

The effect of consuming dulse enriched bread on markers of health

Submission date 11/08/2014	Recruitment status No longer recruiting	☐ Prospectively registered
		☐ Protocol
Registration date 13/10/2014	Overall study status Completed	☐ Statistical analysis plan
		☐ Results
Last Edited 19/05/2017	Condition category Nutritional, Metabolic, Endocrine	☐ Individual participant data
		☐ Record updated in last year

Plain English summary of protocol

Background and study aims

Palmaria palmata (*P. palmata*) is an Irish seaweed also called dulse. It has always been consumed over the years and is generally regarded as safe. There is evidence suggesting that it can have a role in promoting health but this has not been studied formally. This study will compare normal bread with bread enriched with 5g of dulse and will note any changes in markers of health.

Who can participate?

Healthy adults.

What does the study involve?

Participants are randomly allocated to one of two groups: the treatment group (bread containing 5 g *P. palmata*) or the placebo group (bread without *P. palmata*). They have to eat 1 bread roll (230 g) per day for 28 consecutive days.

What are the possible benefits and risks of participating?

This study will help understand the effects of consuming Irish seaweed on human health. No foreseeable risks are involved.

Where is the study run from?

University of Ulster in Coleraine, Northern Ireland (UK).

When is the study starting and how long is it expected to run for?

August to December 2011.

Who is funding the study?

The Irish Marine Institute and the Department of Agriculture

Who is the main contact?

Dr Emeir McSorley
em.mcsorley@ulster.ac.uk

Contact information

Type(s)

Scientific

Contact name

Dr Emeir McSorley

Contact details

Room W2046
School of Biomedical Sciences
University of Ulster
Coleraine campus
Cromore Road
Coleraine
United Kingdom
BT52 1SA
+44 (0)28 7012 3543
em.mcsorley@ulster.ac.uk

Additional identifiers**Study information****Scientific Title**

The effect of consuming *Palmaria palmata* enriched bread on inflammatory markers, antioxidant status, lipid profile and thyroid function in a randomised placebo controlled intervention trial of healthy adults

Acronym

SEAPALM

Study objectives

Consumption of *P. palmata* will favourably alter biomarkers of inflammation and other markers of health (lipid profile, thyroid function and antioxidant status)

Ethics approval required

Old ethics approval format

Ethics approval(s)

Research Ethics Committee of the University of Ulster; ref: REC/11/0078

Primary study design

Interventional

Study design

Double-blind randomized placebo controlled human dietary intervention study

Study type(s)

Screening

Health condition(s) or problem(s) studied

Inflammation in healthy adults - cardiovascular disease risk

Interventions

Palmaria palmata incorporated (5g) into bread (230g total) vs bread alone

Participants were randomly assigned to either the treatment group (bread containing 5 g P. palmata) or placebo group (bread without P. palmata) using an online randomization software (www.randomisation.com) which was determined prior to participant recruitment. Treatment and control breads were labelled and allocated to participant ID according to the randomisation sequence output by an independent researcher not involved in the design or the analysis of the study to ensure that the study was double-blinded to both researcher and participants.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

C-reactive protein- cytokine analysis

Key secondary outcome(s)

1. Lipid profile - (cholesterol; triglycerides)
2. Thyroid function - (thyroid stimulating hormone (TSH))
3. Antioxidant status - (ferric reducing antioxidant power (FRAP))

Completion date

15/12/2011

Eligibility**Key inclusion criteria**

Apparently healthy adults aged 18-65 years.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Upper age limit

65 Years

Sex

All

Key exclusion criteria

Participants were excluded if they regularly consumed seaweed (>5 g/week), used vitamin or mineral supplements, used immune altering medication or had a history of thyroid problems.

Date of first enrolment

01/08/2011

Date of final enrolment

15/12/2011

Locations**Countries of recruitment**

United Kingdom

Northern Ireland

Study participating centre**Room W2046**

Coleraine

United Kingdom

BT52 1SA

Sponsor information**Organisation**

Department of Food, Agriculture and the Marine (Ireland)

ROR

<https://ror.org/008gjgb19>

Funder(s)**Funder type**

Research organisation

Funder Name

The Irish Marine Institute and the Department of Agriculture, Food and the Marine - Sea Change Strategy; Grant-Aid Agreement No. MFFRI/07/01

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration