

Natural vs.
Synthetic Astaxanthin

RAHN

Astaxanthin, a powerful **antioxidant** belonging to the **carot-enoid** family, has gained significant attention for its benefits.

As the demand for this **powerhouse antioxidant** rises, the pivotal question arises:

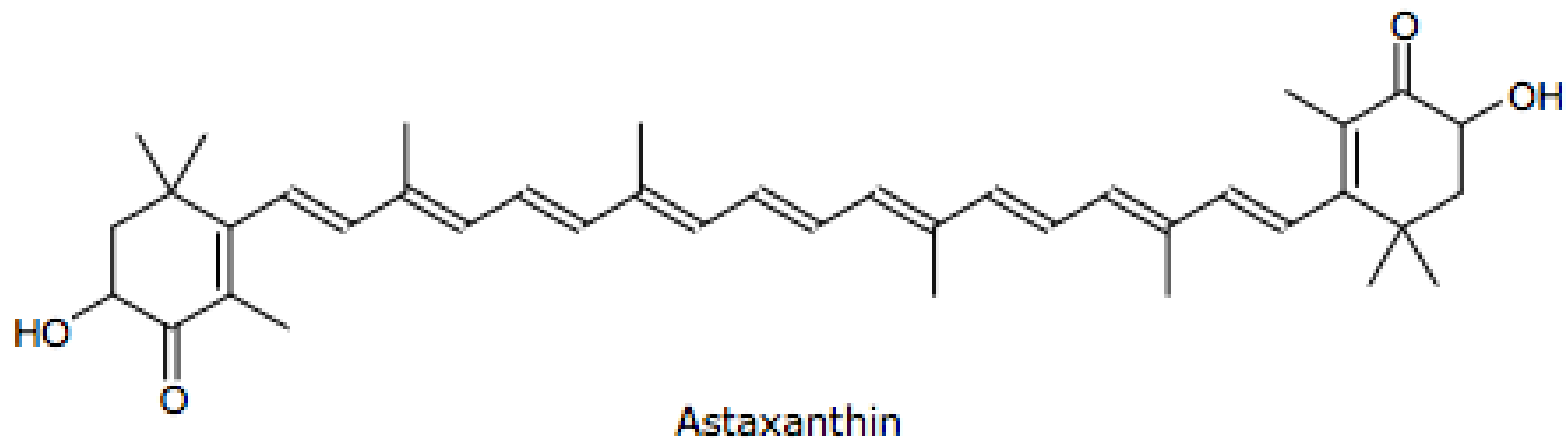
Natural or synthetic astaxanthin?




What are the differences?

Natural and **synthetic** astaxanthin are different because of how their **molecules** are **arranged**. Imagine the molecules as shapes – chirality means the shapes are the same, but like reflections in a mirror.

In synthetic astaxanthin, the shapes are a bit different, with more of one type (3R,3'S) **compared** to what's mainly found in natural astaxanthin (3S,3'S, like in *Haematococcus*). So, it's like natural astaxanthin has a **special arrangement** that makes it unique.



A woman with long blonde hair, wearing a white t-shirt and bright yellow pants, is captured in mid-air, jumping from a large, light-colored rock into a clear lake. Her arms are outstretched, and her hair is blowing in the wind. The background features a scenic mountain landscape with green forests and rocky peaks under a bright sky with scattered clouds. The sun is low in the sky, creating a warm, golden glow and a reflection on the water's surface.


Further, natural astaxanthin is characterised by a higher **oxygen radical absorbance capacity** (ORAC), indicating its enhanced ability to neutralise free radicals.

Additionally, it exhibits **greater stability** and **better assimilability** within the human body, providing optimal support for various **health benefits**.

Another noteworthy **difference** is the **regulatory status** of natural versus synthetic astaxanthin. In the United States, **synthetic astaxanthin** lacks *Generally Recognized as Safe (GRAS)* status, highlighting **potential concerns** about its **safety** for human consumption.

While regulations for cosmetics may vary, products utilising dried biomass (powder) of **natural astaxanthin** bypass these concerns, offering a **safer alternative** for health-conscious consumers.





In conclusion, for consumers navigating the world of astaxanthin in skincare, understanding these distinctions is pivotal for making well-informed choices **promoting skin health and overall well-being.**

Curious about our natural Astaxanthin, **AstaCos OL 50**? Check our website and learn more about its exceptional qualities.