INTISARI

Bahan pangan asal hewan yang mengandung kadar residu fluorokuinolon melebihi batas maksimum residu (BMR) dapat menyebabkan gangguan kesehatan dan resistensi antibiotik apabila dikonsumsi manusia. Penelitian ini bertujuan untuk mengetahui keamanan bahan pangan asal hewan yang beredar di pasaran dengan membandingkan kadar residu fluorokuinolon menggunakan metode kromatografi cair kinerja tinggi (KCKT) dengan BMR.

Metode yang digunakan dalam penelitian ini adalah *narrative review* dengan menganalisis beberapa jurnal internasional yang meneliti kadar residu fluorokuinolon pada bahan pangan asal hewan di pasaran dengan metode KCKT kemudian membandingkan hasil kadar yang didapatkan dengan BMR sehingga keamanan bahan pangan asal hewan dapat ditentukan.

Sampel yang dianalisis dalam literatur meliputi daging ternak dan akuakultur, jeroan ternak, lemak dan kulit unggas, telur, dan susu. Hasilnya ditemukan sebanyak 397 sampel daging unggas, 273 sampel jeroan unggas, 27 sampel kulit dan lemak unggas, 17 sampel telur, 26 sampel ikan dan udang, 72 sampel susu, dan 107 sampel daging sapi, kambing, dan babi memiliki kadar residu fluorokuinolon melebihi BMR sehingga dapat disimpulkan bahwa sebagian produk bahan pangan asal hewan tidak aman untuk dikonsumsi masyarakat. Negara asal sampel yang memiliki kadar residu fluorokuinolon melebihi BMR antara lain Nigeria, India, Mesir, Cina, Pakistan, Vietnam, Iran, Turki, Jepang, Thailand, Brazil, dan Portugal.

Kata kunci: Residu fluorokuinolon, KCKT, bahan pangan hewani.

ABSTRACT

Food of animal origin that contain fluoroquinolone residue exceeding the maximum residue limit (MRL) can cause health problems and antibiotic resistance when consumed by humans. This study aims to determine the safety of foodstuffs from animal origin on the market by comparing the residual levels of fluoroquinolone residues using the high performance liquid chromatography (HPLC) method with established MRLs.

The method used in this research is narrative review by analysing several international journals that examined the residual levels of fluoroquinolones in food of animal origin on the market using the HPLC method then comparing the results obtained with MRL so that the safety of food from animal origin can be determined.

The samples analysed in the literatures included livestock and aquaculture meat, livestock offal, poultry fat and skin, eggs, and milk. The results found that 397 samples of poultry meat, 273 samples of poultry giblets, 27 samples of poultry skin and fat, 17 samples of eggs, 26 samples of fish and shrimp, 72 samples of milk, and 107 samples of beef, mutton, and pork contained fluoroquinolone residue levels exceeding the MRL. So, it can be concluded that some food products of animal origin are not safe for public consumption. The countries of origin of the food product samples that have fluoroquinolone residue levels exceeding the MRLs are Nigeria, India, Egypt, China, Pakistan, Vietnam, Iran, Turkey, Japan, Thailand, Brazil, and Portugal.

Key words: fluoroquinolone residue, HPLC, food of animal origin.