

Lay Summary

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Investigating the genetic basis of nutritional optic and sensory neuropathy in black African and Caribbean communities in the UK

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It has been recognized for more than 50 years that black African and Caribbean individuals are at risk of developing loss of feeling in the arms and legs and loss of vision and hearing following periods of fasting or when eating a diet with no meat or dairy based foods. The loss of sensation, vision and hearing is often permanent if left untreated.

The overall purpose of this study is to identify the genetic factors that make individuals with black African and Caribbean ancestry more likely to develop visual, hearing and sensory loss after periods of weight loss or following a vegan or vegetarian diet. We will examine the muscle biopsies of individuals with the disease by looking at their RNA (similar to DNA) to identify what metabolic pathways are activated in the disease.