

# OMEGA-3 POULTRY: The Science Inside the Food

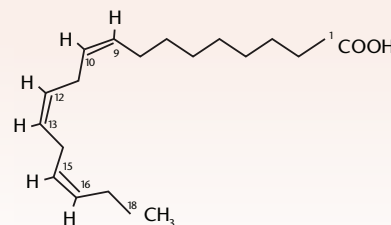
LinPRO® A Naturally Better Source for Omega-3 Meat, Eggs and Dairy.



The benefits of essential omega-3 fatty acids have been documented for several years. However, it is only recently that consumer awareness and demand for such functional foods have begun to increase.  $\alpha$ -linolenic acid (ALA) (C18:3n3) is one of the main forms of omega-3 fatty acids. When consumed, this fatty acid may act as a precursor for other members of the omega-3 family, such as Eicosapentaenoic acid (EPA) (C20:5n3) and Docosahexaenoic acid (DHA) (C22:6n3).

By naturally increasing the levels of omega-3 fatty acids in “everyday” foods through the use of O&T Farms’ patented flax-based LinPRO® product, it becomes possible to produce a healthy dietary alternative with an improved Omega-6/Omega-3 ratio and significant health benefits.

ALPHA LINOLENIC ACID – 3 DOUBLE BONDS



## THE PROOF IS IN THE POULTRY

O&T Farms’ research initiatives have shown exemplary results in the success of omega-3 fatty acid transfer into poultry meat. Demonstrational trials indicate an increase in both the ALA and total omega-3 content in a 100g serving.

THE LinPRO® EFFECT				
	Non-LinPRO® diet <sup>1</sup>		20% LinPRO® diet <sup>2</sup>	
	Whole Bird	Skinless Breast	Whole Bird	Skinless Breast
Total Fat (%)	9.20	1.89	10.80	1.53
ALA (%F.A.)	0.79	0.93	8.55	7.95
Omega-3 (%F.A.)	0.88	1.96	9.57	10.45
Omega-6/Omega-3 Ratio	17.60	3.16	1.68	1.54
Omega-3 mg/100g serving	77	35	977	151

<sup>1</sup> Source: Midwest Laboratories Inc. O&T Farms demonstration trial OT12-4 2012. <sup>2</sup> Lipid Analytical Services Ltd. O&T Farms broiler trial OT13-5 2013.

## SENSORY EVALUATION

Sensory analysis was conducted to compare consumer acceptance of LinPRO® fed poultry compared to non-LinPRO® fed poultry. Products were scored out of a 6 point scale (6 = extremely like) based on appearance, color, texture, juiciness, and flavor. Sensory analysis results indicate no difference between the two products.

POULTRY BREAST MEAT		
	Control	LinPRO®
Rating	4.8	4.8

Source: The Saskatchewan Food Development Center

## TECHNICAL SUPPORT

O&T Farms stands behind their products and customers by offering technical support to ensure the success of the producer’s operation.

The information contained herein is based on technical data and tests which are reliable to the best of O&T Farms Ltd's knowledge. This information is intended for use by persons having the appropriate technical skills, at their own discretion and risk. Due to the possibility of genetic and dietary variations, the inclusion rate and formulation of diets using LinPRO® may be different than those referred to above. Since conditions of use are outside O&T Farms Ltd's control, no warranties or representations are made with respect to this information. O&T Farms Ltd can assume no liability for results obtained or damages incurred through the use thereof.

