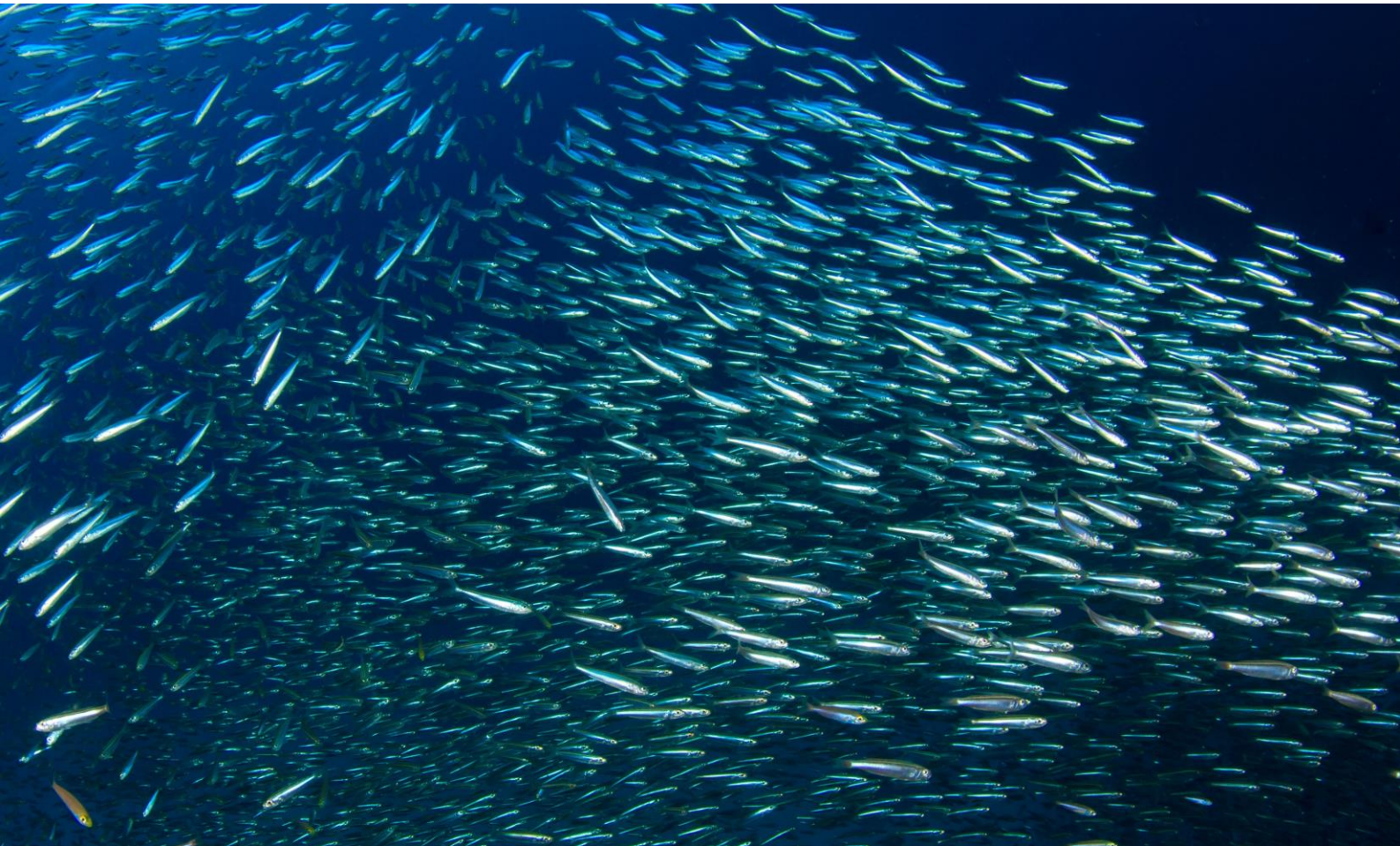


The benefits of New Zealand blue mackerel



Introduction

Blue mackerel is a nutrient-rich oily fish featured in several ZIWI® Peak recipes, including ZIWI® Peak's booster recipes - Skin & Coat Health, and Gut & Immune Support. Mackerel is widely known for its overall health benefits. The purpose of the document is to detail these benefits which include:

- **Skin & coat health**
- **Cognitive health**
- **Anti-inflammatory benefits**
- **Joint health**



Omega-3 fatty acids, vitamins, & minerals

Nutrient-dense, blue mackerel is an excellent source of protein, vitamins, and minerals such as vitamin A, vitamin B12, magnesium, and phosphorus. Blue mackerel is also a rich source of omega-3 fatty acids.

Omega-3 fatty acids, primarily docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA), are known for their health benefits. While the amount varies by season, blue mackerel typically contains up to 2.68% EPA and DHA combined ⁽¹⁾. This is up to 48% higher than the commonly used Atlantic salmon, which contains an average of 1.8% DHA and EPA combined ⁽²⁾.

Inflammation & joint health

DHA and EPA support the body's natural anti-inflammatory system. Inflammation is necessary for our pets at different times of their lives, such as injury or illness, as it supports the body's natural healing process. However, when dogs or cats live in a state of chronic inflammation, joints, bones, and movement can be impaired. Skin can become irritated, and there is a greater chance of degenerative diseases⁽³⁾.

Supplementation of omega-3 fatty acids has been studied for its role in helping alleviate symptoms of chronic osteoarthritis in dogs. Osteoarthritis affects up to 20% of dogs older than one year old.

Treatment is often limited to pain relieving medications, such as non-steroidal anti-inflammatory drugs. However, these can have negative side effects, so a more natural approach would be beneficial ⁽⁴⁾. A study from 2015 found that dogs that received specific amounts of EPA and DHA supplementation over the same time period had fewer signs of discomfort than those who did not receive EPA and DHA

supplementation⁽⁴⁾. The mechanism behind this change in joint discomfort and reduction in inflammation is thought to be related to the balance of the anti-inflammatory fatty acids EPA and DHA levels in the blood compared to the levels of the pro-inflammatory fatty acid arachidonic acid ⁽⁴⁾.

Skin and coat health

Omega-3 fatty acids, specifically DHA and EPA, have been studied for their role in relieving symptoms of pruritis, otherwise known as itching. Itchy, dry skin can affect pets for different reasons, but if not treated can result in skin lesions and abrasions. Omega-3 fatty acids can help alleviate symptoms of skin irritation through their anti-inflammatory properties⁽⁵⁾.

Cognitive health

In addition to supporting joint, skin, and coat health, blue mackerel provides an excellent level of fatty acids for brain health and is known as one of the richest sources of omega-3 fatty acids in the oily fish family. Omega-3 fatty acids, such as DHA and EPA, are vital to brain health. DHA is widely known as the most essential fatty acid for the brain due to its role in protecting the neuronal membrane from degeneration ⁽⁶⁾.

Conclusion

Mackerel is an abundant and nutrient-rich fish, packed full of joint, skin, and brain-supporting fatty acids and nutrients to support the mobility, cognitive development, and health of a dog or cat's skin and coat. Adding mackerel to a pet's daily meal is a proactive and delicious way to support your pet's overall health and well-being.

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