

Memory foam advances give firm support to growing mattress industry

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The way we sleep started to change in 1992 with the commercial release of memory foam—a product originally developed at NASA. A decade later, the product became more accessible when the first compressed mattress sold in a box debuted. Today, the polyurethane mattress industry continues to innovate and grow thanks to new chemistry, as reported in *Chemical & Engineering News* (C&EN), the weekly newsmagazine of the American Chemical Society.

C&EN Assistant Managing Editor Michael McCoy explains how developments in memory foam bedding have unfolded to revolutionize how we get our z's. Unlike normal elastic polyurethane which bounces to return to its original shape, viscoelastic memory foam recovers slowly and has little spring, making it a more supportive sleep surface. Producing it on an industrial scale was the first step toward bringing memory foam mattresses to the market. In the years since, manufacturers have opened up the material's cell structure, altered the chemical composition of the polyurethane, and introduced additives to improve comfort and draw heat away from sleeping bodies.

Today, about one-third of mattresses sold in the U.S. are made partially or entirely from memory foam. "Beds-in-a-box"—made of compressed foam and shipped directly to the consumer to be unfurled and slept on that evening—now account for around 13 percent of the mattress market. Many makers of these easy-to-deliver products are only a few years old, and new companies and entrepreneurs continue to enter the increasingly crowded field. The industry has come a long way in the past



25 <u>years</u>, and with new chemistry, it is looking to expand even further.

More information: To sleep, perchance on foam, cen.acs.org/articles/95/i29/sl ... -perchance-foam.html

Provided by American Chemical Society

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