

## HUBUNGAN ANTARA MONOSODIUM GLUTAMAT PADA JAJANAN DENGAN KEJADIAN GANGGUAN PEMUSATAN PERHATIAN DAN HIPERAKTIVITAS (GPP/H) PADA ANAK DI SEKOLAH DASAR (SD) DI BANGUNTAPAN

Sarah Maulida<sup>1</sup>, Elisabeth S. Herini<sup>2</sup>, Susetyowati<sup>3</sup>

### INTISARI

**Latar Belakang** : Sudah bukan rahasia lagi jika jajanan anak di sekolah mengandung berbagai macam zat berbahaya seperti penyedap rasa atau monosodium glutamat (MSG). Namun hal ini dianggap wajar oleh para penjual jajanan di sekolah agar jajanan terasa nikmat. MSG diindikasikan dapat mempengaruhi perilaku anak terutama anak gangguan pemusatan perhatian dan hiperaktivitas (GPP/H).

**Tujuan** : Tujuan penelitian ini secara umum adalah untuk mengetahui gambaran konsumsi MSG makanan dalam jajanan terhadap anak dengan GPP/H di Yogyakarta

**Metode** : Penelitian ini menggunakan rancangan case-control. Responden dipilih berdasarkan skrining *Abbreviated Connees Teacher Rating Scale* (ACTRS) yang diisi oleh guru, Skala Penilaian Perilaku Anak Hiperaktif Indonesia (SPPAHI) yang diisi oleh orang tua dan hasil diagnosis menggunakan keusisioner *Diagnostic and Statistic Manual – IV* (DSM-IV) yang dilakukan oleh psikolog ahli tumbuh kembang anak. Masing – masing kelompok kasus dan kontrol diwawancarai menggunakan *Food Frequency Quetioner* (FFQ) jajanan anak yang terdiri dari 6 item kelompok jajanan. Data dianalisis secara statistik menggunakan *chi-square test*

**Hasil** : Uji *chi-square test* didapatkan *Odds Ratio* (OR) 14,091 pada jajanan 2 (cimol aneka rasa) dan *p-value* 0,003; OR 19,286 pada jajanan 3 (aneka olahan aci) dan *p-value* < 0,001; OR 6,333 pada jajanan 4 (snack komersial) dan *p-value* 0,001; OR 5,800 pada jajanan 5 (snack olahan rumah) dan *p-value* 0,008; OR 27,353 pada jajanan 6 (bakso, soto dan mie instan) dan *p-value* < 0,001, menunjukkan adanya pengaruh yang signifikan dari konsumsi jajanan 2,3,4,5 dan 6 terhadap anak yang mengalami GPP/H.

**Kesimpulan** : Ada hubungan antara konsumsi jajanan berupa cimol aneka rasa, aneka olahan aci, snack komersial, snack olahan rumah, bakso, soto dan mie instan terhadap anak yang mengalami GPP/H.

### Kata Kunci :

GPP/H, jajanan, MSG

- 
- 1.3 Program Studi Gizi Kesehatan Fakultas Kedokteran UGM, Yogyakarta
  2. Bagian Ilmu Kesehatan Anak RSUP DR. SARDJITO, Yogyakarta

THE CORRELATION BETWEEN THE FREQUENCY OF CONSUMPTION OF SNACK  
CONTAINED MONOSODIUM GLUTAMATE WITH THE OCCURRENCE OF  
ATTENTION DEFICIT/HYPERACTIVITY DISORDER (ADHD) IN CHILDREN IN  
ELEMENTARY SCHOOL IN BANGUNTAPAN

Sarah Maulida<sup>1</sup>, Elisabeth S. Herini<sup>2</sup>, Susetyowati<sup>3</sup>

ABSTRACT

**Background :** *It's not a secret anymore if school snacks contained dangerous substace being or Monosodium Glutamate (MSG). But this is toughed as normal thing for the seller, in order to have delicious taste. MSG was indicated can affect children behavior especially for the children with Attentin Deficit/Hyperactivity Disorder (ADHD).*

**Objective :** *The objective of this study is to know the consumption level of snacks with MSG by children with ADHD in Yogyakarta*

**Method :** *This research used case-control design. The variables observed from this research were severity of GPP/H children and consumption level of MSG contained in snacks. Screening tools of ADHD children were Abbreviated Connees Teacher Rating Scale (ACTRS) and SPPAHI, diagnostic's tool was Diagnostic and Statistic Manual – IV (DSM-IV) form, and consumption level was measured using Food Frequency Qetioner (FFQ) for snack. Variable in this research were analyzed by using chi-square test.*

**Result :** *From chi-square test, snack number 2 (Cimol various flavor) was contained Odds Ratio (OR) 14.091 and p-value 0.003; snack number 3 (various of aci) was contained OR 19.286 and p-value <0.001; snack number 4 (snack commercial) was contained OR 6.333 and p-value 0.001; snack number 5 (home made snack) was contained OR 5.800 and p-value 0.008; snack number 6 (meatball, soto and instant noodles) was contained OR 27.353 and p-value <0.001, Was shown significant affect from the snack 2,3,4,5 and 6 to the childrens with ADHD*

**Conclusion :** *There is relation between consumption of snacks containing MSG with ADHD*

**Key Words:**

ADHD, Snack Consumption, MSG

1.3 Departement of Health and Nutrition Faculty of Medicine UGM, Yogyakarta

2. Pediatric Departments, DR. SARDJITO General Hospital