

Japanese turn to wearable tech to beat the heat

August 18 2023



Credit: Unsplash/CC0 Public Domain

Selling jackets with built-in fans, neck coolers and T-shirts that feel cold, Japanese firms are tapping into a growing market for products to help people handle the summer heat.

Japan—like other countries—is seeing ever-hotter summers. This July was the warmest in 100 years, with at least 53 people dying of heatstroke and almost 50,000 needing emergency medical attention.

Workman, which makes clothes for [construction workers](#), launched a version of their fan-fitted jackets adapted for the high street in 2020 as demand grew.

The mechanism is simple—two electric, palm-sized fans powered by a [rechargeable battery](#) are fitted into the back of the jacket.

They draw in air to then deliver a breeze—at variable speeds—onto the wearer's body.

The jackets retail for 12,000 to 24,000 yen (\$82-164).

"As the weather gets hotter, people who have never worn fan-equipped clothing before want to find ways to cool down... so more people are interested in buying it," Workman spokesman Yuya Suzuki told AFP.

"Just like you feel cool when you are at home with a fan, you feel cool just by wearing (the [jacket](#)) because the wind is blowing through your body all the time," he said.

Aging population at risk

Japanese summers are known to be hot and humid, but this July Tokyo really sweated.

The average temperature was 28.7 Celsius (83.7 Fahrenheit), the highest on record since 1875.

Heatstroke is particularly deadly in Japan, which has the second-oldest

population in the world after Monaco.

More than 80 percent of heat-related deaths in the past five years have been among senior citizens.

"Some people die from heatstroke," said Nozomi Takai of MI Creations, a company selling neck-cooling tubes mainly to factory and warehouse workers.

"Individuals as well as companies are putting more and more effort into measures against it every year," Takai said.

The gel inside his firm's brightly colored tubes—priced at 2,500 yen—is cool enough to use after 20 minutes in the fridge.

Wearing it on the neck will "considerably cool the whole body" for about an hour, she said.

Takai's company joined an expo this year on "measures against extreme heat" in Tokyo to showcase new products that help users stay cool in the scorching heat.

At another booth, Tokyo-based company Liberta had a series of clothing including T-shirts and arm sleeves using prints that make users feel cool—especially when they sweat.

The prints use materials such as xylitol that feel cool when reacting with water and sweat, they said.

Chikuma, an Osaka-based company, has even created office jackets and dresses equipped with electric fans.

"We developed them with the idea that it could be proposed in places

where casual wear is not allowed," Yosuke Yamanaka of Chikuma said.

Regular fan-fitted clothes can make the wearer look puffy, as they need to be zipped up, and cuffs are tight.

But jackets developed jointly by Chikuma, power tool maker Makita and textile giant Teijin do not need to be buttoned up, thanks to a special structure that sandwiches the fans in two layers and keeps the cool air in, Yamanaka said.

Men adopting parasols

Parasols, which are commonly associated in Japan with skin-tone-conscious women protecting against a summer tan, are now proving more popular with men too.

Komiyama Shoten, a small, luxury umbrella maker in Tokyo, began making parasols for men around 2019 after the environment ministry encouraged people to use them.

Before, many male customers thought parasols "were for women and they were embarrassed", the owner Hiroyuki Komiya said.

"Once you use it, you can't let go," he added.

On the busy streets of popular tourist destination Asakusa, Kiyoshi Miya, 42, said he decided to "use his umbrella as a parasol".

"It's like I'm always in the shade and the wind feels cool," he said.

Another visitor, Shoma Kawashima, wore a wearable fan around his neck to stay cool under the blazing sun.

"It's so hot I want to be naked," the 21-year-old said.

Gadgets are helpful, but "not a solution" to rising temperatures, he added.

© 2023 AFP

Citation: Japanese turn to wearable tech to beat the heat (2023, August 18) retrieved 2 May 2024 from <https://techxplore.com/news/2023-08-japanese-wearable-tech.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.