

Novel Marine derived healthy pet food ingredient

Through the development of a novel process for the extraction of heart healthy proteins from pelagic fish blood water, Teagasc researchers have successfully incorporated this novel ingredient containing the highly beneficial ACE-1 inhibitor into dog biscuits. Key health improvements such as reduced blood pressure and weight gain observed in older dogs at clinical trial stage positions this ingredient as a non-pharmaceutical treat targeted at numerous ailments including weight management, and cardiovascular health.

Pet food; Marine; Blood pressure; ACE-1 Inhibitor

Opportunity

Humanisation of pets, in particular dogs, has inspired a growing interest and concern in pet health care. Aging pets in the UK, Europe and US with rich diets are requiring increasing amounts of pharmaceutical interventions to reduce blood pressure; diabetes and weight gain, contributing to increased costs to owners. Such “pet parents” are willing to pay a premium for pet health care and solutions targeted at numerous ailments such as weight management, fitness and cardiovascular health.

The Solution

Our technology offers a non-pharmaceutical solution for pet aging health issues, in the form of a variety of pet food product recipes, with benefits derived from the ACE-1 inhibitor in the product, achieved through inclusion of fish waste based hydrosylates as dried powders.

Advantages of Technology

1. This novel ingredient is based on marine processing waste stream – ample supply in Irish and European fisheries.
2. Clinical trials in dogs, feeding them biscuits containing the protein hydrosylates, have demonstrated:
 - Significant reduction in blood pressure compared to control studies
 - Reduction in weight gain vs control
 - Easily digestible and improved palatability vs control

Intellectual Property Status

Patent application filed by Teagasc in 2020, claiming a novel method of isolating and preparing as ingredients peptides derived from marine by-products generated during the processing of fish. It also claims the animal food product created as a result of the invention has health benefits, as well as a desirable appearance and texture to pets.

Stage of Development

The technology has had extensive pre-commercialisation research carried out including optimisation of process, scale up costing, and production of test dog biscuits containing the protein hydrosylates, for clinical trials.



Bloodwater ingredient containing dog treat biscuit

Opportunity

Teagasc is interested in partnering with a company/companies (existing and start-ups) to commercialise this technology.

Funding

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How to Proceed:

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