# Sour Cherry extract inhibits Human Salivary $\alpha$-Amylase and growth of Streptococcus mutans (a pilot clinical study) 

Food and Function

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Figure S1. Representation of the number of hemolizing Streptococcus mutans stains with $( \pm \mathrm{SD})$ observed on blood agar plates in different patient groups (A: over 30 years of age, B: 18 to 20 years, C: 12 years old). Coloured-dotted graphs refer to control, while colouredhollow graphs refer to control data groups. Colors represent different sampling procedures (grey: 0. time point prior mastification, blue: sampling right after mastification, red: 10 minutes following mastification, red: 20 minutes after mastification, orange: 30 minutes after mastification).

Table S1: representation the median values with ( $\pm \mathrm{SD}$ ) of the different data groups. Results of the T-tests are shown where empty squares show no significance and squares filled with $\checkmark$ signs refer to significat differences between the two data groups. List of abbreviations: AK (control group-A: over 30 years of age), AE (case group-A: over 30 years of age), BK (control group-B: 18 to 20 years ), BE (case group-B: 18 to 20 years), CK (control group-C: 12 years old ), CE (case group-C: 12 years old ). Numbers 1, 2, 3, 4, 5 refer to sampling procedures (1:0. time point prior mastification, 2: sampling right after mastification, 3: 10 minutes following mastification, 4: 20 minutes after mastification, 5: 30 minutes after mastificati.

|  | media <br> n | $\pm$ SD | $\begin{aligned} & \theta 1 \\ & \text { AK } \end{aligned}$ | $\begin{aligned} & \theta 1 \\ & \mathrm{AE} \end{aligned}$ | $\begin{gathered} \theta 1 \\ \mathrm{BK} \end{gathered}$ | $\begin{aligned} & \theta 1 \\ & \mathrm{BF} \end{aligned}$ | $\begin{aligned} & \hline \theta 1 \\ & \mathrm{CK} \end{aligned}$ | $\stackrel{\theta}{{ }_{\mathrm{CF}}}$ | $\begin{aligned} & \hline+2 \\ & \mathrm{AK} \end{aligned}$ | $\begin{aligned} & \hline+2 \\ & \mathrm{AE} \end{aligned}$ | $\begin{aligned} & \hline+2 \\ & \text { BK } \end{aligned}$ | $\begin{aligned} & +2 \\ & \mathrm{RF} \end{aligned}$ | $\begin{aligned} & \hline+2 \\ & \mathrm{CK} \end{aligned}$ | $\begin{aligned} & +2 \\ & \mathrm{CE} \end{aligned}$ | $\begin{aligned} & \hline z 3 \\ & \text { AK } \end{aligned}$ | $\begin{aligned} & \hline 23 \\ & \mathrm{AE} \end{aligned}$ | $\begin{aligned} & \hline z 3 \\ & \text { BK } \end{aligned}$ | $\begin{aligned} & z 3 \\ & \text { RF } \end{aligned}$ | $\begin{aligned} & z 3 \\ & \text { CK } \end{aligned}$ | $\begin{aligned} & z 3 \\ & \text { CE } \end{aligned}$ | $\begin{aligned} & \hline 34 \\ & \text { AK } \end{aligned}$ | $\begin{aligned} & 34 \\ & \mathrm{AE} \end{aligned}$ | $\begin{aligned} & 34 \\ & \mathrm{BK} \end{aligned}$ | $\begin{aligned} & \hline 34 \\ & \mathrm{BE} \end{aligned}$ | $\begin{aligned} & \hline 34 \\ & \mathrm{CK} \end{aligned}$ | $\begin{aligned} & \hline 34 \\ & \mathrm{CE} \end{aligned}$ | $\begin{aligned} & \hline 45 \\ & A K \end{aligned}$ | $\begin{aligned} & 45 \\ & \mathrm{AE} \end{aligned}$ | $\begin{aligned} & \hline 45 \\ & \mathrm{BK} \end{aligned}$ | $\begin{aligned} & 45 \\ & \hline \mathrm{BE} \end{aligned}$ | $\begin{aligned} & \hline \frac{45}{\mathrm{CK}} \end{aligned}$ | $\begin{aligned} & 45 \\ & \mathrm{CE} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \theta \\ 1 \mathrm{AK} \end{gathered}$ | 162.8 | 434.8 | - |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  |  |  |  |
| $\begin{gathered} \hline \theta \\ 1 \mathrm{AE} \end{gathered}$ | 43.2 | 94.3 |  | - |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  |
| $\begin{gathered} 9 \\ 1 \mathrm{BK} \end{gathered}$ | 181.8 | 316.5 | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} \hline \theta \\ 1 \mathrm{BE} \\ \hline \end{gathered}$ | 302.9 | 1054.8 |  |  |  | - |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \hline \theta \\ 1 \mathrm{CK} \\ \hline \end{gathered}$ | 170.1 | 353.3 |  |  |  |  | - |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  |  |  |  |
| $\begin{gathered} \theta \\ 1 \mathrm{CE} \\ \hline \end{gathered}$ | 26.92 | 37.8 |  |  |  |  |  | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |
| $\begin{gathered} 4 \\ 2 \mathrm{AK} \end{gathered}$ | 2203.9 | 1228.3 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - |  |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} \hline+ \\ 2 \mathrm{AE} \\ \hline \end{gathered}$ | 2476.4 | 1322.2 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | - | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} 4 \\ 4 \mathrm{BK} \end{gathered}$ | 1534.6 | 819.2 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | - | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} \hline 4 \\ 2 \mathrm{BE} \\ \hline \end{gathered}$ | 2875.6 | 1729.5 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} \hline 4 \\ 2 \mathrm{CK} \\ \hline \end{gathered}$ | 716.6 | 892 | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} \hline 1 \\ 2 \mathrm{CE} \\ \hline \end{gathered}$ | 1178.3 | 1167.9 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | - |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} z \\ 3 \mathrm{AK} \\ \hline \end{gathered}$ | 1804.9 | 1196.2 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ |  | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} z \\ 3 \mathrm{AE} \\ \hline \end{gathered}$ | 295.4 | 757.2 |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | - | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} z \\ 3 \mathrm{BK} \end{gathered}$ | 1103.1 | 580.6 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | - |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} z \\ 3 \mathrm{BE} \end{gathered}$ | 717.85 | 861 | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | - |  |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} z \\ 3 \mathrm{CK} \\ \hline \end{gathered}$ | 294.6 | 312.9 |  | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | - |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} \hline z \\ 3 \mathrm{CE} \\ \hline \end{gathered}$ | 478.5 | 624 |  | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | - | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |
| $\begin{array}{r} 3 \\ 4 \mathrm{AK} \\ \hline \end{array}$ | 1165.3 | 661.8 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | - | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{array}{r} 3 \\ 4 \mathrm{AE} \\ \hline \end{array}$ | 28.23 | 73.23 |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  |  |  |
| $\begin{gathered} 3 \\ 4 \mathrm{BK} \\ \hline \end{gathered}$ | 794.7 | 468.2 | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\begin{array}{r} 3 \\ 4 \mathrm{BE} \\ \hline \end{array}$ | 127.5 | 434.4 |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ | - |  |  | $\checkmark$ |  |  |  |  |  |
| $\begin{array}{r} 3 \\ 4 \mathrm{CK} \\ \hline \end{array}$ | 161.4 | 230.7 |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | - |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |
| $\begin{gathered} \stackrel{3}{4} \\ 4 \mathrm{CE} \end{gathered}$ | 79.5 | 160.3 |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | - | $\checkmark$ |  | $\checkmark$ |  |  |  |


| $\frac{4}{5 \mathrm{AK}}$ | 627.6 | 491.8 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
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| ${ }_{5} \frac{4}{\text { AE }}$ | 6.4 | 15.2 |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | - | $\checkmark$ |  | $\checkmark$ |  |
| $\stackrel{4}{\text { 5BK }}$ | 277.8 | 207.9 |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | - |  | $\checkmark$ | $\checkmark$ |
| $\stackrel{4}{5 \mathrm{BE}}$ | 135.1 | 69.5 |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  | - |  |  |
| $\underset{5 \mathrm{CK}}{4}$ | 41.2 | 69.5 |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | - |  |
| $\stackrel{4}{5 \mathrm{CE}}$ | 35.3 | 67.7 |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  |  | - |

