

Canadian Association of Occupational Therapists
Product Recognition Program

Munchables pendants



Available online at www.caot.ca/prp



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Disclaimers

The information compiled in this report was designed for informational purposes and to communicate the final conclusions of a documented review process. The decision to award a seal of recognition **does not supersede or replace other codes, requirements or regulations** set by authoritative organizations of a specific jurisdiction. CAOT encourages health professionals to act in a responsible manner and according to best practices for the recommendation, assessment, installation and maintenance of this product. It is critical to **follow the recommendations set by the manufacturer and/or distributor** of this product and, when relevant, engage domain expert for training, use, installation, maintenance and repair.

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Specific questions related to this product(s) (including usage, availability, pricing, etc.) should be addressed directly to the manufacturer and/or distributor. Please visit Munchables at www.munchables.ca. Concerns or questions related to the content of this report should be addressed to Julie Lapointe, Director of Knowledge Translation Programs, at jlapointe@caot.ca or at 1(800) 434-2268 ext. 260

The conclusions presented in the current report are derived from the best information available. In the case that new information becomes available and grants a modification to the conclusions, CAOT reserves the right to update and issue a new report of this product at any time.

Acknowledgement

The generation of this report would not have been possible without the contribution of occupational therapists and members of the Canadian Association of Occupational Therapists (CAOT).





Executive Summary

The *Munchables* pendants are a line of products designed for individuals who require or enjoy increased oral stimulation and sensory input. *Munchables* pendants addresses the needs of individuals who have tendencies to chew or bite other objects such as fingernails, pens, and clothing by providing a safer, more discrete and appropriate item to chew on. Reviewers were unanimous in recommending that *Munchables* pendants be accepted for the CAOT Product Recognition Program. Information regarding the performance of the product as well as recommendations on its usage are provided in this report.



Munchables pendants are recognized by CAOT.



Review report

The purpose of this product

The *Munchables* pendants are a line of products designed for individuals who require or enjoy increased oral stimulation and sensory input. *Munchables* pendants addresses the needs of individuals who have tendencies to chew or bite other objects such as fingernails, pens, and clothing by providing a safer, more discrete and appropriate item to chew on. Substituting the *Munchables* item to achieve the desired oral sensory input may provide a calming, regulating effect for these individuals.

Performance of the product (efficacy, usability, safety, reliability, durability)

- The *Munchables* pendants may be an effective and efficient alternative object to chew on for people seeking or requiring oral-motor stimulation. It is a more socially acceptable and appealing alternative.
- They are esthetically pleasing in appearance and there is a variety of designs to choose from.
- The neutral presentation of these pendants does not draw unwanted attention to them, and they can be discretely hidden under clothing.
- The pendants are very user friendly and do not require any instructions for use.
- The silicone material used for the pendants does not contain dangerous additives (BPA, lead, phthalates) and surpasses Canadian and American standards in terms of safety. The silicone is of good quality and soft to the touch.
- Each design of the pendant necklace is sold in one length, ranging from 24" to 31". The company produced a video, available on their website, on how to shorten the pendant cord. It is not possible to lengthen the cord so users should ensure to select a design accordingly.
- Guidance for washing and care are provided on the product package. As it is used in the mouth, it is important to remember to wash the pendant regularly for hygienic purposes. The *Munchables* pendants can be washed with mild soap and water.
- Given that this product is intended to be worn around the neck, there is the risk of strangulation. The easy release clasp and the shorter length of the cord are features that reduce this risk.
 - The product's package instructions indicate that the pendant should not be worn by children under the age of 2. Children should be supervised when using this product.
- There is potential for pieces of the chewable portion of the material to break off into the user's mouth as the material is weakened. The packaging includes a statement that suggests monitoring for this hazard.
- The pendant should be inspected regularly for tears, especially the user has a very strong bite or tends to chew extensively.
- Product information does indicate that aggressive chewers may be able to tear the item. The company provides suggestions on their website of products that are more suitable for users with more aggressive/heavy chewing. The product should be replaced immediately if damaged or torn.

Important recommendations

When using *Munchables pendants*, follow the guidelines outlined on the product label:

- Regularly inspect product and discard if damage is found
- Do not chew on breakaway clasps
- Clean using mild soap and water
- Safe for children ages two and up; children should be supervised when using this product

Economic considerations

All reviewers agreed that *Munchables pendants* were good value for money.

Scientific evidence

There is currently no scientific evidence regarding the use of *Munchables pendants*. There is a lack of scientific evidence assessing the efficacy of the use of chewable necklaces specifically. However, there is some evidence regarding the positive effect of chewing on cognitive functions (i.e. sustained attention; Hirano & Onozuka, 2015). There is a great deal of research that supports clinical observations that having something in one's mouth to chew or suck on can provide a calming, organizing, and focusing response (Scheerer, 1992). There is also research that supports the use of oral-motor sensory input in balance, suggesting that chewing behaviors allow neurotypical adults to increase postural stability when standing on an unstable surface with no visual input (Alghadir, Zafar, Whitney, & Iqbal, 2015).

Review committee

The first reviewer is an occupational therapist who works in school health, often recommending sensory-based strategies to promote engagement and focus in the school environment. This includes recommending items to provide oral stimulation and reduce chewing of other objects. The second reviewer is an occupational therapist who has worked as a pediatric, school-based occupational therapist for 8 years. She has spent the last year working in a community-based early intervention for children with diverse needs. The third reviewer is an occupational therapist who works in private practice with adult clientele who present with sensory processing and complex mental health symptoms which include elements of self-harm, biting and mouthing items. The fourth reviewer is a student occupational therapist who has completed theoretical courses related to pediatrics at graduate level and she has an interest in pediatric health as she is also the mother of a two-year old child.



Final recommendation

Reviewers were unanimous in recommending that *Munchables* pendants be accepted for the CAOT Product Recognition Program. *Munchables* pendants could be recommended by an occupational therapist for clients who tend to chew on items when seeking increased oral sensory input. *Munchables* pendants could be recommended to replace inappropriate chewing behaviour (i.e. chewing on fingernails, pencils or clothing) and to provide potential regulating effects for the sensory system, reducing fidgetiness, promoting alertness, attention and focus.

References

- Alghadir, A., Zafar, H., Whitney, S. L., & Iqbal, Z. (2015). Effect of chewing on postural stability during quiet standing in healthy young males. *Somatosensory & motor research*, 32(2), 72-76.
- Hirano, Y & Onozuka, M. (2015). Chewing and attention: a positive effect on sustained attention. *Biomed Res Int.*:367026. doi: 10.1155/2015/367026.
- Scheerer, C. R. (1992). Perspectives on an oral motor activity: The use of rubber tubing as a "Chewy". *American Journal of Occupational Therapy*, 46(4), 344-352.