

# AquiNovo

**Accelerating Fish Growth**

**Nissim Chen, Ph.D., Co-Founder & CEO**

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# The Founders



## ***Nissim Chen, Ph.D., MBA - CEO***

- Over 15 years experience in technology commercialization and international business development in biotech and ag-bio industries
- Formerly VP BD at FuturaGene Group, Director of BD at Ramot, the technology transfer company of Tel Aviv University
- Ph.D., Hebrew University of Jerusalem; M.B.A., Tel Aviv University



## ***Prof. Berta Levavi-Sivan - Advisor***

- Professor at Hebrew University; world renowned specialist in aquaculture;
- Research focused on endocrine axis that leads to fish reproduction, and introduction of new species to Israeli aquaculture.
- 91 publications, 2 patents
- Sc.; life science; M.Sc. + Ph.D. zoology, Tel Aviv University



## ***Prof. Chaim Gilon - Advisor***

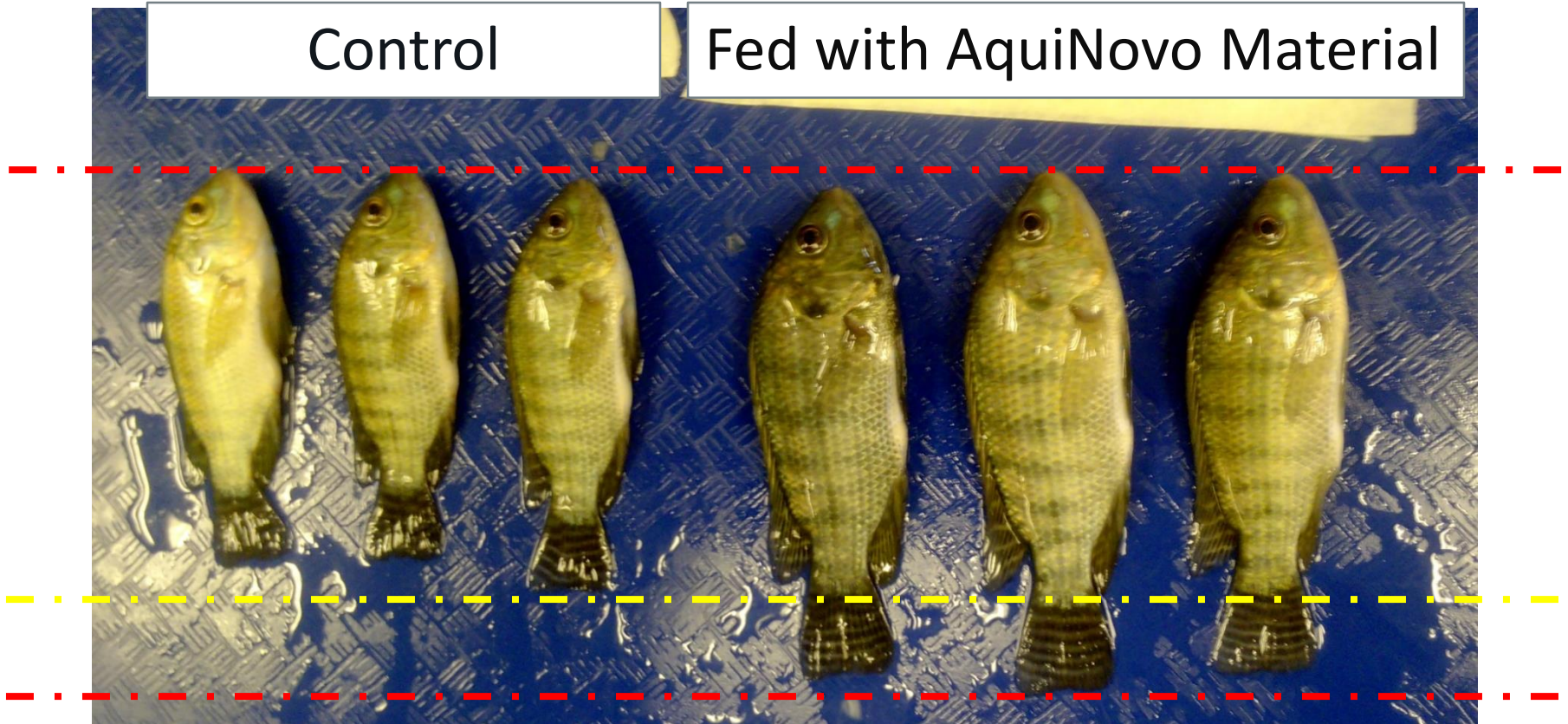
- Professor Emeritus, Hebrew University Faculty of Science; world renowned expert in organic chemistry
- Research focused on molecular mechanism of memory, development of technologies for conversion of bioactive peptides and active regions in proteins into drugs, signal transduction therapy
- Co-founder and consultant to several biotech companies
- 270 peer-reviewed publications; 40 patents

# What do we do?

## Make fish grow faster

Control

Fed with AquiNovo Material



Accelerating growth of farmed fish

Reducing time-to-market & production costs

# Why do we do it?



## Fish

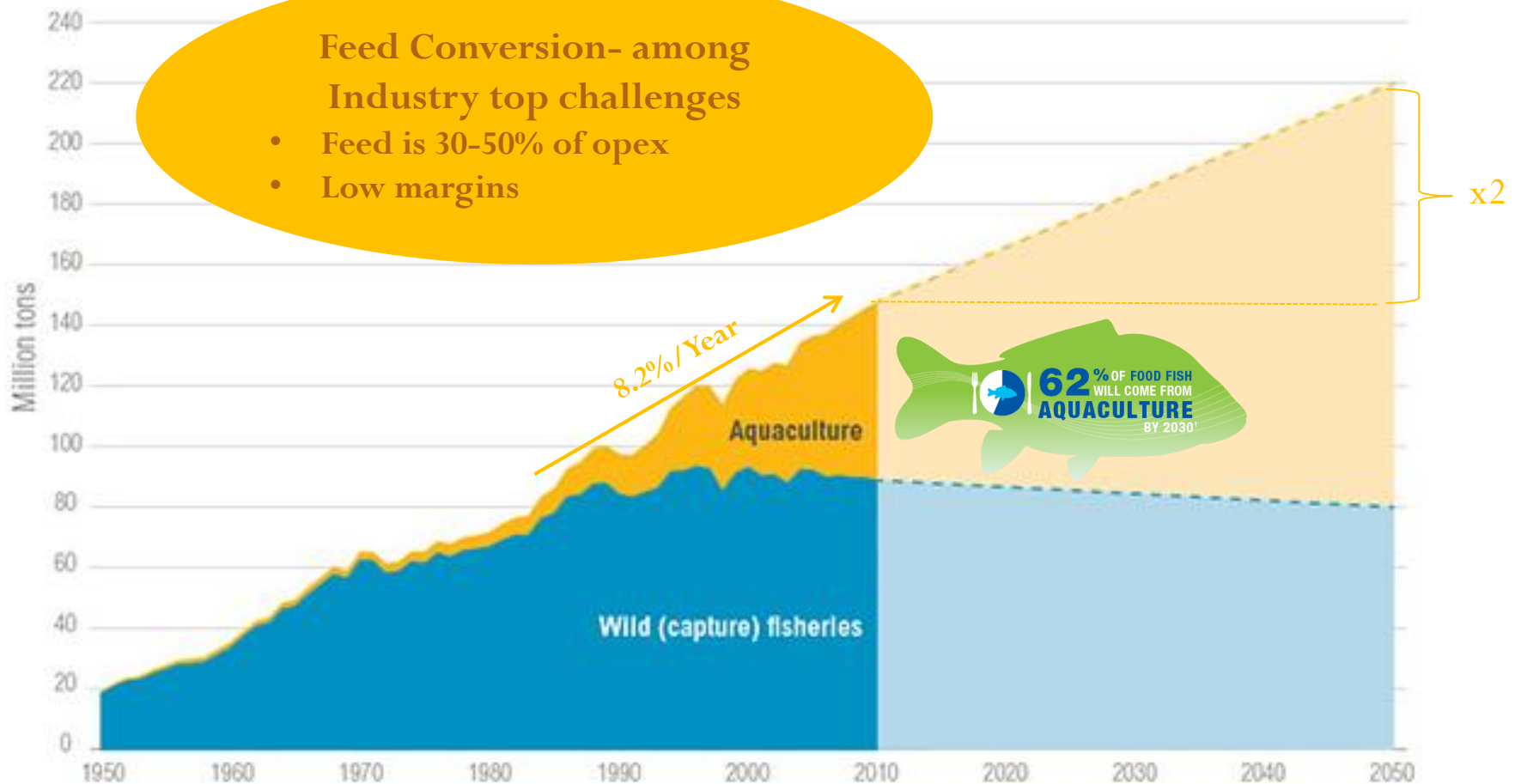
- Primary source of animal protein for 1B people
- 20% of animal protein for 2.9B people
- Projected to provide additional 14% of animal protein by 2050

# Why do we do it?

## Addressing Key Aquaculture Challenges

Feed Conversion- among Industry top challenges

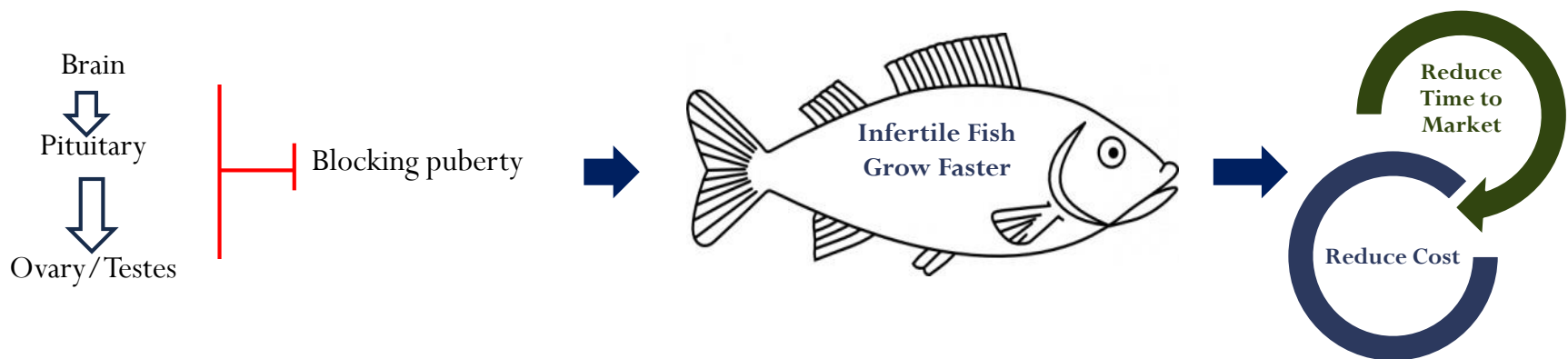
- Feed is 30-50% of opex
- Low margins



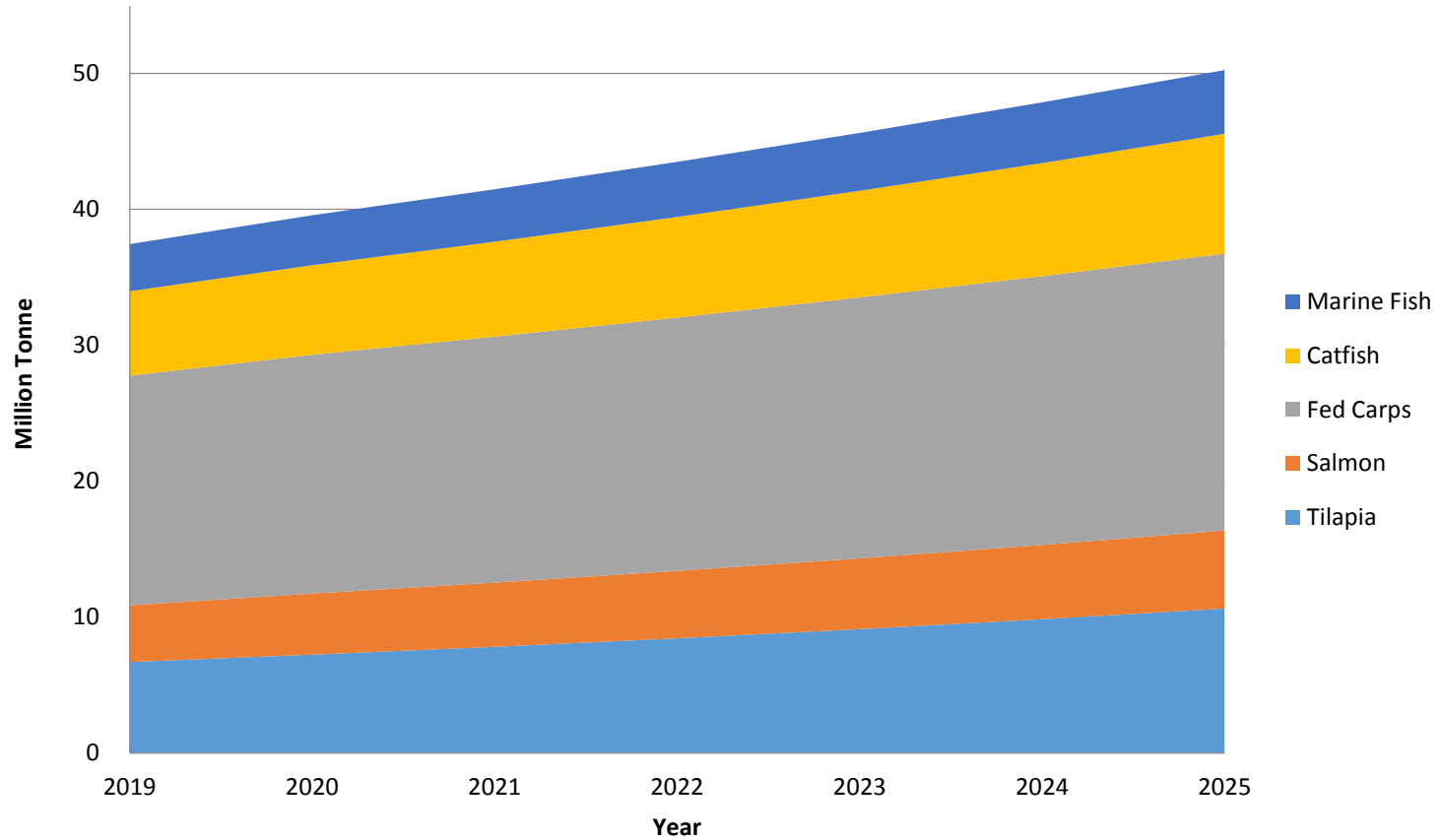
# How do we do it?

## AquiNovo's FishMagic™ technology - Inhibits puberty to accelerate growth & increase yield

- Proprietary materials block receptor of key reproductive hormone
- Non-hormonal, non-GM, no additional labor for fish farmer



# Aggregate addressable market for our products: 50 million tons by 2025



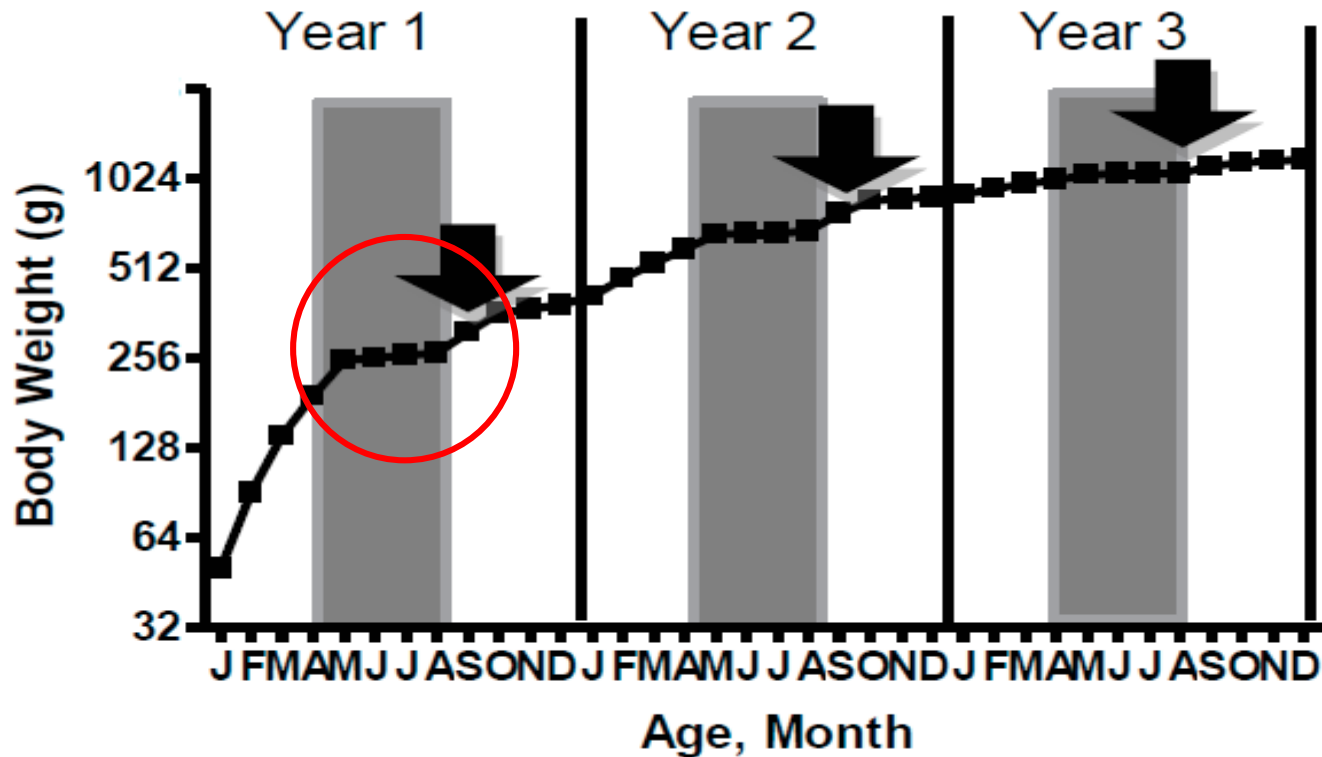


# High Value for Growers & Environment

- Accelerates growth
  - Shorter time to optimal weight and market
  - Reduction in production costs
  - Potential for increased yields/facility (more growth cycles/year)
- Easy application
  - AquiNovo materials to be incorporated in feed
  - Administered to young fish for limited time period
- Prevents reproduction of escapees in the wild



# High Value for Growers - Tilapia



- Prevents wild hatching
- Avoids use of male hormone for sex reversal

# Current Status

- Intellectual Property
  - Patent application filed
  - Worldwide exclusive license from the Hebrew University
- Experimental data
  - Post-puberty male tilapia injected with **FishMagic™** showed
    - Arrested gonads development
    - Decreased semen volume
    - Increased body weight
  - Young tilapia fed with **FishMagic™** showed accelerated growth
  - Initial indication for activity in salmon
- First tilapia field trial planned for mid 2016

# Our path to market

- Regulatory
  - Indications for feed additive status
  - Regulatory mapping and initial safety during first year
- Business Model
  - Produce and sell products directly to feed companies for integration into their feed
- On-going discussions with potential strategic partners
- Projected launch of first product for tilapia: 2019

# Our vision



**Today**

*Yield increase technology  
enhancing sustainability*

**Long Term Vision**

*Biotech hub for the rapidly  
growing aquaculture market*