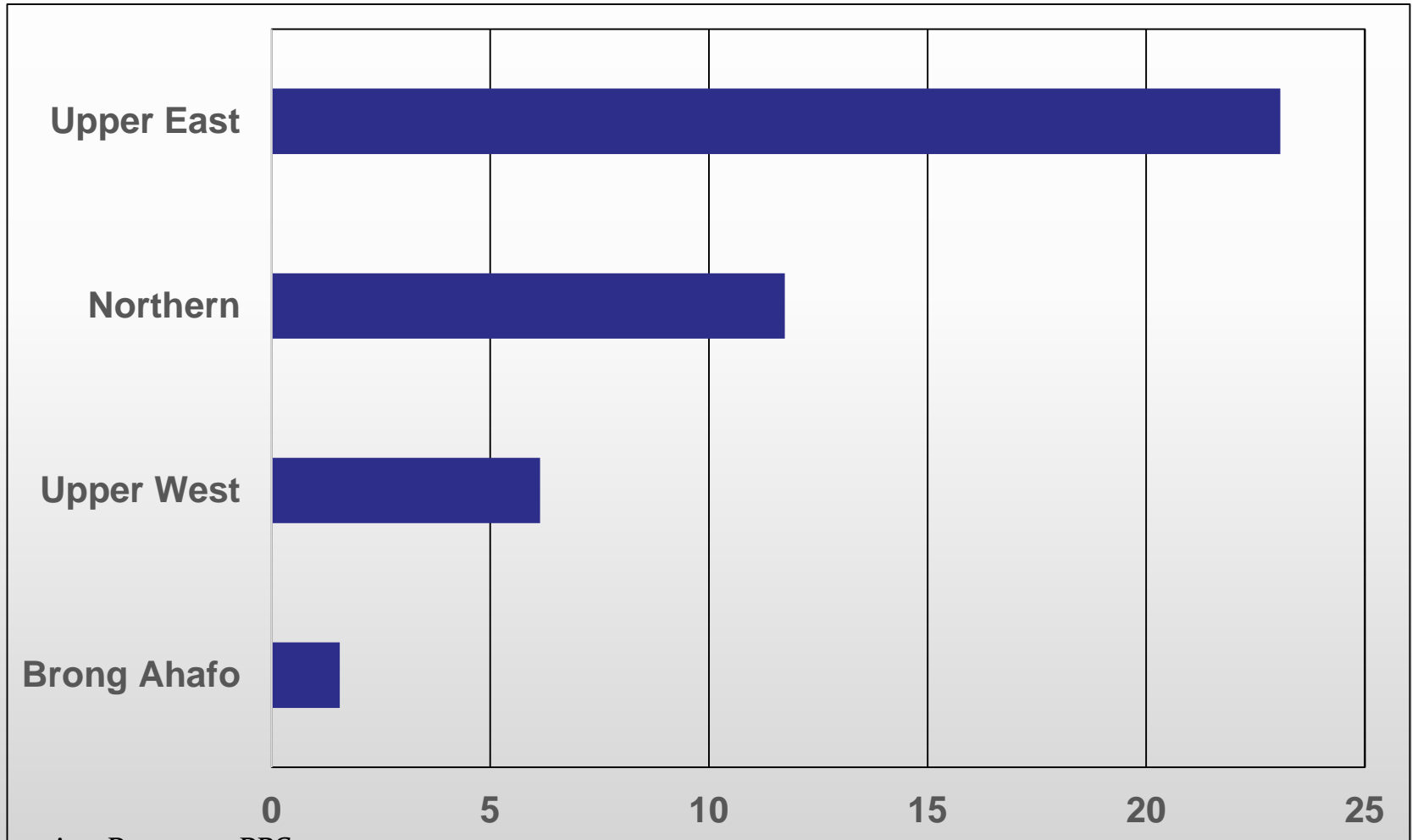
## Proportion of women consuming soybean by characteristics

Percent of omen consuming soybean





## Proportion of women consuming SB by Region





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**Thank you very much**