

**EVALUATION OF SYNTHETIC PRESERVATIVE
USAGE IN BAKED PRODUCTS OF THAILAND
AND THEIR CONSUMERS' SAFETY PERCEPTIONS**

ABSTRACT

By:

ELITA YELIANI

14/363923/TP/10910

The consumption of bakery products highly increases in Thailand even though almost all bakery industries use synthetic preservatives to maintain the quality of their products. Identification of synthetic preservatives and consumer survey on bakery product consumption for evaluating the safety perception were evaluated in this research. The concentration of sorbic acid and benzoic acid in fifty-three collected bakery products, such as pies, cookies, bread, pastry, cake, etc. from convenience stores, supermarkets, modern bakery/coffee shops, homemade bakery shops, and local groceries in Thailand were investigated using High-Performance Liquid Chromatography (HPLC). Meanwhile, a consumer perceptions survey was conducted on 405 participants. The result shows almost all the samples of Thailand's bakery products contained benzoic acid and sorbic acid. Only one sample was not complied to Thailand regulation (maximum levels; MPL 1000 mg/kg). On the other hand, safety perceptions on preservative usage was that synthetic preservatives in bakery products were not safe because of their negative health effects. Consumers needed the education of synthetic preservatives and they also desired natural preservatives for bakery products.

Keywords: benzoic acid, safety perception, sorbic acid, synthetic preservative

**EVALUASI PENGGUNAAN PENGAWET SINTETIS
PADA *BAKED PRODUCTS* THAILAND
DAN PERSEPSI KONSUMEN TERHADAP KEAMANANNYA**

INTISARI

Oleh:

ELITA YELIANI

14/363923/TP/10910

Konsumsi produk roti di Thailand mengalami peningkatan yang tajam meskipun hampir semua industri roti telah menggunakan pengawet sintesis untuk menjaga kualitas produk. Identifikasi pengawet sintetis dan survei konsumen untuk mengevaluasi persepsi keamanan pengawet tersebut diinvestigasi dalam penelitian ini. Konsentrasi asam sorbat dan asam benzoat pada lima puluh tiga produk roti, seperti *pie, cookies, bread, pastry, cake* dll. dari toserba, supermarket, toko roti/*coffee shops, homemade bakery shops*, dan toko lokal bahan pangan di Thailand diinvestigasi menggunakan High-Performance Liquid Chromatography (HPLC). Sementara itu, survei persepsi konsumen dilakukan pada 405 orang. Hasil penelitian ini menunjukkan bahwa hampir semua sampel produk roti Thailand mengandung asam benzoat dan asam sorbat. Terdapat satu sampel tidak memenuhi peraturan Thailand (konsentrasi maksimum; MPL 1000 mg / kg). Di sisi lain, persepsi responden keamanan terhadap penggunaan pengawet adalah bahwa pengawet sintetis dalam produk roti tidak aman karena memberikan efek negatif terhadap kesehatan mereka. Konsumen membutuhkan pengetahuan tentang pengawet sintetis dan mereka menginginkan pengawet alami untuk produk roti.

Kata kunci: asam benzoat, asam sorbat, pengawet sintetis, persepsi keamaan