## (Continuation Sheet 1)

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Dissertation Title	Lifestyle and Obesity in Urban Uganda:		
	Body Size Perceptions, Food Consumption and Physical Activity of Women		
	in Mukono		
	(ウガンダ都市部におけるライフスタイルと肥満の問題		
	―ムコノの女性の体形に対する認識と食事、身体活動―)		

## (Summary of Dissertation)

In 2016, 17.1% of women living in Kampala, the capital city of Uganda, and the surrounding urban areas were obese. This dissertation aimed to clarify the body size self-perceptions, food consumption, and physical activity characteristics of women living in urban Uganda.

Chapter 1 provides a description of the research area. The study was conducted in Mukono, Central Division, located 21 km east of Kampala. Chapter 2 provides a description of the research methods. The data on body size self-perception were collected through interviews with 540 women in August—September 2016 and in February—March 2017. The data on food consumption were collected via 7-day weighed food record diaries of 14 women in August—September 2018. The data on physical activity were collected using 7-day activity diaries of the same women. In addition, the daily lives of three pairs of obese mothers—normal weight daughters living together were recorded in February—March, and in June—July 2019. The weight and height of the women were also measured to determine their BMI (Body Mass Index).

Chapter 3 presents the findings regarding the body size self-perceptions of the 540 women. One hundred and nine (20.2%) were obese. However, only 51 (46.8%) of the obese women perceived their body size as too fat, and only 36 (33.0%) desired to reduce their body size; mostly those who perceived their body size as too fat—30 women (27.5%). A big body size was considered desirable to avoid disrespect; to look good—particularly in traditional clothes called *gomesi*; and to look healthy, and wealthy. In addition, a small body size was associated with stress, poverty, and sickness, particularly HIV infection. A reduction in body size was desired only when one felt heavy and had trouble in getting around, showed signs of non-communicable diseases, or had trouble in finding fashionable clothes. Only 13.3% (72 women) had ever made efforts to change their body size.

Chapter 4 presents the findings on food consumption. The number of eating occasions in a day was irregular and varied from one to six. The timing of the eating occasions was also irregular. The number of staples and sauces at meals ranged between one and three. Most

energy intake was from dried red beans stew (16.5%), green cooking bananas "matooke" (15.2%). The energy intake on different days was irregular.

Chapter 5 presents the findings on physical activity. The author allocated Metabolic Equivalent of Task (MET) values to the women's daily activities. The MET value of an activity is a number that represents how many calories are burned per hour that an individual spends on the activity according to their body weight in kilograms. The author calculated the Physical Activity Scores (PAS) of each activity by multiplying its MET value with the specific activity time in hours. The daily PAS were regular. In addition, women spent an average of 4.5, and 6.3 hours per day in sedentary, and light-intensity.

In Chapter 6, the author describes the daily lives of three pairs of obese mothers—normal weight daughters. When at home, daughters tended to do more work and eat less than the mothers. However, when the daughters worked outside the home, they tended to be less active. In addition, they tended to eat more when they acquired food from restaurants, usually eating more than three types of staples and two types of sauces at one meal. This indicates that the women tend to eat more when more food is available, which increases the likelihood of weight gain. In addition, women tended to go to bed 20-30 minutes after eating the last meal late at night.

Chapter 7 discusses the findings according to three main points. The first point is the existence of a positive self-perception of body size corresponding to an obese BMI. The second point is that the women had irregular daily energy intake. The third point is that the physical activities of women were regular. In addition, 11 of the 14 women had more daily energy intake than the 2,021 kcal/day requirement for Ugandan women set by the FAO in 2010.

In conclusion, the irregular energy intake of women coupled with regular sedentary activities, translates into positive average daily values of energy balance. Furthermore, the uncertainty of food availability renders voluntary food restriction difficult, predisposing women to obesity, especially since a large body size is viewed in a positive light, while reduction in size is associated with poverty and HIV infection.