

## **Contents**

<b>Chapter 1:</b> General Introduction and Outline of the Thesis	<b>9</b>
<b>Chapter 2:</b> The Involvement of Perivascular Adipose Tissue in Obesity-Associated Microvascular Dysfunction and Insulin Resistance	<b>17</b>
<b>Chapter 3a:</b> Insulin-induced Microvascular Recruitment in Skin and Muscle are Related and Both are Associated With Whole Body Glucose Uptake	<b>67</b>
<b>Chapter 3b:</b> Phenotyping the Microcirculation with Contrast-Enhanced Ultrasound	<b>87</b>
<b>Chapter 4:</b> Perivascular Adipose Tissue Control of Insulin-Induced Vasoreactivity in Muscle is Impaired in db/db Mice	<b>91</b>
<b>Chapter 5:</b> AMPK Regulates Microvascular Perfusion and Insulin-Induced Microvascular Recruitment Through Control Over eNOS and Endothelin-1	<b>117</b>
<b>Chapter 6:</b> Bone Marrow-Derived JNK2-Positive Cells in Perivascular Adipose Tissue Blunt Microvascular Insulin-Induced Vasodilation Early During Nutrient Excess	<b>143</b>
<b>Chapter 7:</b> Insulin-Induced Changes in Skeletal Muscle Microvascular Perfusion are Regulated by Perivascular Adipose Tissue in Women	<b>169</b>
<b>Chapter 8:</b> Discussion	<b>191</b>
<b>Summary</b>	<b>219</b>
<b>Nederlandse samenvatting</b>	<b>225</b>

<b>List of Publications</b>	<b>233</b>
<b>List of author affiliations</b>	<b>237</b>
<b>Biografie/Biography</b>	<b>241</b>
<b>Dankwoord/Acknowledgments</b>	<b>245</b>