

**Suggested Muscle Function Structure/Function claims\*:**

- AstaReal® Astaxanthin reduces buildup of lactic acid <sup>1, 11</sup>
- AstaReal® Astaxanthin supports endurance and muscle performance <sup>2,3</sup>
- AstaReal® Astaxanthin supports sustained energy and athletic performance <sup>2, 3</sup>
- AstaReal® Astaxanthin helps improve power output <sup>3</sup>
- AstaReal® Astaxanthin supports muscle recovery <sup>4, 5, 6</sup>
- AstaReal® Astaxanthin protect against exercise-induced muscle damage <sup>4, 5, 6</sup>
- AstaReal® Astaxanthin promotes good circulation; nutrition & oxygenation of muscles <sup>7, 8, 9</sup>
- AstaReal® Astaxanthin promotes mental clarity and focus <sup>10</sup>

**Studies with ASTAREAL® Astaxanthin**

1. Sawaki *et al.* Journal of Clinical Therapeutics & Medicines. 2002;18(9)1085-100. **6 mg/day**
2. Malmsten *et al.* Carotenoid Science. 2008; 13:20-2. **4 mg/day**
3. Earnest *et al.* International journal of sports medicine. 2011 Nov;32(11):882-8. **4 mg/day**
4. Djordjevic *et al.* The Journal of sports medicine and physical fitness. 2012 Aug;52(4):382-92. **4 mg/day**
5. Baralic *et al.* Phytotherapy research: PTR. 2013;27(10):1536-42. **4 mg/day**
6. Baralic *et al.* Evidence-Based Complementary and Alternative Medicine. 2015 **4 mg/day**
7. Miyawaki *et al.* Journal of clinical biochemistry and nutrition. 2008 Sep;43(2):69-74. **6 mg/day**
8. Saito *et al.* Albrecht von Graefes Archiv für klinische und experimentelle Ophthalmologie. 2012 Feb;250(2):239-45. **12 mg/day**
9. Iwabayashi *et al.* Anti-aging medicine. 2009 6(4):15-21. **12 mg/day**
10. Hongo *et al.* Japanese Pharmacology & Therapeutics. 2017 Jan; 45:61-72. **12 mg/day**
11. Fukamauchi M. *et al.* FOOD STYLE 21. 2007;11(10). **12 mg/day**

\* These are suggested structure/function claims based on AstaReal studies. These suggested structure/function claims have not been verified for promotional use by a regulatory team. We encourage you to review the studies together with your regulatory affairs team to confirm suitability for promotional applications.