

**Figure 1(A).** Analysis of the chewing cycle. In this series of picture, participants were given in a black tray the food stimuli to eat (food products were separated from the gels), in such way that they can choose the order of eating the samples. For the number of chewing cycles, special attention was given to the mandible movements.

**Figure 1(B).** Analysis of time at swallow. In this occasion, the study of frame-by-frame analysis of the swallowing reveals the group of observable actions to perform the swallowing.

**Figures 2.** Average number of chews in base of the participant's dental status for (A) gel systems and (B) food products.

**Figure 3.** Average liking score per product (food (A) and gel (B)) and bite force group with standard deviation marked as bars.

**Figures 4.** Relation among samples, number of chew and maximum force at break for A) gel systems, B) food products

**Figures 5.** Relation between oral processing time and (A) number of chews, (B) likeness score, (C) difficulty score. The gels and food products are presented in the right and left side respectively. Mean values relations were studied with Pearson correlation at of significance  $p = 0.01$  indicated by (\*).