C-Reactive Proteins (CRPs) are plasma proteins produced in the liver which increase in response to inflammation (Melo Coutinho et al., 1998). A CRP test can be used to determine inflammation in the body. Periodontal disease includes inflammation of the tissues surrounding the teeth (Loesche et al. 2001). Mettila et al. (1998) showed that poor dental care, elevated CRP levels which could increase the risk for cardiovascular disease.

The study consisted of 17 participants (males and females age 20-30). There were 8 people in the control group and 9 people in the study (non-brushers) group. The control group was allowed to brush their teeth twice daily for the 10 day period. The study or non-brushers group did not brush their teeth for the entire 10 day trial. Saliva samples were taken on the first day, and were then taken again ten days later. Saliva samples were then assessed for CRP levels, at Salimetrics, by ELISA.

Poor Oral Health and C-Reactive Proteins an Indicator for Inflammation
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INTRODUCTION
C-Reactive Proteins (CRPs) are plasma proteins produced in the liver which increase in response to inflammation (Melo Coutinho et al., 1998). A CRP test can be used to determine inflammation in the body. Periodontal disease includes inflammation of the tissues surrounding the teeth (Loesche et al. 2001). Mettila et al. (1998) showed that poor dental care, elevated CRP levels which could increase the risk for cardiovascular disease.

PURPOSE
The purpose of this study was to determine if lack of teeth brushing increased inflammation increasing CRP concentration in a student population at BYU-Hawai

MATERIALS AND METHODS
The study consisted of 17 participants (males and females age 20-30). There were 8 people in the control group and 9 people in the study (non-brushers) group. The control group was allowed to brush their teeth twice daily for the 10 day period. The study or non-brushers group did not brush their teeth for the entire 10 day trial. Saliva samples were taken on the first day, and were then taken again ten days later. Saliva samples were then assessed for CRP levels, at Salimetrics, by ELISA.

RESULTS
An independent t-test was preformed between the two groups, at the start of the study. There was no difference (p = 0.195) between the groups. A paired t –test was perfomred before and after for the study on the control group, there was no difference (p = 0.197) in the control subjects. Another independent t-test was performed between the two groups (control vs subjects) after ten testing days. There was a significant difference in CRP levels (p = 0.045) between the two groups(fig. 1).

A paired t- test indicated a significant difference (p=0.047) in CRP levels in the test group before and after ten test days (fig. 2).

CONCLUSIONS
Statistically the group of non-brushers had higher levels of C-Reactive proteins than the brushes group after 10 days. Not brushing your teeth for ten days does increase inflammation which increases the levels of C-Reactive proteins.

According to studies performed by Loesche et al (2001), Mattila et al (1998) and Mendall et al (1996) if these levels were raised for a prolonged amount of time, these people could be at a higher risk to developing cardiovascular disease than those of people who brush their teeth twice daily.

REFERENCES
