

## **Press release**

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## **Basic information**

Name: Peter Sieljacks Email: petersieljacks@gmail.com Phone: 30271139

Department of: Public Health

Main supervisor: Kristian Vissing

Title of dissertation: Effect of Blood Flow Restricted Resistance Exercise on Muscle Accretion and Function in Healthy and Clinical Settings

Date for defence: 5<sup>th</sup> of March at (time of day): 14.00 Place: Auditoriet, Sektion for Idræt, Dalgas Avenue 4, 8000 Aarhus

Press release (Danish)

Effekt af okklusionbaseret styrketræning på muskelvækst og funktion

Lav-intens styrketræning med samtidig nedsat blodforsyning til den arbejdende muskulatur (okklusionsbaseret lav-intens styrketræning, OLIS), har vist sig at være i stand til at producere muskelvækst og øge muskelstyrke i en tilsvarende grad som tung traditionel tung styrketræning.

Et nyt ph.d.-projekt fra Aarhus Universitet, Health har gennem studier på raske og patienter undersøgt potentialet af OLIS som træningsredskab til at fremme muskeltilpasninger og bevare en sund funktionel muskelmasse i kliniske populationer. Resultaterne understøtter OLIS som rehabiliteringsstrategi for bevarelse af en funktionel muskelmasse i kliniske populationer. Projektet er gennemført af Peter Sieljacks, der forsvarer det d. 5/3 2010 kl 14.00

Forsvaret af ph.d.-projektet er offentligt og finder sted den 5/3 2020 kl. 14.00 i auditoriet på Sektion for Idræt, Aarhus Universitet, Dalgas Avenue 4, 8000 Aarhus C. Titlen på projektet er "Effect of Blood Flow Restricted Resistance Exercise on Muscle Accretion and Function in Healthy and Clinical Settings". Yderligere oplysninger: Ph.d.-studerende Peter Sieljacks, e-mail: ps@ph.au.dk, tlf. 30271139.

Bedømmelsesudvalg: Rikke Katrine Jentoft Olsen, Associate Professor, PhD Department of Clinical Medicine - Research Unit for Molecular Medicine Aarhus University Aarhus, Denmark (Chairman of the committee)

Marni Boppart, Associate Professor, PhD Department of Kinesiology and Community Health Beckman Institute for Advanced Science and Technology University of Illinois Urbana-Champaign Illinois, USA

Ryan Godsk Larsen, Associate Professor, PhD Department of Health Science and Technology The Faculty of Medicine Aalborg University Aalborg, Denmark

Press release (English)



## Effect of Blood Flow Restricted Resistance Exercise on Muscle Size and Function

Low load resistance exercise with simultaneous moderate blood flow restriction (blood flow restricted resistance exercise, BFRRE), has proven capable of producing muscle hypertrophy and strength gains to an extent comparable with that obtained with high-load resistance exercise (HLRE).

A new PhD project from Aarhus University has investigated how BFRRE may be used as a feasible low-load training strategy to promote muscle adaptions to preserve a healthy functional muscle mass in clinical settings. The results indicate that BFFRE may provide a feasible training modality to aid in the preservation of a healthy functional muscle mass during aging and chronic disease. The project was carried out by Peter Sieljacks, who is defending his dissertation on 5th of March 2020.

The defence is public and takes place on 5/3 2020 kl. 14.00 in the auditorium at Section for Sports Science, Aarhus Universitet, Dalgas Avenue 4, 8000 Aarhus C. The title of the project is "Effect of Blood Flow Restricted Resistance Exercise on Muscle Accretion and Function in Healthy and Clinical Settings". For more information, please contact PhD student Peter Sieljacks, email: ps@ph.au.dk, Phone +45 30271139

Assessment committee: Rikke Katrine Jentoft Olsen, Associate Professor, PhD Department of Clinical Medicine - Research Unit for Molecular Medicine Aarhus University Aarhus, Denmark (Chairman of the committee)

Marni Boppart, Associate Professor, PhD Department of Kinesiology and Community Health Beckman Institute for Advanced Science and Technology University of Illinois Urbana-Champaign Illinois, USA

Ryan Godsk Larsen, Associate Professor, PhD Department of Health Science and Technology The Faculty of Medicine Aalborg University Aalborg, Denmark

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