INTRODUCTION

Linear growth usually occurs without any obstacles, but can be impaired by numerous genetic and environmental factors. In most cases, when the restricting factor is resolved, spontaneous catch-up (CU) growth occurs. However, its efficiency is sometimes inadequate and growth deficits remain permanent.

The therapeutic toolbox for short stature is currently sometimes inadequate and growth deficits remain permanent. Environmental factors. In most cases, when the restricting factor is resolved, spontaneous catch-up (CU) growth occurs.

AIM

This study sought to investigate the role of Sirt1 in modulating the response of the epiphyseal growth plate (EGP) to nutritional manipulation.

CONCLUSIONS

This study shows that Collagen type II-specific knockout of Sirt1 led to:

- Increased proliferative zone and proliferative cells
- Affected EGP height & organization
- Reduced bone mineralization.
- Affects bone structure in both the steady state and in response to nutritional manipulation.

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