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The Kiss-o-Meter*

P. D Gupta and P. P. Sood

A kiss might seem like a natural instinct of love and affection originated in animals. Some researchers believe that kissing began millions of years ago as a result of mouth-to-mouth feeding, with mammal mothers chewing food and then “forcing it” into the mouths of their young. The oldest evidence of a kissing-type behaviour comes from Hindu Vedic Sanskrit texts from over 3,500 years ago. Kissing was described as inhaling each other’s soul. In contrast, Egyptian hieroglyphics picture people close to each other rather than pressing their lips together. The longest kiss lasted 58 hours, 35 minutes and 58 seconds, achieved by Ekkachai Tiranarat and Laksana Tiranarat (both Thailand) at an event organized by Ripley’s Believe It or Not! Pattaya, in Pattaya, Thailand, on February 12-14, 2013.

Research into passionate kissing has uncovered many valuable health benefits, such as, Boosts up “happy brain hormones” oxytocin, serotonin and dopamine, and lowers down cortisol (stress hormone) levels. Secretion of endorphins relieve the stress and regulate mood. In many European countries, the reciprocated welcome is cheek kissing. Oxytocin is a chemical linked to pair bonding. The rush of oxytocin released causes feelings of affection and attachment whereas lowering of cortisol removes stress. The other reaction is on blood vessels, they are dilated, blood flow increases and causes an immediate decrease in the blood pressure that can help relieve cramps, relieve from headaches — a boost in feel-good chemicals and relief from period cramps. Kissing strengthen the immune system and reduces allergic response. A “kiss with the tongue” stimulates the partner’s lips, tongue and mouth, which are sensitive to the touch and induce physiological sexual arousal by filling up blood in sex organs. Kissing activate hypothalamic kisspeptinergic neurons. Kisspeptin exerts its stimulatory effects on GnRH secretion *via* its cognate Kiss-1R receptor that is co-expressed on GnRH neurons (Putteeraj, M. et al. Front. Endocrinol. (Lausanne). 7: 121 (2016).

One 2009 study found that couples who increased the frequency of romantic kissing experienced improvement

in their total serum cholesterol. Keeping cholesterol in check lowers the risk of several diseases, including heart disease and stroke. Deep kissing increases saliva production, the flow of saliva, which helps to keep the mouth, teeth and gums healthy. It also tighten and tone your facial muscles.

A 10-second kiss on the lips can transfer 80 million bacteria. People who kiss frequently have similar oral microbiota. Kissing at least nine times a day that the bacteria on the couples’ tongues were more similar than those in their saliva. The Dutch researchers did one interesting test: One member of each couple drank a yogurt drink containing bacteriacalled *Lactobacillus* and *Bifidobacteria*. Then, after the couple shared a 10-second, intimate kiss, researchers took a sample of the bacteria in the mouth of the partner who hadn’t drank the yogurt. They found that the partners’ bacteria levels. The results of the study are already being put to use at the kiss-o-meter*, an interactive exhibit at Micropia, the world’s first museum of microbes in Amsterdam.

The study also revealed that 74 percent of men reported a higher frequency of kissing than their female partners did. Overall, men in the couples reported about 10 kisses per day, whereas the women reported about five kisses per day. One gentleman reported receiving an average of 50 kisses a day, while his partner reported an average of only eight. The researchers excluded his data from the analysis on kiss frequency.

In mother-child kissing study, the presence of matching microbiota genotypes suggested vertical transmission from mothers to children. Feeding habits, gum cleaning and number of erupted teeth in children had significant effect on microbiota colonization. There is a need to develop strategies to present microbiota colonization in children.

Kissing involves neural and hormonal activity and many recent researchers have indicated that dopamine, serotonin, oxytocin and sex hormones are released during romantic kissing. It has also been shown that men kiss to introduce sex hormones and proteins that make their female partner more sexually receptive. Dopamine and serotonin are chemicals, the signally hormones for sexual arousal.