Introduction: It is well established that household food security is a complex phenomenon with numerous indicators and outcomes, the measurement of which is yet to be adequately captured by a single measure. We propose the adoption of the methodology of multidimensional poverty measurement in calculating an index of multidimensional food insecurity. This framework has gained increasing popularity, particularly with the introduction of the Multidimensional Poverty Index (MPI). The assertion is that, like poverty, food insecurity is a multidimensional phenomenon, requiring the inclusion of multiple aspects of deprivation in its measurement.

Methods: The National Income Dynamics Study (NIDS) from South Africa is used to construct a Multidimensional Food Insecurity Index (MFII), based on the methodology of the MPI. The six food insecurity indicators included are child stunting and wasting, low BMI, dietary diversity, food expenditure, and self-reported hunger and food consumption adequacy. The MFII is then used to develop a detailed profile of individual food insecurity in South Africa.

Results: Nationally, close to half of the population are considered multidimensionally food insecure, with the greatest contributors to food insecurity being dietary diversity and subjective food consumption adequacy. The Western Cape and Gauteng enjoy the lowest levels of multidimensional food insecurity, while Limpopo and KwaZulu-Natal suffer the highest levels.

Conclusion: How food security is measured can have an important impact on how policies and interventions are developed and implemented. As such, measurement methodologies can be very practically relevant to research.