

## EVOLUTION

## Hominins had flexible diets

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Humans have a high capacity for adaptation, which may partially lie in the flexible dietary ranges of our early hominin ancestors. However, our knowledge of early hominin diets is mostly limited to the Eastern Rift Valley in Kenya.

A paper by Tina Lüdecke, of the Senckenberg Biodiversity and climate research centre, and colleagues expands the record to the region around Lake Malawi, which lies at the southern end of the ‘African hominin corridor’. The study uses a clever combination of isotopic data from tooth enamel to reconstruct the diets of *Homo rudolfensis* and *Paranthropus boisei* individuals in the Karonga Basin around 2.4 million years ago and isotopic analysis from contemporary soils and herbivore remains to reconstruct climate and vegetation. The ecosystem in the Karonga Basin was cooler and wetter and had more woodland compared with the drier, more open savannah of the Eastern Rift. Consequently, *H. rudolfensis* and *P. boisei* in Malawi had mixed diets—consuming a majority of forest resources over grassland resources. Contemporary and later hominins in the Eastern Rift in contrast consumed larger and increasing proportions of grassland resources.

These findings demonstrate that dietary plasticity allowed early *Homo* and its relatives to adapt to diverse and changing environments.

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