

# Chewing Gum Associated With Migraines

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## Chewing Gum and Migraines

According to a recent report published in *Pediatric Neurology*, chewing gum can lead to migraine headaches in young children and teens. Dr. Nathan Watemberg of Tel Aviv University Medical Center conducted a study regarding migraine headaches in teenagers and their association with chewing gum. Let's take a deeper look into chewing gum and migraines.

Headaches are a common occurrence for children, especially adolescents. Migraine-type headaches typically occur more often in young female teens. Usual migraine triggers include lack of sleep, stress, fatigue, heat, noise, sunlight exposure, missed meals, smoking and menstruation. Until this recent study, little medical research was available on the relationship between headaches and gum chewing.

Migraine headache is a chronic neurological disorder that is characterized by moderate or severe headaches that occur with associated symptoms, such as nausea and vomiting. As many as 33% of people with migraines report "aura," which is a transient visual, motor, sensory and language disturbance. Migraine headaches are thought to be related to genetic and environmental factors. Also, these headaches have been attributed to changing hormones.

### Yummy Gummy

At the Medical Center's Child Neurology Unit and the affiliated community clinics, Watemberg and associates found that many patients who were reporting headaches were regular gum chewers. Out of 30 of these teens, 26 reported significant headache symptoms improvement when they stopped chewing gum. What's more, 19 had complete headache resolution when gum chewing ceased. When the patients went back to chewing the gum, all of them reported the immediate return of headache symptoms.

During a more statistical approach, the researchers asked 30 child and teen participants to quit chewing gum for one full month. These patients were between the ages of 6 and 19 years old and all of them had either tension or migraine-type headaches. After one whole month with no gum, 66 percent of these participants reported that the headaches went completely away. To test these results, 26 of them agreed to start back chewing the gum for 14 days. All 26 had a return of the symptoms within only a few days.

### Putting Results to Good Use

According to previous clinical trials, two studies showed a link between headaches and chewing gum, but they offered different explanations for the association. One study suggested that chewing caused temporomandibular joint (TMJ) stress. The other study blamed the artificial sweetener aspartame, one that is often used in chewing gums. Both aspartame and TMJ dysfunction have been shown to cause headaches in many clinical trials.

Dr. Watemberg and colleagues tend to favor the TMJ dysfunction explanation over the aspartame explanation.

These researchers found that not all gum contains aspartame, and it only flavors the gum for a short period. If aspartame was the culprit, more people who drank soft drinks would complain. Also, TMJ is the most logical explanation, as the stress on this joint leads to headaches for many people.

These findings indicate that teenagers and young children who suffer from chronic migraine and tension headaches should simply stop chewing gum. Doctors now will understand this research and use this advice in their treatment plans. By stopping gum use, doctors could eliminate the need for expensive diagnostic and screening tests, as well as the use of medications.

#### Resource:

Nathan Watemberg, Manar Matar, Miki Har-Gil and Muhammad Mahajnah. The Influence of Excessive Chewing Gum Use on Headache Frequency and Severity Among Adolescents. *Pediatric Neurology*, 2013; DOI: 10.1016/j.pediatrneurol.2013.08.015