

## **APPENDIX 1: Fuji Chemical Industries/AstaReal's company history**

**1946:** Just after the Second World War, Fuji Chemical Industries starts business of yeast production for bread baking in Toyama Prefecture, Japan, to help ease the severe food shortage in postwar Japan, in line with the company mission to bring new technologies, products and services to create a new market with a strong passion to contribute the human healthcare.

**1954:** Fuji Chemical Industries successfully developed Neusilin (<http://www.fujichemical.co.jp/english/medical/medicine/neusilin/index.html>). Neusilin quickly developed acclaim and entered the limelight of the Japanese pharmaceutical industry. Neusilin was recognized as an ideal antacid, free of side effects.

**1964:** Fuji Chemical Industries establishes a strong presence in the Japanese pharmaceutical industry. Fuji succeeded with the organic pharmaceutical products market and began development of Pipethanate. Fuji's major sales came from organic and inorganic pharmaceutical preparations.

**1980s:** Equipped with large-scale spray dryers to facilitate R&D and the production of "orphan drugs". In doing so, Fuji Chemical Industries was able to actualize the company belief and become pioneer in the field of Orphan Drugs.

**1990's:** Mr. Mitsunori Nishida takes the post as president leads new structure of manufacturing, sales and quality assurance while continuing to introduce unique and advanced capabilities. Fuji diversified its business into developing nutraceutical products that maintains health and promotes well-being as preventative medicine. AstaReal is a research-based biotech company, dedicated to the production, research and marketing of natural astaxanthin. AstaReal was originally from a leading research institution of Uppsala University in Sweden, established in 1987.

**1994:** For the first time in the world, AstaReal succeeded in the large-scale industrial production of astaxanthin from *Haematococcus pluvialis* alga in Gustavsberg, Sweden. Since then, AstaReal has continued to be the pioneer and leader in astaxanthin clinical science, cultivation technology and product innovation.

**2004:** Astavita series launches in the Japan and U.S. market.

**2008-12:** AstaReal ACT launched in Japan market, sales of dietary supplements via medical distribution channel took full-scale business. AstaReal approved for GRAS by U.S. FDA and formation of AstaReal Group of companies.

**2014 -15:** Second astaxanthin manufacturing plant completed in Moses Lake, WA, USA. Astavita Inc. established for sales of finished astaxanthin products in the U.S. Non-GMO, cGMP, Halal and Kosher certification completed.

**2016:** AstaReal Pte Ltd Singapore established targeting Asean sales.

## **APPENDIX 2: Vincent Wood's back ground and biography**

Vincent Wood was inspired by 1990's biotechnology boom and it cemented his career as a specialist in biotechnology for business. After completing his studies in University of London, he has worked for biotech venture companies such as Celltech/Lonza UK. He moved from London, England to join AstaReal in Japan out of interest in researching the possibilities that the then newly-discovered astaxanthin held. He dedicated the last 15 years travelling to many parts of the world to present the benefits of astaxanthin and healthy ageing.

After 15-years of R&D and market creation, Vincent Wood is fully convinced of the power of astaxanthin to transform and improve lives. Vincent Wood can explain more about this powerful natural antioxidant and how this will become a household supplement like Vitamin C, of which astaxanthin is around 6000 times stronger, and on AstaReal's growth plans in Singapore and the region.

He was born in London, England, lived in Tokyo, Japan and recently moved to Singapore. Vincent enjoys all kinds of gastronomical experiences, drinking and collecting wines, cooking, trekking, gym fitness, running, snowboarding and karaoke.

### **Speaking and publications (highlights)**

2016 Sept: "The benefits of astaxanthin for skin health" - A4M Congress on Anti-aging and Aesthetic Medicine, Bangkok, Thailand.

2015 Sept: "Astaxanthin – designed to be different (cardiology) – Kopapdi XVI 2015, Bangdung, Indonesia.

2015 Sept: "AstaReal astaxanthin for anti-aging." - A4M Congress on Anti-aging and Aesthetic Medicine, Bangkok, Thailand.

2014 June: "A Preventative Approach to Life-style Related Diseases: from a person experience." Taipei Medical University, Pharmaceutical Society of Taiwan

2013 June: "Natural Products for Eye Health: The Vision Benefits of Astaxanthin in the Digital Age." 31st Annual Academic Meeting Royal College of Ophthalmologists of Thailand, Bangkok.

2009 February: "Natural Microalgal Plant Active for Today's Skin Care Requirements", Cosmetic Valley, Orlean, France.

2008 November: "Astaxanthin and Metabolic Syndrome", Astaxanthin Mini-Symposium, Dubai, UAE

2007 IOA Eye Annual Conference, Jakarta, Indonesia. "Introduction to Astaxanthin: 21<sup>st</sup> Century Nutritional Defense against ROS"

2008 (May) Innovations in Food Technology. "Keeping metabolic syndrome at bay: the role of natural astaxanthin in cardiovascular health, type 2 diabetes and weight management."

2004 Carotenoid Science Journal. "Astaxanthin – A New Radical Carotenoid Antioxidant."