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# Effects of gustatory stimulants of salivary secretion on the pH and stimulation of saliva of Sjögrens syndrome patients

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| **Submission date**<br>03/01/2010 | **Recruitment status**<br>No longer recruiting | [ ] Prospectively registered<br>[ ] Protocol<br>[ ] Statistical analysis plan<br>[ ] Results<br>[ ] Individual participant data<br>[ ] Record updated in last year |
| **Registration date**<br>16/03/2010 | **Overall study status**<br>Completed | |
| **Last Edited**<br>16/03/2010 | **Condition category**<br>Musculoskeletal Diseases | |

**Plain English summary of protocol**
Not provided at time of registration

## Contact information

**Type(s)**
Scientific

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## Additional identifiers

**Protocol serial number**
N/A

## Study information

**Scientific Title**

Effects of gustatory stimulants of salivary secretion on the pH and stimulation of saliva of Sjögrens syndrome patients: a two arm parallel single centre randomised controlled trial

## Study objectives
Gustatory stimulants of salivary secretion (GSSS) are sold over the counter in wide number of European countries and used to stimulate salivary secretion. The acidic nature of these lozenges suggests that they may increase the risk for dental erosion.

The rationale for this study being to find out if the use of the Dentaid GSSS increases salivary secretion and is safer regarding dental erosion.

The study hypotheses are:
1.There is a significant difference in the salivary pH variation elicited by the new GSSS in patients with Sjögrens syndrome
2.There is a significant difference in the stimulation of whole saliva secretion capacity elicited by the new GSSS with patients with Sjögrens syndrome

## Ethics approval required
Old ethics approval format

## Ethics approval(s)
Ethical Committee at the Faculty of Dentistry of the University of Lisbon and the Portuguese Institute for Rheumathological Diseases approved in December 2009

## Study design
Two-arm parallel single centre triple-blind randomised controlled trial

## Primary study design
Interventional

## Study type(s)
Treatment

## Health condition(s) or problem(s) studied
Primary Sjögren's syndrome

## Interventions
Salivary buffering capacity will be assessed in all participants at baseline. The participants will randomly be allocated to the control and intervention arms in equal numbers (40 in each arm):
1. Intervention arm: New Gustatory stimulant of salivary secretion - one lozenge of Dentaid® (Dentaid, Spain)
2. Control arm: Traditional, citric acid based gustatory stimulant of salivary secretion - one lozenge of SST® (Sinclair, UK)

Salivary secretion rate and pH changes will be recorded at defined time intervals (minute 0, 1, 2, 3, 5, 8, 10, 15 and 20) to determine the efficacy of saliva stimulation and dental erosion potential of these lozenges.

## Intervention Type
Drug

### Phase
Not Applicable

### Drug/device/biological/vaccine name(s)
Dentaid®, SST®

### Primary outcome(s)
Time of GSSS induced pH drop below 5.5 expressed in minutes as the mean ± 95% confidence interval. In order to better quantify risk differences of GSSS induced pH drop below 5.5 a contingency table compiling the counts of subjects with pH drops below 5.5 for over one minute will be obtained. Additional analyses will be done to calculate association measures like the absolute risk reduction (ARR) and number needed to treat (NNT).

### Key secondary outcome(s))
1. GSSS induced salivary pH variations expressed as the mean ± 95% confidence interval of the three pH measures obtained from salivary samples at defined time points
2. GSSS stimulated salivary flow expressed in ml/min as the mean ± 95% confidence interval of stimulated salivary flow obtained at different time points
3. Overall stimulated salivary flow will also be calculated and expressed in ml/min as the mean ± 95% confidence interval of the total volume of stimulated saliva divided by the total time of each experiment which will be 20 minutes
4. Salivary stimulation output defined as the difference between GSSS and basal salivary flow, expressed as ml/min

### Completion date
07/10/2010

## Eligibility

### Key inclusion criteria
1. Participants (both males and females) above 18 years
2. Suffering from primary Sjögren's syndrome
3. An unstimulated whole saliva flow less than 0.1 mL/min, and a stimulated whole saliva flow greater than 0.2 mL/min

### Participant type(s)
Patient

### Healthy volunteers allowed
No

### Age group
Adult

### Lower age limit
18 years

### Sex
All

**Key exclusion criteria**
1. Currently taking xerostomic medication
2. Pregnant

**Date of first enrolment**
07/01/2010

**Date of final enrolment**
07/10/2010

## Locations

**Countries of recruitment**
Portugal

**Study participating centre**
**Grupo de Investigação em Biologia e Bioquímica Oral**
Lisbon
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1649-003

## Sponsor information

**Organisation**
Dentaid, S.L. (Spain)

**ROR**
https://ror.org/02n9shp96

## Funder(s)

**Funder type**
Industry

**Funder Name**
Dentaid, S.L. (Spain)

## Results and Publications

**Individual participant data (IPD) sharing plan**

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---|---|---|---|---|---|
| Participant information sheet | Participant information sheet | 11/11/2025 | 11/11/2025 | No | Yes |