

# Novel chewing gum formulation helps prevent motion sickness

October 17 2012

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A new prototype for medicated chewing gum has been developed for motion sickness that may offer many advantages over conventional oral solid dosage forms. About 33 percent of people are susceptible to motion sickness in mild circumstances and 66 percent are affected in more severe conditions. This research is being presented at the 2012 American Association of Pharmaceutical Scientists (AAPS) Annual Meeting and Exposition in Chicago, Ill., Oct. 14 – 18, an international event anticipating more than 8,000 attendees.

Lead researcher Mohsen Sadatrezaei of RoshaDarou Co. and a team of researchers consisting of Niloufar Pouyan, Zoherh JafariAzar and Alireza Ghaffari from the Islamic Azad University School of [Pharmaceutical Sciences](#) (Tehran, Iran), have developed a medicated gum that will improve patient compliance and faster absorption through the cheek, which will alleviate [motion sickness](#) sooner. A sensory panel was used to test faster absorption through the buccal cavity, which will result in earlier onset of action against motion sickness. Panelists also ranked the gum on bitterness and easiness to chew.

"The main challenge in delivering drugs through chewing gum is masking the bitter taste of its active ingredient," said Sadatrezaei. "We have formulated dimenhydrinate as chewing gum with acceptable taste and sensory attributes. Dimenhydrinate is among the best [drug candidates](#) for treatment of motion sickness, providing a comfortable and acceptable drug delivery."

The final formulation has great potential for dimenhydrinate chewing gum commercialization. Moreover, the outcome of the study can be used as a platform to incorporate other active ingredients with objectionable taste into [chewing gum](#).

Provided by American Association of Pharmaceutical Scientists

Citation: Novel chewing gum formulation helps prevent motion sickness (2012, October 17)  
retrieved 5 May 2024 from <https://medicalxpress.com/news/2012-10-gum-motion-sickness.html>

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