Anak kelas 5 SD mulai terjadi peningkatan nafsu makan sehingga terjadi peningkatan pengonsumsi jajanan. Jajanan yang banyak dikonsumsi banyak mengandung sukrosa sehingga dapat mengubah pH saliva menjadi asam dan berperan dalam proses karies yang dapat dicegah dengan membersihkan rongga mulut dengan menggosok gigi atau berkumur dengan air mineral.

Tujuan dari penelitian ini adalah untuk mengetahui perubahan pH saliva yang terjadi setelah mengonsumsi jajanan.

Jenis penelitian cross sectional dengan metode observasi. Subyek penelitian berjumlah 58 anak yang sudah sarapan dan mengonsumsi jajanan saat istirahat serta merupakan siswa SDN Cibogo. Pengukuran pH saliva dilakukan dua kali, yaitu sebelum dan setelah mengonsumsi jajanan kemudian saliva anak ditampung pada gelas penampung. pH saliva diukur menggunakan indikator pH. Analisis data menggunakan uji T-berpasangan dengan α = 0,05.

Hasil dari penelitian adalah 38 anak mengalami penurunan pH saliva, 10 anak pH saliva tetap, dan 10 anak pH saliva naik. Rerata nilai pH saliva sebelum mengonsumsi jajanan 6,45 dan rerata nilai pH saliva setelah mengonsumsi jajanan 6,33.

Simpulannya terdapat perubahan pH saliva yang menurun menjadi lebih asam setelah mengonsumsi jajanan.

Kata kunci : anak SD, jajanan, sukrosa, pH saliva, indikator pH, karies
ABSTRACT

The 5th grade elementary student who are at increased appetite will result in an escalation of snack consumption. Many of consumed snack contains sucrose which could change salivary pH becomes acidic, and it will role in the caries process which can be prevented by cleaning oral cavity with brushing teeth or gargle with mineral water.

The purpose of this study was to determine the salivary pH changes that occur after eating snacks.

This research used a cross-sectional with observational method. The research’s subjects are 58 children who already have breakfast and consuming snacks during breaks which is the student of SDN Cibogo. Salivary pH measurements performed twice, before and after eating snacks the children's saliva accommodated in the glass container. Then salivary pH was measured using pH indicator. The data analyzed using T-paired test with $\alpha = 0.05$.

As for the results of the study, 38 children found to have a decreased in salivary pH, 10 children salivary pH’s remain unchanged and 10 children salivary pH’s were increased. The mean value of salivary pH before eating snacks is 6.45, and the mean value of salivary pH is 6.33 after eating snacks.

With the changes in the pH of saliva is decreased, it can be concluded that the acidity of the oral cavity is likely to increase due to consuming snacks.

Tag: Elementary school, snack, sucrose, salivary pH, pH indicator, caries.
BAB I PENDAHULUAN

1.1 Latar Belakang ................................................................. 1

1.2 Identifikasi Masalah .......................................................... 3

1.3 Tujuan Penelitian ............................................................. 3

1.4 Manfaat Penelitian ............................................................ 4

1.4.1 Manfaat Praktis ............................................................. 4

1.4.2 Manfaat Akademis ......................................................... 4

1.5 Kerangka Pemikiran .......................................................... 5
BAB II TINJAUAN PUSTAKA

2.1 Saliva ................................................................. 7
  2.1.1 Anatomi Glandula Saliva ..................................... 7
    2.1.1.1 Glandula Saliva Mayor .................................. 7
    2.1.1.2 Glandula Saliva Minor .................................. 9
  2.2 Fisiologi Saliva .................................................... 10
  2.3 Komposisi Saliva .................................................... 11
  2.4 Fungsi Saliva ....................................................... 11
  2.5 Pengaturan Sekresi Saliva ....................................... 14
  2.6 pH Saliva ........................................................... 15
  2.7 Metode Pengumpulan Saliva ...................................... 16
  2.8 Jajanan ............................................................... 17
  2.9 Karbohidrat .......................................................... 18
    2.9.1 Karbohidrat Sederhana ...................................... 19
      2.9.1.1 Monosakarida ........................................... 20
      2.9.1.2 Disakarida .............................................. 21
    2.9.2 Karbohidrat Kompleks ....................................... 22
      2.9.2.1 Oligosakarida .......................................... 23
2.9.2.2 Zat Tepung ................................................................. 23
2.9.2.3 Glikogen ................................................................. 23
2.9.2.4 Serat ................................................................. 23
2.10 Lapisan Organik pada Permukaan Enamel ......................... 24
2.11 Penyebaran Informasi Keamanan Pangan Jajanan Anak Sekolah (PJAS) ................................................................. 26

BAB III METODE PENELITIAN

3.1 Alat dan Subyek Penelitian ................................................ 29
  3.1.1 Alat Penelitian ............................................................ 29
  3.1.2 Subyek Penelitian .......................................................... 30
3.2 Metode Penelitian .................................................................. 31
  3.2.1 Desain Penelitian ............................................................ 31
  3.2.2 Variabel Penelitian .......................................................... 31
    3.2.2.1 Definisi Konsepsional Variabel .................................. 31
    3.2.2.2 Definisi Operasional ................................................... 31
  3.2.3 Prosedur Kerja ................................................................. 32
  3.2.4 Metode Analisis ............................................................... 34
    3.2.4.1 Hipotesis Statistik ...................................................... 34
    3.2.4.2 Kriteria Uji ................................................................. 34
  3.2.5 Aspek Etik Penelitian ....................................................... 35
BAB IV HASIL DAN PEMBAHASAN

4.1 Hasil Penelitian ................................................................. 36

4.1.1 Hasil Analisis Statistik Penelitian Perubahan ......................... 40

pH Saliva Setelah Mengonsumsi Jajanan

4.2 Pembahasan .......................................................................... 41

4.3 Penguian Hipotesis Penelitian ................................................ 44

4.3.1 Hipotesis Penelitian ............................................................. 44

4.3.2 Hal-hal yang Mendukung .................................................... 44

4.3.3 Hal-hal yang Tidak Mendukung .......................................... 45

4.3.4 Kesimpulan ....................................................................... 45

BAB V SIMPULAN DAN SARAN

5.1 Simpulan ............................................................................. 46

5.2 Saran ................................................................................... 46

DAFTAR PUSTAKA .................................................................... 47

LAMPIRAN ............................................................................... 51

RIWAYAT HIDUP ...................................................................... 61
### DAFTAR TABEL

<table>
<thead>
<tr>
<th>No.</th>
<th>Teks</th>
<th>Halaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabel 4.1</td>
<td>Data Hasil Penelitian Pengukuran pH Saliva Sebelum dan Setelah Mengonsumsi Jajanan</td>
<td>37</td>
</tr>
<tr>
<td>Tabel 4.2</td>
<td>Hasil Uji T-Berpasangan Nilai pH Saliva Sebelum dan Setelah Mengonsumsi Jajanan</td>
<td>40</td>
</tr>
</tbody>
</table>
## DAFTAR GAMBAR

<table>
<thead>
<tr>
<th>No.</th>
<th>Teks</th>
<th>Halaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gambar 2.1</td>
<td>Anatomi Glandula Saliva Mayor</td>
<td>9</td>
</tr>
<tr>
<td>Gambar 2.2</td>
<td>Hubungan Fungsi Saliva Secara Umum</td>
<td>13</td>
</tr>
<tr>
<td>Gambar 2.3</td>
<td>Pengaturan Sekresi Saliva melalui Syaraf</td>
<td>14</td>
</tr>
<tr>
<td>Gambar 2.4</td>
<td>Struktur Kimia Monosakarida</td>
<td>20</td>
</tr>
<tr>
<td>Gambar 2.5</td>
<td>Struktur Kimia Disakarida</td>
<td>22</td>
</tr>
<tr>
<td>Gambar 3.1</td>
<td>Alat yang Digunakan</td>
<td>30</td>
</tr>
<tr>
<td>Gambar 3.2</td>
<td>Indikator pH Saliva</td>
<td>33</td>
</tr>
<tr>
<td>Gambar 3.3</td>
<td>pH Colours</td>
<td>34</td>
</tr>
</tbody>
</table>
DAFTAR DIAGRAM

<table>
<thead>
<tr>
<th>No.</th>
<th>Teks</th>
<th>Halaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagram 4.1</td>
<td>Persentase Perubahan pH Saliva 58 Anak</td>
<td>39</td>
</tr>
<tr>
<td>Diagram 4.2</td>
<td>Rerata Perubahan pH Saliva Sebelum dan Setelah Mengonsumsi Jajanan</td>
<td>40</td>
</tr>
</tbody>
</table>
### DAFTAR LAMPIRAN

<table>
<thead>
<tr>
<th>No.</th>
<th>Teks</th>
<th>Halaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lampiran 1</td>
<td>Surat Keputusan Komisi Etik Penelitian</td>
<td>52</td>
</tr>
<tr>
<td>Lampiran 2</td>
<td>Surat Permohonan Penelitian</td>
<td>53</td>
</tr>
<tr>
<td>Lampiran 3</td>
<td>Surat Permohonan Wawancara</td>
<td>54</td>
</tr>
<tr>
<td>Lampiran 4</td>
<td>Surat Keterangan Penelitian</td>
<td>55</td>
</tr>
<tr>
<td>Lampiran 5</td>
<td>Informed Consent</td>
<td>56</td>
</tr>
<tr>
<td>Lampiran 6</td>
<td>Kuisiner</td>
<td>57</td>
</tr>
<tr>
<td>Lampiran 7</td>
<td>Hasil Uji Normalitas Data</td>
<td>60</td>
</tr>
<tr>
<td>Lampiran 8</td>
<td>Dokumentasi Penelitian</td>
<td>61</td>
</tr>
</tbody>
</table>