1. Begum R, Howlader S, Mamun-Or-Rashid ANM, Rafiquzzaman SM, Ashraf GM, Albadrani GM, Sayed AA, Peluso I, Abdel-Daim MM, Uddin MS. Antioxidant and Signal-Modulating Effects of Brown Seaweed-Derived Compounds against Oxidative Stress-Associated Pathology. Oxid Med Cell Longev. 2021 Jul 10;2021:9974890. doi: 10.1155/2021/9974890. PMID: 34336128; PMCID: PMC8289617. Accessed online on October 4, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8289617/**

2. Ferreira MS, Resende DISP, Lobo JMS, Sousa E, Almeida IF. Marine Ingredients for Sensitive Skin: Market Overview. Mar Drugs. 2021 Aug 17;19(8):464. doi: 10.3390/md19080464. PMID: 34436303; PMCID: PMC8398991. Accessed online on October 4, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8398991/**

3. Gabbia D, De Martin S. Brown Seaweeds for the Management of Metabolic Syndrome and Associated Diseases. Molecules. 2020 Sep 12;25(18):4182. doi: 10.3390/molecules25184182. PMID: 32932674; PMCID: PMC7570850. Accessed online on October 1, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7570850/**

4. Biosynth Carbosynth. Accessed online on October 2, 2021 at **https://www.carbosynth.com/carbosynth/website.nsf/(w-productdisplay)/B8E29BA410417061802575ED004A9DFF**

5. Luthuli S, Wu S, Cheng Y, Zheng X, Wu M, Tong H. Therapeutic Effects of Fucoidan: A Review on Recent Studies. Mar Drugs. 2019 Aug 21;17(9):487. doi: 10.3390/md17090487. Accessed online on October 1, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6780838/**

6. Zhao Y, Zheng Y, Wang J, Ma S, Yu Y, White WL, Yang S, Yang F, Lu J. Fucoidan Extracted from Undaria pinnatifida: Source for Nutraceuticals/Functional Foods. Mar Drugs. 2018 Sep 9;16(9):321. doi: 10.3390/md16090321. PMID: 30205616; PMCID: PMC6164441. Accessed online on Oct 2, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6164441/**

7. Fitton JH, Stringer DN, Park AY, Karpiniec, SS. Therapies from Fucoidan: New Developments. Mar. Drugs 2019:17:571. **https://doi.org/10.3390/md17100571** Accessed online on October 1, 2021 at **https://www.mdpi.com/1660-3397/17/10/571/htm**

8. Keleszade E, Patterson M, Trangmar S, Guinan KJ, Costabile A. Clinical Efficacy of Brown Seaweeds Ascophyllum nodosum and Fucus vesiculosus in the Prevention or Delay Progression of the Metabolic Syndrome: A Review of Clinical Trials. Molecules. 2021 Jan 30;26(3):714. doi: 10.3390/molecules26030714. PMID: 33573121; PMCID: PMC7866543. Accessed online on October 1, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7866543/**

9. Fitton JH, Stringer DN, Karpiniec SS. Therapies from Fucoidan: An Update. Mar Drugs. 2015 Sep 16;13(9):5920-46. doi: 10.3390/md13095920. Accessed online on October 1, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4584361/**

10. Betsch N, Deguy T, Deroussent L-J, Doronzo R, Naccache J, Pitiot V, Quemere Y, Rousseau E, Sante C, Vincent P. Seaweed global demand: Component of interest and short and medium term trends. GRADEA. June – October 2020. Accessed online on October 5, 2021 at **https://kelp.blue/wp-content/uploads/2021/09/Seaweed-global-demand-World-Bank-Pitiot-Valentin-2.pdf**

11. Barbosa M, Valentão P, Andrade PB. Polyphenols from Brown Seaweeds (Ochrophyta, Phaeophyceae): Phlorotannins in the Pursuit of Natural Alternatives to Tackle Neurodegeneration. Mar Drugs. 2020 Dec 18;18(12):654. doi: 10.3390/md18120654. PMID: 33353007; PMCID: PMC7766193. Accessed online on October 4, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7766193/**

12. Agregán R, Munekata PES, Franco D, Carballo J, Barba FJ, Lorenzo JM. Antioxidant Potential of Extracts Obtained from Macro- (Ascophyllum nodosum, Fucus vesiculosus and Bifurcaria bifurcata) and Micro-Algae (Chlorella vulgaris and Spirulina platensis) Assisted by Ultrasound. Medicines (Basel). 2018 Apr 10;5(2). pii: E33. doi: 10.3390/medicines5020033. Accessed online of July 23, 2019 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6023426/**

13. Chen L, Wang Y, Yang H, Li H, Xu W, Chen G, Zhu H. Physicochemical Characterization, Antioxidant and Immunostimulatory Activities of Sulfated Polysaccharides Extracted from Ascophyllum nodosum. Molecules. 2018 Jul 31;23(8):1912. doi: 10.3390/molecules23081912. PMID: 30065217; PMCID: PMC6222602. Accessed online of July 23, 2019 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6222602/**

14. Abu R, Jiang Z, Ueno M, Okimura T, Yamaguchi K, Oda T. In vitro antioxidant activities of sulfated polysaccharide ascophyllan isolated from Ascophyllum nodosum. Int J Biol Macromol. 2013 Aug;59:305-12. doi: 10.1016/j.ijbiomac.2013.04.035. Epub 2013 May 2. PMID: 23643974. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/23643974/**

15. Yuan Y, Macquarrie D. Microwave assisted extraction of sulfated polysaccharides (fucoidan) from Ascophyllum nodosum and its antioxidant activity. Carbohydr Polym. 2015 Sep 20;129:101-7. doi: 10.1016/j.carbpol.2015.04.057. Epub 2015 May 5. PMID: 26050894. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/26050894/**

16. ClinicalTrials.gov Identifier: NCT02295878. Accessed online on October 5, 2021 at **https://clinicaltrials.gov/ct2/show/NCT02295878?term=Ascophyllum+nodosum&draw=2&rank=1**

17. Iacoviello L, Zito F, Rago L, Di Castelnuovo A, De Curtis A, Zappacosta B, de Gaetano G, Donati MB, Cerletti C. Prolonged administration of Ascophyllum nodosum to healthy human volunteers and cardiovascular risk. Nutrafoods 2013;12:137–144. Accessed online on October 1, 2021 at **https://link.springer.com/article/10.1007%2Fs13749-013-0059-x**

18. Derosa G, Cicero AFG, D'Angelo A, Maffioli P. Ascophyllum nodosum and Fucus vesiculosus on glycemic status and on endothelial damage markers in dysglicemic patients. Phytother Res. 2019a Mar;33(3):791-797. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/30714233/**

19. Fernando IPS, Nah JW, Jeon YJ. Potential anti-inflammatory natural products from marine algae. Environ Toxicol Pharmacol. 2016 Dec;48:22-30. doi: 10.1016/j.etap.2016.09.023. Epub 2016 Oct 3. PMID: 27716532. Accessed online of October 4, 2021 at **https://pubmed.ncbi.nlm.nih.gov/27716532/**

20. Chen L , Liu R , He X , Pei S , Li D . Effects of brown seaweed polyphenols, a class of phlorotannins, on metabolic disorders via regulation of fat function. Food Funct. 2021 Mar 21;12(6):2378-2388. doi: 10.1039/d0fo02886j. Epub 2021 Mar 1. PMID: 33645609. Accessed online on October 2, 2021 at **https://pubmed.ncbi.nlm.nih.gov/33645609/**

21. Barbosa M, Lopes G, Ferreres F, Andrade PB, Pereira DM, Gil-Izquierdo A, Valentão P. Phlorotannin extracts from Fucales: Marine polyphenols as bioregulators engaged in inflammation-related mediators and enzymes. Algal Research 2017;28:1-8. Accessed online on Oct 6, 2021 at **https://www.sciencedirect.com/science/article/abs/pii/S2211926417304137?via%3Dihub**

22. Foley SA, Szegezdi E, Mulloy B, Samali A, Tuohy MG. An unfractionated fucoidan from Ascophyllum nodosum: extraction, characterization, and apoptotic effects in vitro. J Nat Prod. 2011 Sep 23;74(9):1851-61. doi: 10.1021/np200124m. Epub 2011 Aug 29. Erratum in: J Nat Prod. 2012 Sep 28;75(9):1674. Szegezdi, Eva [added]; Samali, Afshin [added]. PMID: 21875034. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/21875034/**

23. Riou D, Colliec-Jouault S, Pinczon du Sel D, Bosch S, Siavoshian S, Le Bert V, Tomasoni C, Sinquin C, Durand P, Roussakis C. Antitumor and antiproliferative effects of a fucan extracted from ascophyllum nodosum against a non-small-cell bronchopulmonary carcinoma line. Anticancer Res. 1996 May-Jun;16(3A):1213-8. PMID: 8702239. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/8702239/**

24. Negishi H, Mori M, Mori H, Yamori Y. Supplementation of elderly Japanese men and women with fucoidan from seaweed increases immune responses to seasonal influenza vaccination. J Nutr. 2013 Nov;143(11):1794-8. doi: 10.3945/jn.113.179036. Epub 2013 Sep 4. PMID: 24005608; PMCID: PMC3796347. Accessed online on October 3, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3796347/**

25. Corona G, Ji Y, Anegboonlap P, Hotchkiss S, Gill C, Yaqoob P, Spencer JP, Rowland I. Gastrointestinal modifications and bioavailability of brown seaweed phlorotannins and effects on inflammatory markers. Br J Nutr. 2016 Apr 14;115(7):1240-53. doi: 10.1017/S0007114516000210. Epub 2016 Feb 16. PMID: 26879487. Accessed online on October 5, 2021 at **https://www.cambridge.org/core/journals/british-journal-of-nutrition/article/gastrointestinal-modifications-and-bioavailability-of-brown-seaweed-phlorotannins-and-effects-on-inflammatory-markers/D7D1BEC5CFE75990B8A6F1428870466F**

26. Bickel M. The role of interleukin-8 in inflammation and mechanisms of regulation. J Periodontol. 1993 May;64(5 Suppl):456-60. PMID: 8315568. Accessed online on October 5, 2021 at **https://pubmed.ncbi.nlm.nih.gov/8315568/**

27. Catarino MD, Amarante SJ, Mateus N, Silva AMS, Cardoso SM. Brown Algae Phlorotannins: A Marine Alternative to Break the Oxidative Stress, Inflammation and Cancer Network. Foods. 2021 Jun 25;10(7):1478. doi: 10.3390/foods10071478. PMID: 34202184; PMCID: PMC8307260. Accessed online on October 4, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8307260/**

28. Nwosu F, Morris J, Lund VA, Stewart D, Ross HA, McDougall GJ. Anti-proliferative and potential anti-diabetic effects of phenolic-rich extracts from edible marine algae. Food Chemistry. 2011;126(3):1006-1012. Accessed online on October 5, 2021 at **https://www.sciencedirect.com/science/article/abs/pii/S0308814610015293**

29. Baldrick FR, McFadden K, Ibars M, Sung C, Moffatt T, Megarry K, Thomas K, Mitchell P, Wallace JMW, Pourshahidi LK. Impact of a (poly)phenol-rich extract from the brown algae Ascophyllum nodosum on DNA damage and antioxidant activity in an overweight or obese population: A randomized controlled trial. Am. J. Clin. Nutr. 2018, 108, 688–700. Accessed online on October 5, 2021 at **https://academic.oup.com/ajcn/article/108/4/688/5129161**

30. Bumunang EW, McAllister TA, Zaheer R, Ortega Polo R, Stanford K, King R, Niu YD, Ateba CN. Characterization of Non-O157 Escherichia coli from Cattle Faecal Samples in the North-West Province of South Africa. Microorganisms. 2019 Aug 20;7(8):272. doi: 10.3390/microorganisms7080272. PMID: 31434244; PMCID: PMC6723556. Accessed online on October 6, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6723556/**

31. Wang Y, Xu Z, Bach SJ, McAllister TA. Sensitivity of Escherichia coli to Seaweed (Ascophyllum nodosum) Phlorotannins and Terrestrial Tannins. Asian-Australasian J. Anim. Sci. 2009, 22, 238–245. Accessed online on October 6, 2021 at **https://www.animbiosci.org/journal/view.php?doi=10.5713/ajas.2009.80213**

32. Besednova NN, Andryukov BG, Zaporozhets TS, Kryzhanovsky SP, Kuznetsova TA, Fedyanina LN, Makarenkova ID, Zvyagintseva TN. Algae Polyphenolic Compounds and Modern Antibacterial Strategies: Current Achievements and Immediate Prospects. Biomedicines. 2020 Sep 11;8(9):342. doi: 10.3390/biomedicines8090342. PMID: 32932759; PMCID: PMC7554682. Accessed online on October 4, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7554682/**

33. Yin J , Wang J , Li F , Yang Z , Yang X , Sun W , Xia B , Li T , Song W , Guo S . The fucoidan from the brown seaweed Ascophyllum nodosum ameliorates atherosclerosis in apolipoprotein E-deficient mice. Food Funct. 2019 Aug 1;10(8):5124-5139. doi: 10.1039/c9fo00619b. Epub 2019 Jul 31. PMID: 31364648. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/31364648/**

34. Mauray S, Sternberg C, Theveniaux J, Millet J, Sinquin C, Tapon-Bretaudière J, Fischer AM. Venous antithrombotic and anticoagulant activities of a fucoïdan fraction. Thromb Haemost. 1995 Nov;74(5):1280-5. PMID: 8607110. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/8607110/**

35. Colliec S, Fischer AM, Tapon-Bretaudiere J, Boisson C, Durand P, Jozefonvicz J. Anticoagulant properties of a fucoïdan fraction. Thromb Res. 1991 Oct 15;64(2):143-54. doi: 10.1016/0049-3848(91)90114-c. PMID: 1811335. Accessed online on October 3, 2021 at https://pubmed.ncbi.nlm.nih.gov/1811335/

36. Irhimeh MR, Fitton JH, Lowenthal RM. Pilot clinical study to evaluate the anticoagulant activity of fucoidan. Blood Coagul Fibrinolysis. 2009 Oct;20(7):607-10. doi: 10.1097/MBC.0b013e32833135fe. PMID: 19696660. Accessed online on October 3, 2021 at **https://pubmed.ncbi.nlm.nih.gov/19696660/**

37. Church FC, Meade JB, Treanor RE, Whinna HC. Antithrombin activity of fucoidan. The interaction of fucoidan with heparin cofactor II, antithrombin III, and thrombin. J Biol Chem. 1989 Feb 25;264(6):3618-23. PMID: 2914965. Accessed online on October 3, 2021 at **https://pubmed.ncbi.nlm.nih.gov/2914965/**

38. Hernández-Corona DM, Martínez-Abundis E, González-Ortiz M. Effect of fucoidan administration on insulin secretion and insulin resistance in overweight or obese adults. J Med Food. 2014 Jul;17(7):830-2. doi: 10.1089/jmf.2013.0053. Epub 2014 Mar 10. PMID: 24611906. Accessed online on October 3, 2021 at **https://pubmed.ncbi.nlm.nih.gov/24611906/**

39. Yang Z, Yin J, Wang Y, Wang J, Xia B, Li T, Yang X, Hu S, Ji C, Guo S. The fucoidan A3 from the seaweed Ascophyllum nodosum enhances RCT-related genes expression in hyperlipidemic C57BL/6J mice. Int J Biol Macromol. 2019 Aug 1;134:759-769. doi: 10.1016/j.ijbiomac.2019.05.070. Epub 2019 May 14. PMID: 31100394. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/31100394/**

40. Yang Z, Liu G, Wang Y, Yin J, Wang J, Xia B, Li T, Yang X, Hou P, Hu S, Song W, Guo S. Fucoidan A2 from the Brown Seaweed Ascophyllum nodosum Lowers Lipid by Improving Reverse Cholesterol Transport in C57BL/6J Mice Fed a High-Fat Diet. J Agric Food Chem. 2019a May 22;67(20):5782-5791. doi: 10.1021/acs.jafc.9b01321. Epub 2019 May 13. PMID: 31055921. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/31055921/**

41. Ren R, Azuma Y, Ojima T, Hashimoto T, Mizuno M, Nishitani Y, Yoshida M, Azuma T, Kanazawa K. Modulation of platelet aggregation-related eicosanoid production by dietary F-fucoidan from brown alga Laminaria japonica in human subjects. Br J Nutr. 2013 Sep 14;110(5):880-90. doi: 10.1017/S000711451200606X. Epub 2013 Feb 1. PMID: 23374164. Accessed online on October 3, 2021 at **https://pubmed.ncbi.nlm.nih.gov/23374164/**

42. Murray M, Dordevic AL, Bonham MP, Ryan L. Do marine algal polyphenols have antidiabetic, antihyperlipidemic or anti-inflammatory effects in humans? A systematic review. Crit Rev Food Sci Nutr. 2018;58(12):2039-2054. doi: 10.1080/10408398.2017.1301876. Epub 2017 Jul 5. PMID: 28414549. Accessed online of October 4, 2021 at **https://pubmed.ncbi.nlm.nih.gov/28414549/**

43. Cardoso SM, Pereira OR, Seca AM, Pinto DC, Silva AM. Seaweeds as Preventive Agents for Cardiovascular Diseases: From Nutrients to Functional Foods. Mar Drugs. 2015 Nov 12;13(11):6838-65. doi: 10.3390/md13116838. PMID: 26569268; PMCID: PMC4663556. Accessed online of Oct 6, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4663556/pdf/marinedrugs-13-06838.pdf**

44. Shang, Q.; Song, G.; Zhang, M.; Shi, J.; Xu, C.; Hao, J.; Li, G.; Yu, G. Dietary fucoidan improves metabolic syndrome in association with increased Akkermansia population in the gut microbiota of high-fat diet-fed mice. J. Funct. Foods 2017, 28, 138–146. Accessed online on Oct 2, 2021 at **https://www.sciencedirect.com/science/article/abs/pii/S1756464616303401?via%3Dihub**

45. Kim KT, Rioux LE, Turgeon SL. Alpha-amylase and alpha-glucosidase inhibition is differentially modulated by fucoidan obtained from Fucus vesiculosus and Ascophyllum nodosum. Phytochemistry. 2014 Feb;98:27-33. doi: 10.1016/j.phytochem.2013.12.003. Epub 2013 Dec 30. PMID: 24388677. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/24388677/**

46. Chater PI, Wilcox M, Cherry P, Herford A, Mustar S, Wheater H, Brownlee I, Seal C, Pearson J. Inhibitory activity of extracts of Hebridean brown seaweeds on lipase activity. J Appl Phycol. 2016;28:1303-1313. doi: 10.1007/s10811-015-0619-0. Epub 2015 May 26. PMID: 27057089; PMCID: PMC4789227. Accessed online on October 1, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4789227/**

47. Lee SH, Jeon YJ. Anti-diabetic effects of brown algae derived phlorotannins, marine polyphenols through diverse mechanisms. Fitoterapia. 2013 Apr;86:129-36. doi: 10.1016/j.fitote.2013.02.013. Epub 2013 Mar 4. PMID: 23466874. Accessed online on October 4, 2021 at **https://pubmed.ncbi.nlm.nih.gov/23466874/**

48. Lopes G, Andrade PB, Valentão P. Phlorotannins: Towards New Pharmacological Interventions for Diabetes Mellitus Type 2. Molecules. 2016 Dec 30;22(1):56. doi: 10.3390/molecules22010056. PMID: 28042834; PMCID: PMC6155720. Accessed online on October 4, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6155720/**

49. Paradis ME, Couture P, Lamarche B. A randomised crossover placebo-controlled trial investigating the effect of brown seaweed (Ascophyllum nodosum and Fucus vesiculosus) on postchallenge plasma glucose and insulin levels in men and women. Appl Physiol Nutr Metab. 2011 Dec;36(6):913-9. doi: 10.1139/h11-115. Epub 2011 Nov 16. PMID: 22087795. Accessed online on October 2, 2021 at **https://pubmed.ncbi.nlm.nih.gov/22087795/**

50. Derosa G, Pascuzzo MD, D'angelo A, Maffioli P. Ascophyllum nodosum , Fucus vesiculosus and chromiumpicolinate nutraceutical composition can help to treat type 2 diabetic patients. Diabetes Metab. Syndr. Obes. Targets Ther. 2019;12:1861. Accessed online on October 1, 2021 at **https://www.dovepress.com/ascophyllum-nodosum-fucus-vesiculosus-and-chromium-picolinate-nutraceu-peer-reviewed-fulltext-article-DMSO**

51. Attjioui M, Ryan S, Ristic AK, Higgins T, Goñi O, Gibney ER, Tierney J, O'Connell S. Comparison of edible brown algae extracts for the inhibition of intestinal carbohydrate digestive enzymes involved in glucose release from the diet. J Nutr Sci. 2021 Jan 12;10:e5. doi: 10.1017/jns.2020.56. PMID: 33889388; PMCID: PMC8057513. Accessed online on October 1, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8057513/**

52. Rattigan R, Sweeney T, Vigors S, Thornton K, Rajauria G, O'Doherty AJV. The Effect of Increasing Inclusion Levels of a Fucoidan-Rich Extract Derived from Ascophyllum nodosum on Growth Performance and Aspects of Intestinal Health of Pigs Post-Weaning. Mar Drugs. 2019 Nov 30;17(12):680. doi: 10.3390/md17120680. PMID: 31801301; PMCID: PMC6950662. Accessed online on October 1, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6950662/**

53. Wang L, Ai C, Wen C, Qin Y, Liu Z, Wang L, Gong Y, Su C, Wang Z, Song S. Fucoidan isolated from Ascophyllum nodosum alleviates gut microbiota dysbiosis and colonic inflammation in antibiotic-treated mice. Food Funct. 2020 Jun 24;11(6):5595-5606. doi: 10.1039/d0fo00668h. PMID: 32525182. Accessed online on October 1, 2021 at **https://pubmed.ncbi.nlm.nih.gov/32525182/**

54. Meenakshi S, Umayaparvathi S, Saravanan R, Manivasagam T, Balasubramanian T. Neuroprotective effect of fucoidan from Turbinaria decurrens in MPTP intoxicated Parkinsonic mice. Int J Biol Macromol. 2016 May;86:425-33. doi: 10.1016/j.ijbiomac.2015.12.025. Epub 2016 Jan 29. PMID: 26828289. Accessed online on October 4, 2021 at **https://pubmed.ncbi.nlm.nih.gov/26828289/**

55. Liang Z, Liu Z, Sun X, Tao M, Xiao X, Yu G, Wang X. The Effect of Fucoidan on Cellular Oxidative Stress and the CatD-Bax Signaling Axis in MN9D Cells Damaged by 1-Methyl-4-Phenypyridinium. Front Aging Neurosci. 2019 Jan 16;10:429. doi: 10.3389/fnagi.2018.00429. PMID: 30700973; PMCID: PMC6343539. Accessed online on October 4, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6343539/**

56. Silva M, Seijas P, Otero P. Exploitation of Marine Molecules to Manage Alzheimer's Disease. Mar Drugs. 2021 Jun 28;19(7):373. doi: 10.3390/md19070373. PMID: 34203244; PMCID: PMC8307759. Accessed online on October 1, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8307759/**

57. Kwak JH, Yang Z, Yoon B, He Y, Uhm S, Shin HC, Lee BH, Yoo YC, Lee KB, Han SY, Kim JS. Blood-brain barrier-permeable fluorone-labeled dieckols acting as neuronal ER stress signaling inhibitors. Biomaterials. 2015 Aug;61:52-60. doi: 10.1016/j.biomaterials.2015.04.045. Epub 2015 May 16. PMID: 25996411. Accessed online on October at **https://www.sciencedirect.com/science/article/abs/pii/S0142961215004329?via%3Dihub**

58. Pangestuti R, Siahaan EA, Kim SK. Photoprotective Substances Derived from Marine Algae. Mar Drugs. 2018 Oct 23;16(11):399. doi: 10.3390/md16110399. PMID: 30360482; PMCID: PMC6265938. Accessed online on October 4, 2021 at **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6265938/**

59. Guinea M, Franco V, Araujo-Bazán L, Rodríguez-Martín I, González S. In vivo UVB-photoprotective activity of extracts from commercial marine macroalgae. Food Chem Toxicol. 2012 Mar;50(3-4):1109-17. doi: 10.1016/j.fct.2012.01.004. Epub 2012 Jan 18. PMID: 22273696. Accessed online on Oct 6, 2021 at **https://www.sciencedirect.com/science/article/abs/pii/S0278691512000130?via%3Dihub**

60. Polyphenol. Medicinal Ingredients. Health Canada, Natural and Non-Prescription Health Products Directorate, Accessed online on Oct 5, 20201 at **http://webprod.hc-sc.gc.ca/nhpid-bdipsn/ingredReq.do?id=3250&lang=eng**

61. Antioxidant Monograph, Health Canada, Natural and Non-Prescription Health Products Directorate, Accessed online on Oct 4, 20201 at **http://webprod.hc-sc.gc.ca/nhpid-bdipsn/atReq.do?atid=antiox&lang=eng**

62. Kelp Monograph, Health Canada, Natural and Non-Prescription Health Products Directorate, Accessed online on Oct 4, 20201 at **http://webprod.hc-sc.gc.ca/nhpid-bdipsn/atReq.do?atid=kelp.prod.varech&lang=eng**

63. GRAS Notice 661, Fucoidan. US FDA Accessed online on October 4, 2021 at **https://www.fda.gov/media/100376/download** and **https://www.cfsanappsexternal.fda.gov/scripts/fdcc/index.cfm?set=GRASNotices&id=661**