

# Marginal Impact of Brown Seaweed *Ascophyllum nodosum* and *Fucus vesiculosus* eExtract on Metabolic and Inflammatory Response in Overweight and Obese Prediabetic Subjects

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Supplemental Table S1. Subjects' characteristics

Variables	Brown seaweed extract ( <i>n</i> = 27)	Placebo ( <i>n</i> = 29)	P
Men/women (n/n)	11/16	11/18	-
Age (years)	55±12	51±11	0.22
Weight (kg)	91±13	91±13	0.89
BMI (Kg/m <sup>2</sup> )	33±4	33±4	0.89
Waist circumference (cm)	109±11	107±9	0.49
Hip circumference (cm)	113±2	115±2	0.38
SBP (mmHg)	126±14	122±13	0.32
DBP (mmHg)	76±10	76±8	0.90
Heart beats (beats/min)	74±10	70±9	0.13
Total cholesterol (mmol/l)	5.3±0.9	5.5±0.9	0.44
TAG (mmol/l)	1.6±0.8	1.6±0.6	0.92
LDLc (mmol/l)	3.1±0.8	3.3±0.8	0.40
HDLc (mmol/l)	1.4±0.3	1.4±0.4	0.97
Chol/HDLc	3.8±0.8	4.0±1	0.33
Fasting glycemia (mmol/l)	5.9±0.4	5.9±0.4	0.63
2h Glycemia (mmol/)	7.2±1.6	7.4±1.5	0.60

BMI, Body Mass Index; SBP, Systolic Blood Pressure; DBP, Diastolic Blood Pressure; TAG, Total triglycerides; LDLc, Low Density Lipoprotein cholesterol; HDLc, High Density Lipoprotein cholesterol, Chol, Cholesterol.

Mean ± SD

P value to compare parameters between groups (placebo vs brown seaweed extract) at the screening, as performed by ANOVA.

**Supplemental Table S2. Nutritional intakes over time within and between groups**

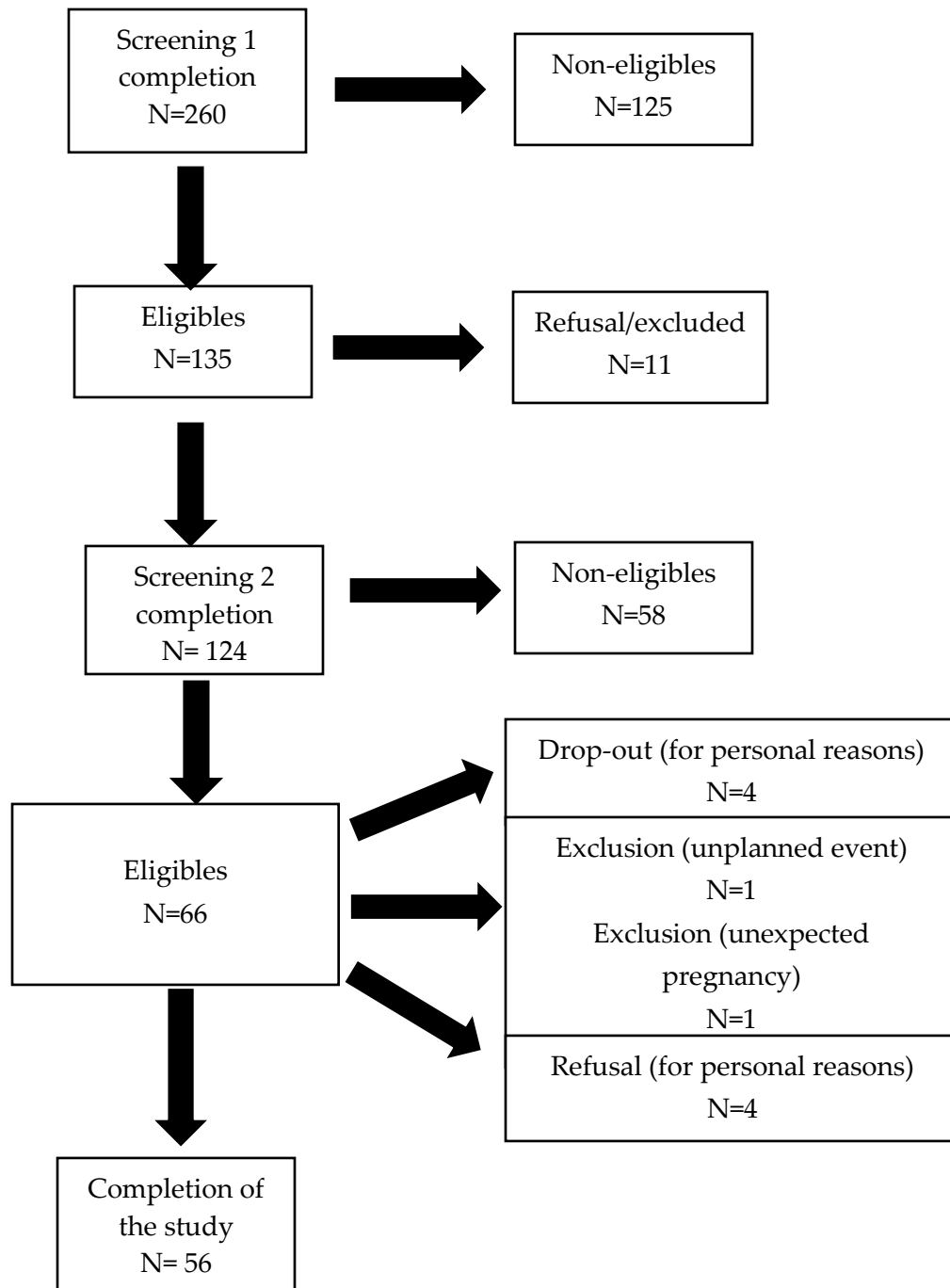
	Brown seaweed extract (n = 27)			Placebo (n = 29)			<b>P<sub>IXG</sub><sup>2,3</sup></b>
	<b>Pre<sup>1</sup></b>	<b>Post<sup>1</sup></b>	<b>Pi<sup>2</sup></b>	<b>Pre<sup>1</sup></b>	<b>Post<sup>1</sup></b>	<b>Pi<sup>2</sup></b>	
Energy (KJ)	9 971±737	8 870±737	0.08	10 666±712	9 059±720	0.05	0.90
% Carbohydrate	47±1	47±1	0.64	46±1	48±1	0.02	0.18
% Protein	17±1	18±1	0.01	17±1	18±1	0.22	0.24
% Fat	35±1	35±1	0.63	36±1	35±1	0.07	0.34
Saturated fatty acid (g)	32±3	27±3	0.08	35 ±3	28 ± 3	0.01	0.63
MUFA (g)	37±3	33±3	0.09	41±3	34±3	0.02	0.66
PUFA (g)	18±1	15±1	0.08	19±1	15±1	0.01	0.48
Trans fatty acid (g)	3.5±0.3	3.1±0.3	0.08	4.0±0.3	3.2±0.3	0.04	0.83
Cholesterol (g)	302±33	297±33	0.9	340±32	276±32	0.11	0.22
Caffeine (g)	235±30	224±30	0.51	172±29	175±29	0.83	0.53
Alcohol (g)	11±2	6±2	0.01	12±2	6±2	0.01	0.89
Total fiber (g)	27±2	27±2	0.79	29±2	30±2	0.36	0.66
Insoluble fiber (g)	18±1	18±1	0.78	19±1	20±1	0.30	0.59
Physical activity (MET)	2502±429	1970±429	0.25	1936±407	1622±414	0.86	0.48

MUFA, Monounsaturated Fatty Acid; PUFA, Polyunsaturated Fatty Acid.

1. Mean ± SD pre-intervention (at the beginning of the 12-week trial) and post-intervention (at the end of the 12-week trial)

2. *P value* to compare changes over time from the baseline to 12 weeks (Pre vs Post) within each group (placebo or brown seaweed extract), as performed by repeated-measures ANOVA test with two factors (treatment, post-pre phase).

3. *P value* interaction to compare change over time (Pre vs Post) between groups (placebo vs brown seaweed extract).



Supplementary Figure S1. Flow chart.