Jaw muscle size and bite force magnitude in relation to craniofacial morphology
Raadsheer, M.C.

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: http://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
CHAPTER 1  GENERAL INTRODUCTION

1.1 Craniofacial growth regulation 9
1.2 Jaw muscle biomechanics 9
   1.2.1 Muscle force 9
   1.2.2 Bite force 10
1.3 Jaw muscle size, bite force magnitude and craniofacial morphology 11
   1.3.1 EMG activity and craniofacial morphology 11
   1.3.2 Bite force magnitude and craniofacial morphology 12
   1.3.3 Jaw muscle size and craniofacial morphology 12
   1.3.4 Jaw muscle size and strength reflecting general and local influences 13
1.4 Objectives of the study 13
1.5 Contents 15
1.6 References 16

CHAPTER 2  HETEROGENEITY OF FIBER AND SARCOMERE LENGTH IN THE HUMAN MASSETER MUSCLE 21

Abstract 21
2.1 Introduction 21
2.2 Materials and methods 22
   2.2.1 Materials 22
   2.2.2 Sampling of muscle portions 22
   2.2.3 Sarcomere length measurements 23
   2.2.4 Prediction of sarcomere length for different mandibular positions 23
2.3 Results 24
   2.3.1 Muscle fiber length 24
   2.3.2 Sarcomere length 25
   2.3.3 Predicted sarcomere length changes 28
2.4 Discussion 30
2.5 References 32
CHAPTER 3  A COMPARISON OF HUMAN MASSETER MUSCLE THICKNESS MEASURED BY ULTRASONOGRAPHY AND MAGNETIC RESONANCE IMAGING

Abstract
3.1 Introduction
3.2 Materials and methods
3.3 Results
3.4 Discussion
3.5 References

CHAPTER 4  MASSETER MUSCLE THICKNESS IN GROWING INDIVIDUALS AND ITS RELATION TO FACIAL MORPHOLOGY

Abstract
4.1 Introduction
4.2 Materials and methods
4.2.1 Participants
4.2.2 Body measurements
4.2.3 Masseter muscle thickness
4.2.4 Facial dimensions
4.2.5 Statistics
4.2.6 Measurement error
4.3 Results
4.3.1 Masseter thickness
4.3.2 Facial dimensions
4.3.3 Relation between muscle thickness and facial dimensions
4.4 Discussion
4.4.1 Methodological considerations
4.4.2 Masseter muscle thickness
4.4.3 Relation between muscle thickness and facial dimensions
4.5 References

CHAPTER 5  CONTRIBUTION OF JAW MUSCLE SIZE AND CRANIOFACIAL MORPHOLOGY TO HUMAN BITE FORCE MAGNITUDE

Abstract
5.1 Introduction