The surveillance of patients is a dentist’s duty
An interview with Prof. Newell Johnson, Australia

Consumption of certain dairy products may prevent cavities

MORADABAD/DELHI, India: New research from India suggests that dairy products may positively affect oral health. In a study of almost 70 teenagers, the researchers observed that cheese in particular raised the plaque pH in the participants’ mouths. High pH levels are associated with a lower risk of developing cavities, they believe that dairy products may help protect against cavities.

The study involved 68 participants aged 12-15 who were assigned randomly to three groups. The first group was instructed to consume 10 g of cheddar cheese, the second group drank 15 ml of milk containing 3.5 percent fat, and the third group was given 10 g of sugar-free yogurt. After a baseline oral health analysis, all participants chewed or swished their respective product around their mouth for 3 minutes and then rinsed with water. Afterwards, the plaque pH level was assessed at different time intervals.

According to the study, the mean plaque pH in the cheese group rose rapidly after 10 minutes and decreased slightly after 20 and 30 minutes, while the plaque pH at 30 minutes was still slightly higher than at baseline. No such development was observed in the other groups. After 30 minutes, the plaque pH in the milk group was similar to that of the baseline pH, while it was slightly lower in the yogurt group. However, none of the dairy products lowered the plaque pH below the critical pH of 5.5, which is associated with enamel demineralisation and dissolution, the researchers said.

They attributed the anticaries activity of these products to their direct effects on calcium, phosphate, and other minerals in saliva. Another explanation is that the action of chewing increased saliva production, which led to a rising pH level.

There are a number of oral cancer screening systems available on the market but their penetration is still very low. Why is this technology not yet part of dental practice?

For cancers, and for potentially malignant disorders, in the mouth itself, we have direct visual inspection followed by referral or biopsy, is the best approach. Other screening tests have not been demonstrated to have utility beyond this and commercialisation can be counterproductive.

You have already mentioned gene therapy, what role will it play in the evaluation of oral cancer in the future?

We are indeed doing better, in terms of awareness campaigns run by dental organisations worldwide, despite awareness campaigns. However, hundreds of thousands still die of oral cancer in the world. For the world, the future must be personalised treatments.

Thank you very much for this interview.