



**Meat and seafood
bioactives – creating
value from waste stream
co-products**

Harness the **hidden value** in meat and seafood waste streams to produce **novel bioactives** using **IRL's cost-effective technologies.**

Waste stream co-products contain multiple high-value bioactive compounds which can be used to deliver **health and wellbeing solutions**. Currently most of this material is untapped, meaning significant industry revenue is being lost.

IRL has developed smart processes for extracting the active ingredients from co-products, converting waste material into biologically active extracts with multiple uses. These extracts are screened using assays relevant to human health and wellbeing for the development of nutraceuticals and functional foods.

How we can help you

- ▶ We have the expertise to identify bioactives from industry co-products
- ▶ We have the knowledge and ability to develop cost-effective industrial processes for the production of these bioactive extracts
- ▶ We use food grade methods to produce nutraceuticals with demonstrated bioactivity
- ▶ We have in-house assays to measure the level of bioactivity, with external validation.

Our track record

We have worked with key players in the meat industry since our inception and have a strong relationship with the New Zealand meat industry through a multi-million dollar contract over five years in the Ovine Automation consortium. We also work with Meat Biologics, Meat and Wool NZ, and Meat & Livestock Australia (MLA) and other industry partners, to undertake the discovery and development of red meat-based bioactives.

Case study 1: Wound healing proteins from eye lens (IRL/MLA partnership)

This work began by searching for red meat extracts that stimulated cell movements important for healing. The cell mobility was only present after we had modified the proteins of interest. We have now developed a method for extraction of these proteins that allows their formulation into a wound dressing.

Case study 2: Wound healing product from a by-product of the meat industry (Mesynthes)

Our team worked closely with Mesynthes to develop a novel process to isolate and extract the product of interest within a tight timeframe. The company has now established its research and development and manufacturing facility at IRL in Wellington and is poised for significant growth.

If you want to significantly increase your company's revenue through the cost-effective utilisation of your co-products, then talk to our experts at IRL.

For all enquiries please contact the Industry Engagement team on 0508 CALL IRL (0508 225 5475). If calling from overseas phone +64 4 931 3000 or visit the *Contact Us* page on our website.

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