



Egg Antihypertensive Peptides for Hypertension

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SUMMARY

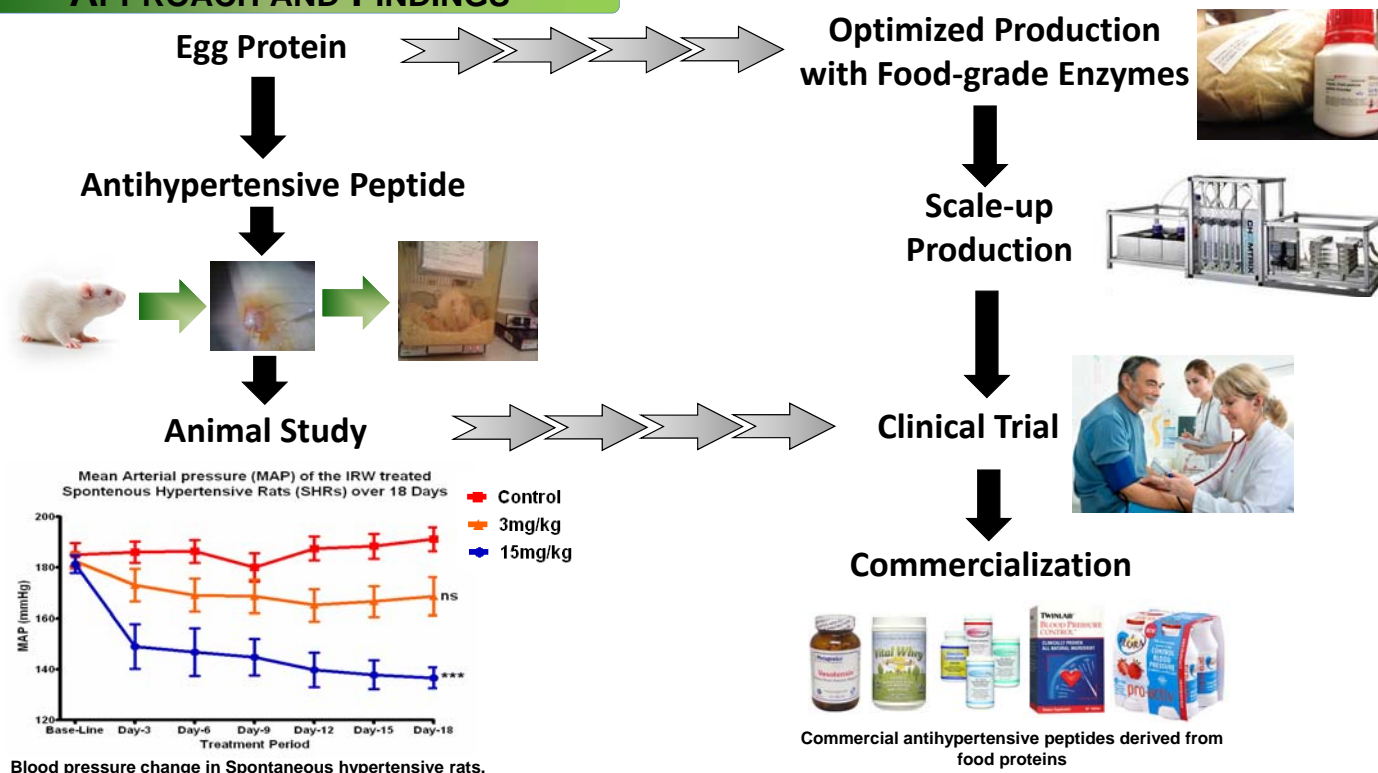
- We have identified potent anti-hypertensive peptide (**IRW/LKP/IQW**) from the egg white protein ovotransferrin.
- We observed that egg peptides could significantly attenuate blood pressure in adult male spontaneously hypertensive rats.
- Optimization of peptide preparation with food-grade enzymes is currently under investigation.
- A clinical trial will be conducted before commercialization of the egg derived antihypertensive product

BACKGROUND

- Hypertension affects about 30% of Canadian adults, or over 53% of the population aged 60-79. Hypertension is the major risk factor for cardiovascular disease, the leading cause of death worldwide.
- Antihypertensive drugs are the first line therapy for hypertension but are associated with adverse side effects.
- Antihypertensive peptides derived from food proteins are safe.

PURPOSE: Develop commercially viable and cost effective antihypertensive peptides from eggs.

APPROACH AND FINDINGS



SIGNIFICANCE OF RESULTS

- Egg derived bioactive peptides showed in vivo antihypertensive effect in animal models.
- Antihypertensive egg peptides can be used for the development of functional foods/nutraceuticals for the treatment and management of hypertension.
- It could be commercialized as 'Antihypertensive agents from Egg', which would diversify the use of egg and facilitate long-term growth of the egg industry.

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