

# Omega 3 fatty acids in skin cell protection from ultraviolet damage

<b>Submission date</b> 29/04/2010	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 29/04/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 12/04/2017	<b>Condition category</b> Skin and Connective Tissue Diseases	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
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## Additional identifiers

**Protocol serial number**  
4953

## Study information

**Scientific Title**  
Omega 3 fatty acids in skin cell protection from ultraviolet damage

**Study objectives**

Examination into the photoprotective potential of topically applied omega-3 fatty acids. Changes in the parameters of short- and long-term UV-damage will be assessed. This includes analysis of the sunburn response, bioavailability of fatty acids, expression of lipid mediators and expression of p53 and collagen.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

MREC approved, ref: 08/H1004/19

**Study design**

Non-randomised interventional trial

**Primary study design**

Interventional

**Study type(s)**

Not Specified

**Health condition(s) or problem(s) studied**

Topic: Skin; Subtopic: Skin (all Subtopics); Disease: Dermatology

**Interventions**

Topical agents containing low doses of omega-3 fatty acids applied to the skin

**Intervention Type**

Other

**Phase**

Not Specified

**Primary outcome(s)**

To measure changes in the erythema response to UVR in the skin

**Key secondary outcome(s)**

1. To measure changes in levels of bioactive mediators derived from fatty acids in the skin in response
2. To measure changes in the fatty acid levels in the skin

**Completion date**

30/09/2011

**Eligibility****Key inclusion criteria**

1. White Caucasian, either sex
2. Aged between 20 and 60 years old
3. Skin type 1 to 3

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

All

**Key exclusion criteria**

1. Taking photoactive or anti-inflammatory medication
2. History of photosensitivity
3. History of skin cancer
4. Pregnant or breast feeding
5. Taking omega-3 supplements
6. Sunbathed in past 3 months

**Date of first enrolment**

01/04/2008

**Date of final enrolment**

30/09/2011

**Locations****Countries of recruitment**

United Kingdom

England

**Study participating centre****Photobiology Unit**

Salford

United Kingdom

M6 8HD

**Sponsor information****Organisation**

University of Manchester (UK)

ROR

<https://ror.org/027m9bs27>

## **Funder(s)**

### **Funder type**

Research council

### **Funder Name**

Biotechnology and Biological Science Research Council (BBSRC) (UK)

### **Funder Name**

Croda International Plc (UK)

## **Results and Publications**

### **Individual participant data (IPD) sharing plan**

### **IPD sharing plan summary**

Not provided at time of registration