

Table 2S. Assessment of the health effect of microalgae and their components evaluated by animal studies .

Species	Metabolites, extracts or biomass	Health effect	Animal study	Ref.
<i>Arthrospira sp.</i>	Polysaccharides	Immunomodulating; Antibacterial	Mouse; BALB/c mice	158, 159
<i>Arthrospira maxima</i>	Phycobiliproteins	Antioxidant; Anti-inflammatory; Hepatoprotective; Immunomodulatory	Wistar male Rats; Mice	160-175
<i>Arthrospira platensis</i>	Biomass Phycocyanin Carotenoids	Chemoprevention; Preventing endothelial dysfunction-related diseases in metabolic syndrome; Alteration of the gastrointestinal microbiota; Hepatoprotective; Antioxidant;	Rat; Mice; Adult male Wistar albino rats; Healthy adult male albino rats (<i>Rattus rattus</i>); Adult inbred C57BL/6J mice; Wister rats	176- 180, 142
<i>Arthrospira versicolor</i>	Crude extract	Antihyperglycemic	Mice	181
<i>Botryococcus braunii</i>	Carotenoids	Antioxidant	Wistar rats	180
<i>Chlorella stigmatophora</i>	Polysaccharides	Anti-inflammatory Immunomodulatory	Female C57BI mice; Rats	85
<i>Chlorella vulgaris</i>	Glycoprotein	Anticancer; Hepatoprotective	Euthymic mice ICR male; Mice	182, 183
<i>Chlorococcum sp.</i>	Carotenoids	Antibacterial	BALB/c mice	184
<i>Cryptocodinium cohnii</i> <i>Schizochytrium sp</i>	DHA	Increase in n-3 HUFA content of rat organs at the expense of n-6 HUFA and also prevented the accumulation of newly synthesized deuterated end products decrease in TAG and cholesterol levels	Rats; Domestic Yorkshire Crossbred Swine; Male Wistar rats	185- 187
<i>Dunaliella bardawil</i>	Extract β -carotene	Anti-inflammatory; Anti cancer; Antioxidant; Anti-hyperlipidemia	Rats; SHN virgin mice with mammary tumor; Transgenic male mice of APO-al gene	188 - 190
<i>Dunaliella salina</i>	β -carotene	Anticancer; Antioxidant	Wistar rats with fibrosarcoma; Albino rats Wister strain; Diabetic Sprague–Dawley rats	191 - 193
<i>Haematococcus pluvialis</i>	Astaxanthin	Reduction exercise-induced skeletal and cardiac muscle damage Antioxidant; Ulcer preventive;	C57BL/6 mice; Healthy Albino Wistar rats; Wister rats	194, 195 180
<i>Nostoc commune</i>	Biomass	Alteration of the gastrointestinal microbiota	Adult inbred C57BL/6J mice	178
<i>Parachlorella beijerinckii</i>	Hot Water Extract; Biomass	Antihyperinsulinemic; Lead, MeHg excretion	C57BL/6J mice; C57BL/6N mice	196- 200
<i>Phaeodactylum</i>	Polysaccharides	Anti-inflammatory;	Female C57BI mice	85

<i>tricornutum</i>		Immunomodulatory	Rats	
<i>Porphyridium sp.</i>	Polysaccharides	Hypocholesterolemic effects	Rats	201