

Jump training and collagen supplementation for bone health

Gepubliceerd: 05-10-2021 Laatste bijgewerkt: 18-08-2022

Long-term (18 weeks) jump training combined with collagen supplementation will increase BMD in elite cyclists.

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON25714

Bron

Nationaal Trial Register

Verkorte titel

CollaBone

Aandoening

Osteoporosis / low bone mineral density

Ondersteuning

Primaire sponsor: HAN University of Applied Sciences

Overige ondersteuning: N/A

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Lumbar spine BMD

Toelichting onderzoek

Achtergrond van het onderzoek

Bone health is a critical factor for athletes as bones provide the levers for muscles to move the joints, and strong bones decrease the risk of bone fractures. Particularly cyclist can benefit from exercise and nutrition interventions to stimulate bone health, as this population is characterized by an impaired bone mineral density (BMD). Jumping exercise has been identified as a feasible and effective exercise intervention to increase BMD. Furthermore, preliminary evidence suggests that collagen supplementation may also stimulate bone collagen synthesis. It is currently unknown whether combined collagen supplementation and jump training can increase BMD in elite cyclists. The main objective of the current project is to assess the effect of long-term jump training combined with collagen supplementation on BMD in elite cyclists.

Doel van het onderzoek

Long-term (18 weeks) jump training combined with collagen supplementation will increase BMD in elite cyclists.

Onderzoeksopzet

PRE (week -1), POST (week 19)

Onderzoeksproduct en/of interventie

Jump training and collagen supplementation

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Elite cyclists status
- Age ≥ 16 and ≤ 35 years.
- Willing to give blood samples
- Willing to comply with study procedures

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Blood donation during the study period
- Severe allergy to nuts or intolerance to gluten, as supplements are being produced in factory that may have used nuts or gluten previously
- Use of antibiotics in the past month
- Medical condition that can interfere with the study outcome (i.e. cardiovascular disease, pulmonary disease, rheumatoid arthritis, orthopaedic disorders, renal disease, liver disease, diabetes mellitus, inflammatory disease, cognitive impairment, and thyroid or parathyroid disease)
- Use of medications known to interfere with selected outcome measures (i.e. systemic corticosteroids)
- (Chronic) injuries of the locomotor system that can interfere with the intervention.
- Current participation in another biomedical research study.

Onderzoekopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland
Status: Werving gestopt
(Verwachte) startdatum: 11-10-2021
Aantal proefpersonen: 34
Type: Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

Ethische beoordeling

Positief advies
Datum: 05-10-2021
Soort: Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL9770
Ander register	METC Zuyderland : METCZ20210113

Resultaten