



Effects of different preservation methods on antioxidant activity in Icelandic crowberries (*Empetrum nigrum* spp. *hermaphroditum*).

Thesis for the degree of Master of Science in Food Chemistry

Supervisor: Kristberg Kristbergsson, PhD

Co-supervisor: Björn Viðar Aðalbjörnsson, PhD



UNIVERSITY OF ICELAND
FACULTY OF FOOD SCIENCE AND NUTRITION



Abstract

- High oxidative activity
- Many health promoting factors
- Flavonoids and anthocyanins produced by crowberries have high antioxidant activity
- Candidates for cosmetics, in pharmaceutical industry or as food supplements



UNIVERSITY OF ICELAND
FACULTY OF FOOD SCIENCE AND NUTRITION



- Not as popular as Icelandic blueberries probably because their high tannin level makes them bitter
- Despite their bitterness they probably have much more health promoting factors than other popular berries that might make them valuable for innovation.



My daughter eating lasagne with crowberries and loved it!



13 Amazing Health Benefits Of Crowberries

November 1, 2017 by [Jayshree Bhagat](#)



- True?





Background

- No research data is available regarding antioxidant activity in Icelandic crowberries, (*Empetrum nigrum ssp. hermaphroditum*).
- Still it can be bought in pharmacies



UNIVERSITY OF ICELAND
FACULTY OF FOOD SCIENCE AND NUTRITION



Methods

- Harvested in September 2017
- Blanched for 0, 1, 2, 3, 4 minutes
- Juice and waste separated
- Waste extracted in ethanol/water solution
- Polyphenols measured in juice and waste after 0, 3, 6, 9 and 12 months



Harvested in
Fljótshlíð

Stored at -24°C



UNIVERSITY OF ICELAND
FACULTY OF FOOD SCIENCE AND NUTRITION



Results

- Not ready to be published yet...

Thank you!



Crowberries: Both funny
and healthy!



UNIVERSITY OF ICELAND
FACULTY OF FOOD SCIENCE AND NUTRITION