**Table 1.** Characteristics of DS and control subjects.

| | DS (n=30) | Control (n=38) | *p*-value |
|---|---|---|---|
| Gender (M/F) | 21/9 | 11/27 | |
| Age (years) | 28.0 ± 0.0 | 31.8 ± 6.4 | 0.060 |
| Chronic disease (%) | 80.0 | 15.8 | <0.001* |
| Medication (%) | 60.0 | 10.5 | <0.001* |
| Number of tooth brushings/day | 2.3 ± 0.6 | 2.6 ± 0.5 | 0.013* |
| Dental visits (once or more/year)(%) [a] | 76.7 | 23.7 | <0.001* |
| Barthel Index [b] | 87.1 ± 14.2 | 100.0 ± 0.0 | <0.001* |
| Vitality Index [c] | 8.5 ± 1.8 | 10.0 ± 0.0 | <0.001* |

*$p$<0.05

[a] Percentage (%) of people who visited a dental clinic at least once a year.

[b] The Barthel Index evaluates 10 items: diet, transfer, conditioning, toilet action, bathing, moving, stair climbing, changing clothes, defecation self-control and urination self-control with self-reliance degree. The score is set according to the degree of self-reliance with a maximum score of 100 points indicating complete self-reliance.

[c] The Vitality Index evaluates activities in everyday life in five items: awakening, communication, diet, excretion and activity with a maximum score of 10 points.

**Table 2.** Clinical periodontal measurements and oral characteristics in DS and control subjects.

| | DS (n=30) | Control (n=38) | *p*-value |
|---|---|---|---|
| DMF (%) | 22.8 ± 4.9 | 35.8 ± 0.4 | <0.001* |
| Plaque control records (%) | 49.8 ± 18.6 | 24.8 ± 13.3 | <0.001* |
| DI | 2.4 ± 0.5 | 1.8 ± 0.4 | <0.001* |
| CI | 1.0 ± 0.7 | 0.7 ± 0.6 | 0.021* |
| OHI | 3.4 ± 1.0 | 2.5 ± 0.9 | <0.001* |
| 3 mm < PD (%) | 3.2 ± 5.4 | 1.4 ± 2.9 | 0.038* |
| GI | 0.9 ± 0.4 | 0.4 ± 0.4 | <0.001* |
| GBI (%) | 21.0 ± 11.7 | 13.4 ± 7.9 | 0.001* |

*$p$<0.050

DMF: Decay-missing-filled Index, DI: Debris Index, CI: Calculus Index, OHI: Oral Hygiene Index (DI+CI), PD: pocket probing depth, GI: Gingival Index GBI: Gingival Bleeding Index.

**Table 3.** Rates of periodontal bacteria in saliva from DS and control subjects.

| | DS (n=25) | Control (n=38) | *p*-value |
|---|---|---|---|
| *Porphyromonas gingivalis* | $0.4 \pm 0.0 \times$ E-02 | $0.3 \pm 0.0 \times$ E-02 | 0.538 |
| *Aggregatibacter actinomycetemcomitans* | $0.2 \pm 0.0 \times$ E-02 | $0.1 \pm 0.0 \times$ E-02 | 0.570 |
| *Treponema denticola* | $1.4 \pm 0.0 \times$ E-02 | $5.4 \pm 0.3 \times$ E-02 | 0.422 |
| *Tannerella forsythia* | $19.3 \pm 1.1 \times$ E-02 | $6.7 \pm 0.2 \times$ E-02 | 0.408 |
| *Prevotella intermedia* | $0.2 \pm 0.0 \times$ E-02 | $0.4 \pm 0.0 \times$ E-02 | 0.564 |
| Red complex | $4.5 \pm 0.1 \times$ E-02 | $1.2 \pm 0.5 \times$ E-02 | 0.423 |

Data (%) were calculated as follows: (copy numbers of periodontal bacteria/total bacteria) × 100.

Red complex: *P. gingivalis + T. denticola + T. forsythia.*

**Table 4.** Total streptococci, mutans streptococci and lactobacilli in saliva from DS and control subjects.

| | DS (n=29) | Control (n=38) | $p$-value |
|---|---|---|---|
| Mutans streptococci (CFU) | $3.3 \pm 0.7 \times E+05$ | $1.4 \pm 0.5 \times E+05$ | 0.202 |
| Lactobacilli (CFU) | $4.7 \pm 1.4 \times E+05$ | $0.9 \pm 0.3 \times E+05$ | 0.119 |
| | | | |
| Total streptococci (CFU) | $567.0 \pm 34.1 \times E+05$ | $417.0 \pm 35.0 \times E+05$ | 0.087 |
| Mutans streptococci rate (%)[a] | $0.4 \pm 0.9$ | $0.2 \pm 0.5$ | <0.001* |
| Lactobacilli ratio (%)[b] | $0.5 \pm 1.4$ | $0.2 \pm 0.4$ | <0.001* |

*$p$<0.05

[a] The mutans streptococci rate was calculated as follows: (mutans streptococci in CFU/total streptococci in CFU) × 100.

[b] The lactobacilli ratio was calculated as follows: (lactobacilli in CFU/total streptococci in CFU) × 100.

**Table 5.** Number of Candida and *S. aureus* in DS and control subjects.
*p*<0.05

|  | DS (n=30) | Control (n=38) | *p*-value |
|---|---|---|---|
| Candida (CFU) | 35.2 ± 93.8 | 1.1 ± 3.7 | <0.001* |
| *S. aureus* (CFU) | 17.6 ± 38.9 | 10.0 ± 20.2 | 0.50 |