

Canadian Association of Occupational Therapists
Product Recognition Program

LumbAIRPlus



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.

Recognition of a product by the Canadian Association of Occupational Therapists through the Product Recognition Program **is not a guarantee** of any product, nor is it an endorsement of the company. The Canadian Association of Occupational Therapists assumes **no responsibility** for any product or corporation, nor for any damages caused by any product or company. It is recommended that you consult an occupational therapist about the appropriateness and the proper use of the product.

Specific questions related to this product(s) (including usage, availability, pricing, etc.) should be addressed directly to the manufacturer and/or distributor. Please visit the company website: <https://www.embraceair.com>. 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

LumbAIRPlus is a lightweight, portable and adjustable lumbar (lower back) support which can be added to the user's chairs to help achieve the proper spinal alignment. This product is compact and easy to transport in different locations. Its level of firmness can be set to adapt to the user's changing needs. This product could be useful to mobile adolescents, adults and older adults who need to sit for moderate to extended periods of time. Reviewers were unanimous and recommended that LumbAIRPlus 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.



LumbAIRPlus is recognized by CAOT.



Review report

The purpose of this product

LumbAIRPlus is a lightweight, portable and adjustable lumbar (lower back) support which can be added to the user's chairs to help achieve the proper spinal alignment. This product is compact and easy to transport in different locations. Its level of firmness can be set to adapt to the user's changing needs. This product could be useful to mobile adolescents, adults and older adults who need to sit for any periods of time and who wish to use a lumbar support in their car, at home, at work, or even on an airplane. Those who are at risk of back pain or who have a history of back injuries would particularly benefit from this product.

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

- This product is light, discrete and portable. This product may be particularly useful to people who have multiple work stations or to college/university students who need to move from one class to another. Long distance travelers will also be able to bring this compact device on an airplane or a train.
- LumbAIRPlus is made of durable quality material that reviewers found to be very comfortable.
- Because the height and air inflation level can be adjusted, the product is suitable for a variety of body types and sizes.
- The air inflation and retention system has been found efficient and easy to use by reviewers since there is no need for further maintenance once the cushion is adjusted for the preferred air pressure.
- The air pump is connected to the cushion by a hose approximately 30 cm (one foot) long, which makes it easy for the user to reach.
- The instructions that accompany this product are clear and easy to follow.
- Although it will fit most types of chair, it can be difficult to fasten the product to the back of certain chairs. However, in some instances the product won't need to be strapped to the chair to perform as it can be placed in position behind the user and user's weight will hold it in place.
- Reviewers recommend ensuring LumbAIRPlus will fit the user's chair(s) and needs before purchasing the product. In some instances, it may be more convenient for users to own more than one so it can be installed in strategic places such as the car and the office without the need to move it.
- Despite some adjustability in the height and the thickness of the cushion, this product is not intended to replace a custom molded seating system for those with more advanced seating needs.



Important recommendations

Although it will fit most types of chair, it can be difficult to fasten the product to the back of certain chairs, such as those covered in plastic.

Reviewers recommend ensuring LumbAIRPlus will fit the user's chair(s) and needs before purchasing the product. Information about policies for trials and returns can be obtained by contacting the company (see page 2 of this report).

Economic considerations

This product has been found to be good value by the reviewers and offers a relatively low-cost option to support a comfortable sitting posture. Its price is comparable to other available lumbar supports on the market. For some users, it may also eliminate or delay the need to purchase an ergonomic office chair.

Scientific evidence

- The company has posted on their website several reports of research studies that have been conducted on their line of products: <https://www.embraceair.com/studies/mcgill-lumbairplus>
- Among the published scientific literature, several studies have observed that lumbar supports are effective in improving the spine curvature in a seated posture, in reducing fatigue and in increasing the comfort of users (Grondin, Triano, Tran, & Soave, 2013; Makhsous et al., 2009; Saito et al., 2014)

Review committee

Two reviewers completed the full review questionnaire. All engaged reviewers are experienced occupational therapists who have garnered experience in recommending products that support and enhanced the sitting posture of their clients.

Final recommendation

The LumbAIRPlus provides lumbar support in an adjustable, lightweight, compact, and portable cushion for mobile adolescents or adults who would benefit from lumbar support in a variety of environments. Users can easily bring the cushion with them between different environments (i.e. home, car, airplane, classrooms), although some may prefer and find it more efficient to have more than one LumbAIRPlus so they can be installed in strategic places where they frequently use it. Reviewers were unanimous and recommended that the LumbAIRPlus be accepted for the CAOT Product Recognition Program.



References

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