

Snacking among Bhutanese school children and adolescents

Preliminary findings from mixed method formative research

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Research Rationale: To conduct formative research among school children and adolescents, and their influencers to inform the development of an SBC Strategy

	Specific Research Questions
Food Consumption Behaviors	What foods are school children and adolescents consuming? Where? When? How?
Behavioral Determinants	Why? What factors drive or inhibits food consumption behavior? What are their food preferences?

Research Methodologies

Region	1.Free listing	2. Pile Sorting	3. Observations	4. Photo Journals	5. IDIs	6.a FGD - Children	6.b FGD - Mom/ Caregivers
East	48	28	3	4	11	7	2
South	34	19	3	3	7	6	2
West	29	25	3	3	8	5	2
Thimphu	22	12	1	1	4	3	
Total	133	84	10	11	30	21	6

- 25 schools purposively selected
- Across 3 major ecological/ socio-cultural zones
- Including rural and urban schools, boarding & day schools
- Random selection of children at each school, mix of females, males and different classes from Class 1-12
- With students, mothers and caregivers, school staff and retailers near schools



Free Listing Results: Concept of 'meals' vs 'snacks'

- “Name all the different kinds of X you can think of” = Saliency score
- Nationally, “meals” and “snacks” are distinct in the minds of children & adolescents

MEALS

Item	Frequency (%)	Average Rank	Saliency
Potato	68.4	3.76	0.544
Rice	54.4	3.05	0.442
Cabbage	40.5	7.13	0.24
Eggs	39.2	6	0.228
Beans	36.7	7.34	0.205
Dhal	32.9	6.69	0.194
Chilis	31.6	6.88	0.187
Broccoli	32.9	6.88	0.179
Saag	31.6	8.12	0.161
Chicken	27.8	7.32	0.142
Fried Rice	22.8	7.22	0.137
Mango	21.5	6.88	0.13

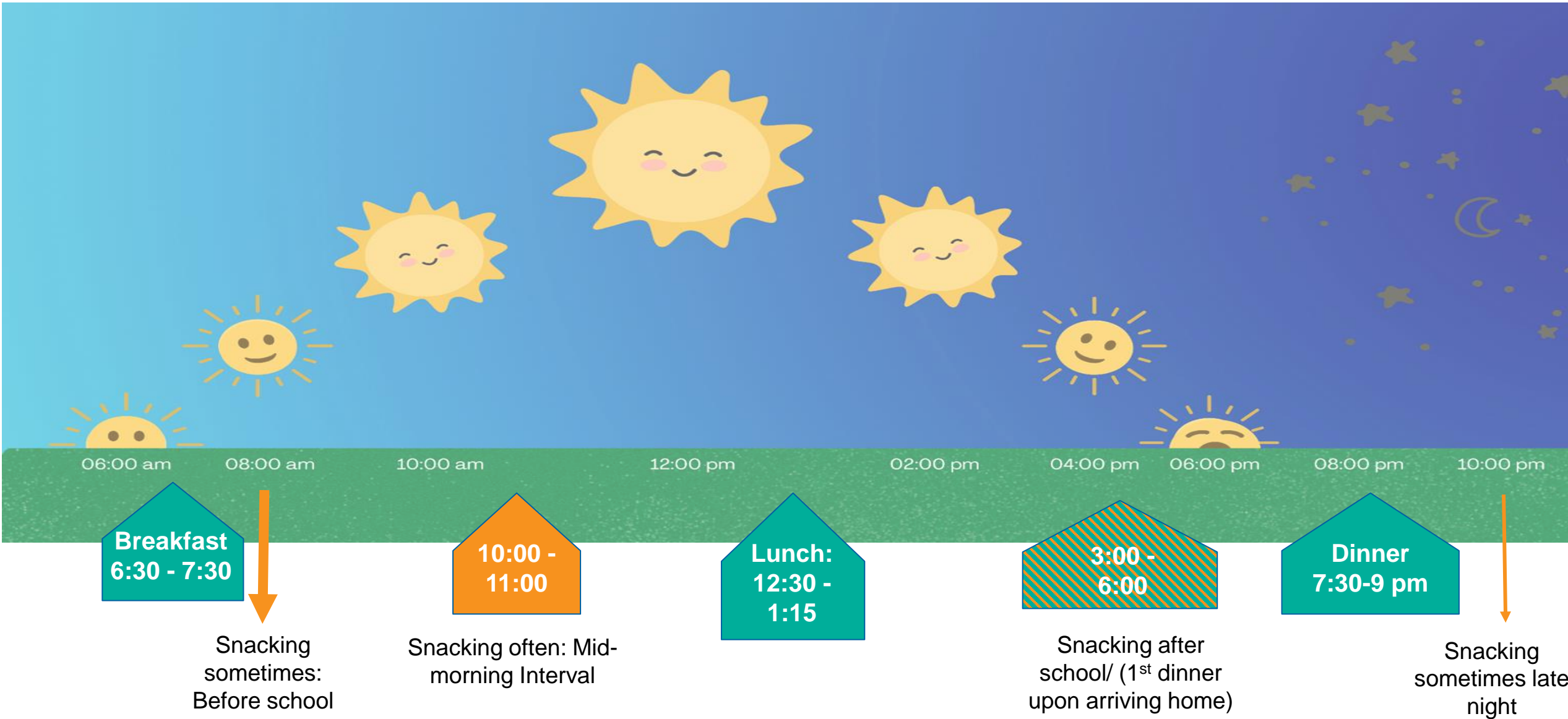
N = 79
172 distinct items

SNACKS

Item	Frequency (%)	Average Rank	Saliency
Instant Noodles	66	4.03	0.47
Chips	50	4.04	0.331
Momo's	38	4.05	0.268
Biscuits	24	2.08	0.203
Ice Cream	32	4.81	0.187
Chocolate	34	5.94	0.169
Juice	34	5.41	0.168
Pizza	28	5.29	0.154
Fizzy Drinks	30	5.4	0.145
Cake	30	5.73	0.144

N = 50 (Classes 5-8 & 9-12)
116 distinct items

FGD Timeline: Meals & Snacking Times



“Junk” is creeping into meals

- Evidence from PJ, FGDs & OBS reveal that unhealthy, nutrient-poor snacks are creeping into meals at home and school



Pile Sorting Results: Tasty - Not Tasty

- N = 84
- Most widely liked foods were FRUITS (>90% of kids classified them as "tasty")
- Ranked higher than "junk" like chocolate, chips, Maggie, biscuits and cake



VS



Foods	% Tasty	% Not Tasty
Mango	96%	4%
Watermelon	94%	6%
Banana	92%	8%
Orange	92%	8%
Apple	90%	10%
Momo's	88%	12%
Fried Rice	86%	14%
Peach	86%	14%
Chocolate	84%	16%
Dal	82%	18%
Chips	80%	20%
Maggie	80%	20%
Biscuits	78%	22%
Cake	78%	22%
Milk	78%	22%
Pineapple	78%	22%
Rice	78%	22%
Beans	74%	26%
Pizza	74%	26%
Broccoli	72%	28%
Carrot	70%	30%
Potato	70%	30%
Curd	68%	32%
Egg	66%	34%
Chicken	64%	36%
Spinach	64%	36%
Cabbage	62%	38%
Meat	60%	40%
Chili	56%	44%
Pumpkin	34%	66%
Tomato	32%	68%

Some drivers of snacking trends

FOOD ENVIRONMENT

Availability/Marketing: ubiquity of unhealthy food designed for kids



Affordability/Convenience: Retailers tailor offerings to tastes & budgets of children



Policy enforcement: School "junk free zone" policies exist, but...



CULTURE & PSYCHOLOGY

Changing family eating habits: Solitary eating in front of screens



Social bonding: Snacking with friends



Policy Implications

- Bhutan has a rapidly closing window of opportunity to stem the avalanche of “junk” foods flooding the country and becoming entrenched in Bhutanese food culture.
- **School meals** are largely nutritious and available to about 60% of students (all boarders and rural day students)
- But **school canteens** (found in urban day schools) serve a lot of unhealthy “junk” food and should be better regulated.
- Other policies such as **taxation, warning labels, restrictions on marketing** of imported ultra-processed foods high in sugar, salt and fat should be considered.
- Making healthy, tasty, convenient and affordable alternatives to “junk” should be prioritized by the **agriculture sector** & food processors.
- **SBC** must go beyond nutrition education and try to tackle the social and psychological drivers of unhealthy diets.