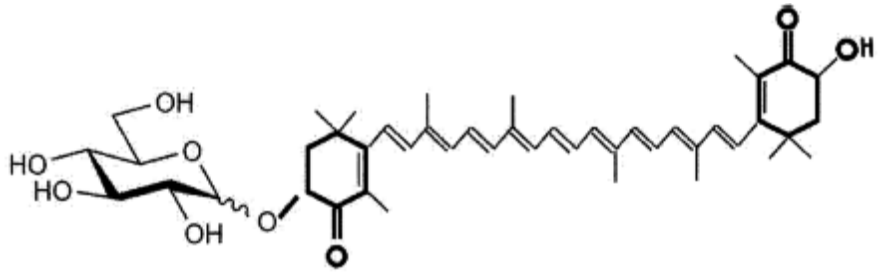
CLAIMS

1. Glucosidic astaxanthin for use in therapy.

2. Use of glucosidic astaxanthin in the manufacture of a medicament for the treatment of oxidative stress due to radiation exposure, wherein the glucosidic astaxanthin is prepared by reacting astaxanthin with a monosaccharide at a microwave frequency of between 1 and 100 GHz for at least 1 second and no more than 25 seconds.

3. The use of claim 2, wherein the glucosidic astaxanthin has the following chemical structure:



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4. The use of claim 2 or 3, wherein the medicament further comprises a carrier material.

5. The use of claim 4, wherein the carrier material is edible.

6. The use of claim 4 or 5, wherein the carrier material is chocolate.

7. The use of claim 4 or 5, wherein the carrier material is an oil.

8. The use of any of claims 2-7, wherein the medicament is capable of being administered in a therapeutic amount greater than 0.1 milligrams per kilogram of body weight per day.

9. The use of any of claims 2-7, wherein the medicament is capable of being administered in a therapeutic amount between 24 and 400 milligrams per kilogram of body weight per day.

10. The use of any of claims 2-9, wherein the medicament is capable of being orally consumed.

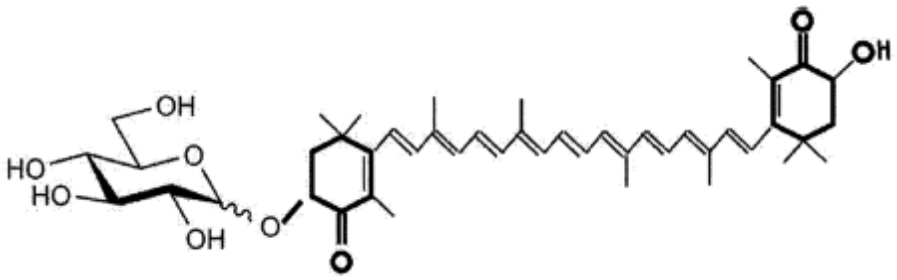
11. The use of any of claims 2-9, wherein the medicament is capable of being dermally applied onto an area of skin where a patient is afflicted with oxidative stress.

12. Use of an astaxanthin-containing composition in the manufacture of a medicament for the treatment of oxidative stress due to radiation exposure.

13. The use of claim 12, wherein the astaxanthin-containing composition is glucosidic astaxanthin.

14. The use of claim 13, wherein the glucosidic astaxanthin is prepared by reacting astaxanthin with a monosaccharide.

15. The use of claim 13 or 14, wherein the glucosidic astaxanthin has the following chemical structure:



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16. The use of any of claims 2-15, wherein the medicament further comprises a carrier material.

17. The use of claim 14, wherein the reacting comprises reacting the astaxanthin with the monosaccharide in a microwave frequency of between 1 and 100 GHz for at least one second and no more than 25 seconds.

18. The use according to any of claims 2-17, wherein the disease is cancer.