Vitamin D has received much attention in recent years due to the re-emergence of vitamin D deficiency as a global health issue along with increasing evidence indicating that 1,25-dihydroxivitamin D, the hormonally active form of vitamin D, not only acts in calcium and bone metabolism but also generates extracellular biological responses.

The role of vitamin D in obesity and other associated conditions has been studied in this thesis. Vitamin D deficiency has been shown to be associated with an increased risk of obesity, diabetes, and cardiovascular disease. The thesis investigates the mechanisms by which vitamin D may influence these conditions and discusses potential therapeutic strategies for the prevention and treatment of vitamin D deficiency-related diseases.