Supplementary Materials

Article

Changing Dietary Habits: The Impact of Urbanization and Rising Socio-Economic Status in Families from Burkina Faso in Sub-Saharan Africa

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Figure S1: Proportion of individuals in the three cohorts, adults (upper panel) and children (bottom panel), who consume an adequate quantity of fiber based on the recommended standards.

Table S1: Food portion sizes estimated for the main food items. An average standard composition of tô sauce was included in our calculation. For bouillie, an average composition was calculated (for 100 g of dry product: millet 60g, soy 20g, peanuts 10g, sugar 9g).

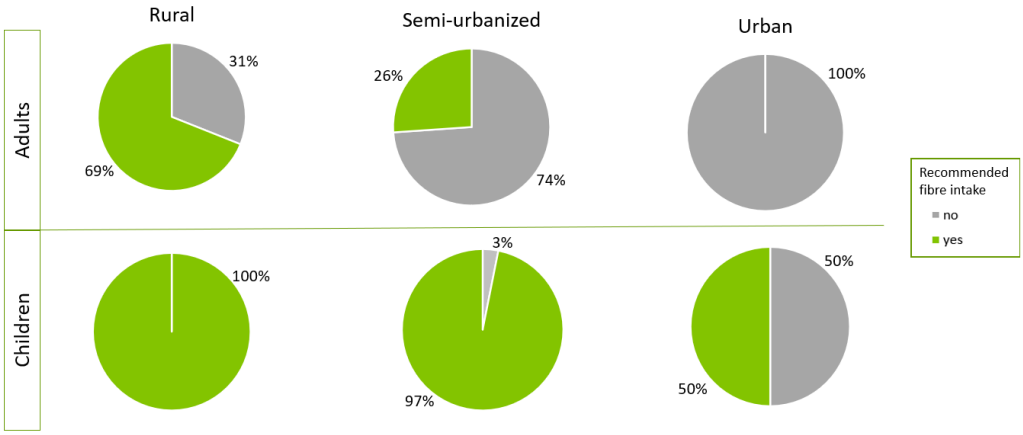
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Table S5: Comparison of the weekly frequency of meals not prepared at home among the three cohorts, in particular food consumed at restaurant and food from a local market.

Table S6: Adult BMI divided by gender. Median and IQR are reported.



Supplementary Figure S1. Proportion of individuals in the three cohorts, adults (upper panel) and children (bottom panel), who consume an adequate quantity of fiber based on the recommended standards.

Supplementary Tables

Supplementary Table S1. Food portion sizes estimated for the main food items. An average standard composition of tô sauce was included in our calculation. For bouillie, an average composition was calculated (for 100 g of dry product: millet 60g, soy 20g, peanuts 10g, sugar 9g).

Food portion size	Children **2-6 y**	Children **7-14 y**	Adults **14+ y**
Tô *- Small	20 g	60g	100 g
Tô - Medium	40 g	80 g	130 g
Tô - Large	50 g	100 g	150 g
Tô sauce - Small	10g	30g	50 g
Tô sauce - Medium	20 g	40 g	60 g
Tô sauce - Large	30 g	50g	70 g
Meat	60 g	100 g	150 g
Fish	60 g	100 g	150 g
Eggs	60 g	100 g	100 g
Legumes (dried)	30g	40 g	60 g
Cheese (fresh)	60 g	100 g	100 g
Milk	200 ml	200 ml	200 ml
Yogurt	125 g	125 g	125 g
Oil	20 g	30 g	40 g
Soft drinks	330 ml	330 ml	330 ml
Sugar cube	5 g	5 g	5 g

* Tô quantities also apply to other carbohydrate sources (rice, bouille, etc); y=years old

Supplementary Table S2. : Estimation of macronutrients intake in adults of the three cohorts. Data are reported as median and interquartile range (IQR).

	Rural n. households (%)	**Semi-urbanized** n. households (%)	**Urban** n. households (%)
Family composition			
Polygamous families	10/10 (100)	6/10 (60)	0/10 (0)
Livestock (hens, pigs, goats, donkeys)	10/10 (100)	10/10 (100)	0/10 (0)
Water source			
Wells	10/10 (100)	10/10 (100)	0/10 (0)
Private tap	0/10 (0)	2/10 (20)	10/10 (100)
Cooking energy			
Coal, wood, millet stalks	10/10 (100)	10/10 (100)	3/10 (30)
Gas	0/10 (0)	0/10 (0)	8/10 (80)
Light source			
Wood and straw	4/10 (40)	0/10 (0)	0/10 (0)
Battery flashlight	9/10 (90)	7/10 (70)	0/10 (0)
Electricity	0/10 (0)	2/10 (20)	10/10 (100)

Some families have access to more than one water/energy/light source

Supplementary Table S3. Estimation of macronutrients intake in adults of the three cohorts. Data are reported as median and interquartile range (IQR).

ADULTS	Rural	Semi-urbanized	Urban
Kcal tot	1986 (448)	1711 (556)	1703 (460)
Proteins (% of caloric intake)	12.1 (1.8)	12.6 (4.8)	16.1 (2.3)
Proteins (g/kg)	1.11 (0.33)	1.00 (0.5)	1.15 (0.6)
Animal proteins (% of total proteins)	17.70 (13.4)	25.60 (30.3)	45.45 (9.1)
Vegetable proteins (% of total proteins)	82.30 (13.4)	74.40 (30.3)	54.55 (9.1)
Fats (% of caloric intake)	27.6 (6.1)	30.4 (4.4)	30.0 (6.3)
Carbohydrates (% of caloric intake)	58.4 (5.1)	57.2 (4.8)	53.7 (7.5)
Sugars (% of caloric intake)	2.4 (3.3)	4.2 (5.0)	6.2 (3.9)
Fibers (g)	28.2 (6.7)	21.7 (5.8)	16.3 (6.4)
Fibers (g/1000kcal)	14.3 (0.9)	13.4 (4.0)	9.3 (1.8)

Supplementary Table S4. Estimation of macronutrients intake in children of the three cohorts. Data are reported as median and interquartile range (IQR). For fiber, absolute amount in grams is not reported due to age and weight differences of children.

CHILDREN	Rural	Semi-urbanized	Urban
Kcal tot	1208 (519)	1245 (482)	1320 (564)
Proteins (% of caloric intake)	12.1 (1.4)	12.3 (3.6)	14.0 (3.3)
Proteins (g/kg)	0.4 (0.1)	0.3 (0.2)	0.4 (0.1)
Animal proteins (% of total proteins)	6.1 (15.5)	9.1 (26.4)	42.7 (17.4)
Vegetable proteins (% of total proteins)	93.9 (15.5)	90.9 (26.3)	57.3 (17.4)
Fats (% of caloric intake)	30.6 (4.3)	30.6 (4.7)	34.3 (6.8)
Carbohydrates (% of caloric intake)	57.4 (4.5)	56.3 (4.3)	51.6 (9.7)
Sugars (% of caloric intake)	3.4 (3.3)	4.2 (4.3)	13.4 (10.3)
Fibers (g/1000kcal)	13.5 (1.7)	13.8 (2.3)	8.4 (3.3)

Supplementary Table S5. Comparison of the weekly frequency of meals not prepared at home among the three cohorts, in particular food consumed at restaurants and food from a local market.

	Meals at restaurant			**Meals at local market**		
n./week	**R**	**SU**	**U**	**R**	**SU**	**U**
0-1	100%	98%	78%	93%	100%	98%
2-3	0%	0%	4%	4%	0%	0%
4-6	0%	2%	10%	4%	0%	2%
7+	0%	0%	8%	0%	0%	0%

Supplementary Table S6. Adult BMI divided by gender. Median and IQR are reported.

Rural		Semi-Urbanized		Urban	
Males	Females	Males	Females	Males	Females
19.5 (1.7)	19.6 (2.5)	21.6 (3.4)	21.2 (6.2)	22.8 (6.4)	24.6 (4.8)