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Sustainable Aquaculture for a Secure Future

Title: Omega-6 (n-6) and omega-3 (n-3) fatty acids in tilapia and human health: a review

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Abstract: A recent publication questions the nutritional value of tilapia in the human diet following the movement to eat fish for their omega fatty acid (FA) content. It suggests that tilapia have

an elevated amount of omega-6 FAs (n-6) and a deficient amount of omega-3 FAs (n-3), a possibly unhealthy proportion for humans. A high n-6:n-3 ratio is problematic because too much arachidonic acid, an n-6 FA, promotes inflammation, which aggravates heart disease and other illnesses. This paper analyzes the numbers from different tilapia composition studies in an effort to understand the range of n-6 and n-3 totals and ratios present in both farmed and wild tilapia. Generally, wild tilapia have more n-3 FAs than farmed tilapia, but diet adjustments can alter the body composition of the domesticated variety. Consumers should consider fish as part of a balanced diet and evaluate their FA needs on an individual

basis.

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