

Separation and utilization of nutrients from *Palmaria palmata* (Dulse)

Málfríður Bjarnadóttir

Supervisors: Björn Viðar Aðalbjörnsson & Rósa Jónsdóttir





Objective

- PROMAC
- Separate sugars and proteins from the red seaweed P. palmata
- · Both parts should be usable as food ingredient
 - Proteins from P. palmata are of good quality
 - P. palmata is rich in indigestible polysaccharides
- · Check for bioactivity





Methods

- · Different extractions methods:
 - Filtration
 - Enzymatic hyrdolysis
 - Precipitation
- · Chemical composition
- · Bioactivity assays, i.e.:
 - DPPH radical scavenging assay
 - ACE inhibition activity





Results

- · Successful results
 - Enzymatic hydrolysis
 - Good protein quality
- Good antioxidant activity
- · Possible ACE inhibition activity
 - Treatment of hypertension

