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Herd, playing, eating, and learning: Samburu pastoralist kids daily activities

In contemporary northern Kenyan pastoralist societies, kids make substantial economic contributions to their family's household and settlements. Qualitatively, pastoralist kids are known to perform a variety of household economic activities such as fetching firewood, getting water, caring for younger siblings, helping to prepare meals, and herding small livestock (i.e., goats and sheep). Quantitatively, little is known regarding duration, physical exertion levels, and energetic requirements of such daily tasks performed by Samburu pastoralist kids and the division of labor between genders. In order to establish a better quantitative baseline of the overall physical, energetic, and caloric demands on boys and girls, our study collected and analyzed physical activities of Samburu kids in conjunction with daily food consumption in a community where traditional diet has been replaced with low quality processed food such as maize meal. Samburu kids daily activities and behaviors were recorded using a focal-follow methodology over 24- and 48-hour periods, sampling 9 boys and 7 girls. Physical activity levels (PALs) were examined by using non-invasive accelerometers and time allocation observations. Food consumption was monitored through direct observations and measurements by volume for each food type with additional 24-hour food recalls. An association between high heart rates and activities that involve playing and herding was identified. While playing and herding were found to be the most physically demanding activities, the frequency of these activities varied across the individuals observed. The implications of these observations are discussed within the context of energy balance during childhood in an energy-poor environment.

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