

## Business Review

## Established and Clean-label Antioxidants

INGREDIENT BUSINESS REVIEW – FOOD, HEALTH FOODS, SUPPLEMENTS, FEED

Europe, North America, Selected APAC

2022 – 2027

**INTRODUCTION**

Antioxidants perform two broad functions in the food and feed industries – *in vitro* (oxidation control in packaged foods) and *in vivo* (as health ingredients that mop up free radicals in the body). Oxidation in edible fats and oils results in rancidity, which, in turn, leads to unpleasant tastes/flavors and changes in product appearance. Using antioxidants is the most economical and practical way to retard this rancidity process.

The health aspect of antioxidants (“mopping up” free radicals in the body) is rapidly gaining importance and “antioxidant” has become an entire generic health food ingredient category in its own right, similar to the case of vitamins. Although dosage, efficacy, and safety of a number of products are still uncertain, volume growth in this ingredient category continues unabated.

Today, an increasing variety of complex ingredient mixes and natural extracts are available in the market, challenging the traditional positions of chemically-synthesized antioxidants. The Covid-19 pandemic has provided a fillip to this trend, as consumers increasingly seek clean-label ingredients, and those with a health halo. Conversely, the pandemic has presented increasing price pressure on the consumer, and with the current climate of rising energy costs and inflationary pressures, consumers will increasingly feel the financial pinch. This may represent a key challenge to premium positioned antioxidants with a higher price tag.

GIRACT, the ingredients and technologies market research and consultancy specialist, has over 50 years’ experience in researching and analysing the global ingredients markets. It is now proposing a new project that will include an in-depth assessment of the roles of antioxidants as both *in vivo* and *in vitro* agents across the key global markets.

**OBJECTIVES**

- Review current and potential ingredients, their specifications, food/feed applications, limitations
- Present Indicative pricing for antioxidant ingredients
- Understand the legislative situation in Europe, North America, and APAC
- Analyse the producers, their strategy for developing these products, strengths, weaknesses, estimated production
- Appreciate the “why” and “why not” concerning the use of various antioxidants based on in-depth interviews with users, covering the different aspects (functional, 'natural', health)
- Identify current food and feed market sizes, and forecast antioxidant volumes for 2027 across regions/products

**PRODUCTS**

*Established products:* tocopherols/vitamin E, ascorbic acid/vitamin C, sodium ascorbate, gallates, BHA, BHT, TBHQ, ethoxyquin, ascorbyl palmitate, β-carotene

*Clean-label products:* natural extracts (largely rosemary), sodium erythorbate, lutein, lycopene, isoflavones, green tea extracts, wine polyphenols (grape), pine bark-based

**MARKETS**

Europe (EU27+UK+NO+CH)

North America (USA+Canada)

Selected APAC (China, India, Selected ASEAN)

**SECTORS**

*in-vitro:* oils and fats, processed meat/fish, meat/fish analogs, seasoning, feed

*in-vivo:* energy/functional drinks, teas, juices, functional bars, cereals, spreads, chilled dairy, supplements

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