

ABSTRAK

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Karya Tulis Ilmiah, Juli 2016

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STUDI TENTANG KUALITAS MIKROBIOLOGI ES BATU KRISTAL DAN HYGIENE SANITASI SEPANJANG RANTAI DISTRIBUSI DI SURABAYA

ix + 66 halaman + 9 tabel + 19 lampiran

Es batu kristal yang dikonsumsi masyarakat didistribusikan melalui rantai distribusi yaitu pabrik, agen, dan pedagang es di Surabaya. Masing-masing rantai distribusi mempunyai resiko cemaran terhadap kualitas es salah satunya adalah cemaran mikrobiologi sehingga menimbulkan gangguan kesehatan pada konsumen.

Penelitian ini adalah penelitian deskriptif bertujuan untuk memperoleh gambaran kualitas mikrobiologi es batu kristal dan hygiene sanitasi sepanjang rantai distribusi di Surabaya. Pengambilan sampel dan observasi dilakukan berurutan di hari yang sama, berbeda waktu dan pengulangan 3 kali selama 3 hari berturut-turut. Data yang diperoleh dianalisis secara deskriptif.

Hasil penelitian menunjukkan es batu kristal negatif *E. coli* tetapi mengandung *MPN Coliform*. *MPN Coliform* pada es batu di pabrik 10 koloni/100 ml sampel, di agen 12 – 15 koloni/100 ml sampel, dan di pedagang 15 – 43 koloni/100 ml sampel. Hygiene sanitasi yang mempengaruhi *MPN Coliform* pada es batu kristal adalah bahan baku, proses produksi, pengangkutan, dan penjamah yang kurang memenuhi syarat.

Kesimpulan kualitas mikrobiologi es batu kristal sepanjang rantai distribusi di Surabaya dengan parameter *E. coli* memenuhi syarat dan *MPN Coliform* tidak memenuhi syarat. Disarankan bagi Dinas Kesehatan untuk melakukan pengawasan secara berkala. Bagi pabrik membuat Standar Operasional Prosedur pengolahan bahan baku. Bagi agen dan pedagang untuk meningkatkan hygiene dan sanitasi alat angkut, tenaga pengangkut, peralatan, dan penjamah.

Kata Kunci : Es Batu Kristal, Rantai Distribusi, Hygiene Sanitasi, *MPN Coliform*, *E. coli*

Daftar Bacaan : 16 buku + 6 jurnal (1978 – 2015)

ABSTRACT

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Scientific Paper, July 2016

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STUDY ON THE QUALITY OF CRYSTAL ICE CUBE MICROBIOLOGY AND HYGIENE
SANITATION THROUGHOUT THE CHAIN OF DISTRIBUTION IN SURABAYA

ix + 66 pages + 9 tables + 19 attachments

Crystal ice cube consumed by people is distributed through distribution chain from factories, agents, and ice traders in Surabaya. Each distribution chain poses risk of contamination to the quality of the ice, one of which is microbiological contamination that causes health problems to consumers.

This is a descriptive study aimed to obtain microbiological quality of crystal ice cube and sanitation hygiene throughout the distribution chain in Surabaya. Sampling and observations were conducted sequentially in the same day, in different times and with 3 repetitions for 3 days in a row. Data were analyzed descriptively.

The results showed that the ice crystals did not contain *E. coli* but contained Coliform MPN. The rate of MPN Coliform on ice at the factory was 10 colonies / 100 ml sample, at the agent was 12-15 colonies / 100 ml sample, and at the merchant 15-43 colonies / 100 ml sample. Hygiene sanitation affecting MPN Coliform in crystal ice are non-standard raw materials, production process, transport, and handlers.

In conclusion, the microbiological quality of crystal ice cube along the distribution chain in Surabaya with the *E. coli* parameter was standard and MPN Coliform did not meet standard. The Health Department needs to conduct surveillance on a regular basis. The factory of ice cube needs to make Standard Operating Procedures. Agents and traders need to improve hygiene sanitation of conveyance, transport personnel, equipment, and handlers.

Keywords : Ice Cube Crystals, Chain Distribution, Sanitation Hygiene, *MPN Coliform*, *E. coli*

Bibliography : 16 books + 6 journals (1978-2015)