



BEYOND ZERO:

Frito-Lay Uses Wearables to Drive Culture Change

Reduces injuries by 19%,
reduces lost work time by 67%



The global environmental health and safety vision for snack food manufacturer Frito-Lay, and parent company PepsiCo, goes beyond the traditional context of zero injuries to include a positive-impact culture. Their “Beyond Zero - Pursue Positive” vision aims to create both an injury-free work environment as well as a program that adds significant value to the health and wellbeing of employees.

With this vision in mind, Frito-Lay recently adopted a strategy to digitize their supply chain in order to drive data-based business decisions. After first experiencing the powerful data generated by fleet telematics and its impact on operations and safety, they turned to KINETIC for wearable technology to address the ergonomic challenges frontline employees face while bringing Frito-Lay snacks to millions of consumers.

SITUATION

A ‘Mix Variety’ of Ergo Injuries

It takes a complex manufacturing and assembly process, involving considerable material handling, to manufacture and distribute some of the most popular snacks available in the marketplace today. With approximately 65,000 associates working in 40+ manufacturing facilities and more than 200 distribution centers throughout North America, ergonomics are a primary worker safety concern at Frito-Lay.

The ergo challenge the company overwhelmingly faced was risk of worker strain and sprain injuries caused by improper postures performed on the job, including bending, lifting and twisting.

Frito-Lay had implemented a variety of traditional methods to enhance their ergonomic process, including athletic trainers, posture training and workplace risk analysis. Although these solutions encouraged employees to modify the way they move, they did not lead to meaningful behavior change.



“We’ve always done all the traditional ergo work, but there has been something missing. We weren’t able to tap into that behavioral element to create a sense of ownership in the individual employee and help them behave posturally in a different way,” said Cormac Gilligan, Vice President of Global Environment, Health & Safety at PepsiCo. “We had a problem to solve and we were able to connect with KINETIC to help do so.”

SOLUTION

'Gotta Have...' Employee Engagement

Frito-Lay introduced the KINETIC Reflex wearable device to thousands of workers in 34 of their manufacturing and distribution centers located throughout North America, in the summer of 2020.

To address improper postures, associates wearing the Reflex device receive a real-time alert when they are bending, twisting or reaching without proper safety technique.

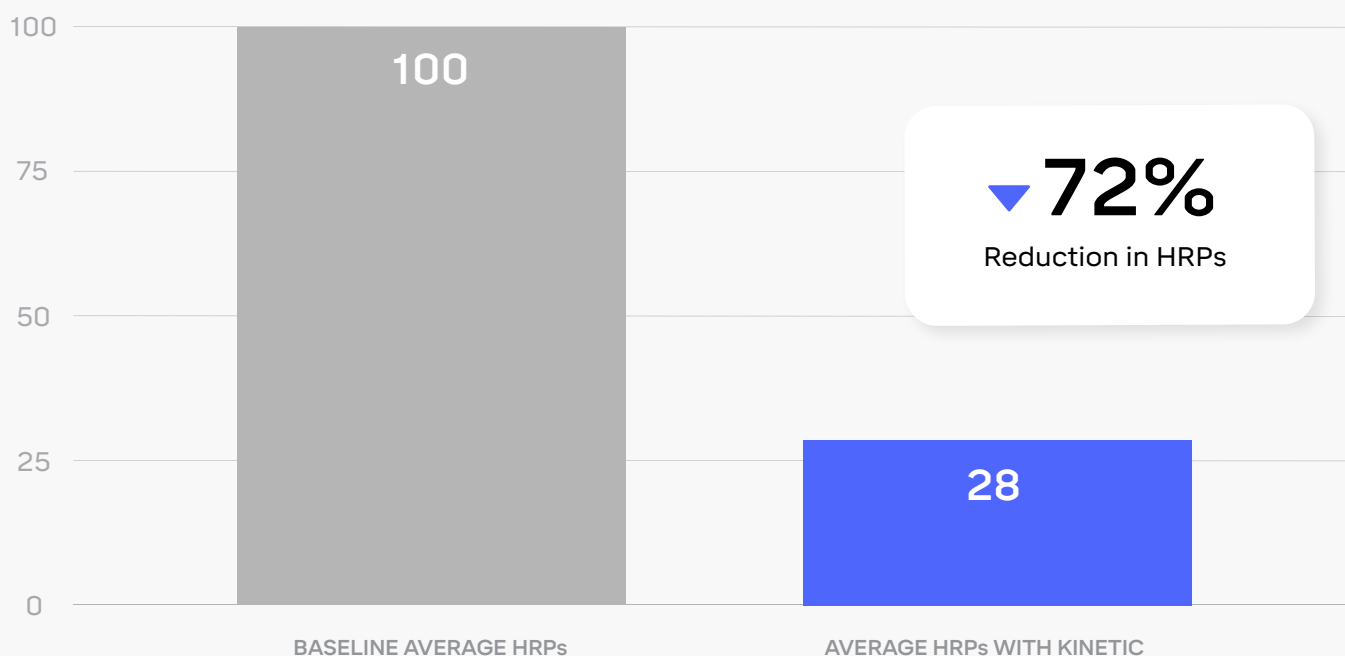
As such, the belt-mounted device serves as an always-on, continuous coaching system.

Employees are empowered to create new habits that drive sustained behavior change with:

- real-time alerts
- on-screen data
- gamification features
- goal and reward functions

Reducing Improper Postures

Awkward postures can contribute to or result in an increased risk of strain and injury. Frito-Lay deployed the KINETIC Reflex device to help employees reduce the amount of improper postures they perform on the job. The belt-mounted wearable automatically recognizes these movements and alerts users with a light vibration, leading to long term behavior change. During a 5-month pilot at two facilities, workers reduced improper postures by 72%.





Leadership reports that having a wearable device, rather than a supervisor, reminding employees to bend or lift properly is especially impactful.

“After receiving an alert, employees stop and think about whether there is something they could do differently. They then initiate conversations with us about why they have to adopt a high risk posture, and how we could redesign the workspace or the process,” said Gilligan. “So you’ve got culture change happening at the same time as behavior change. That is something we’ve never had before with our ergo program.”

Empowered to engage in the ergonomic process, Frito-Lay employees participating in the wearable program have gained a sense of ownership for their own safety and wellbeing.

- “KINETIC helps keep me mindful and aware of my movements at work and home.”
- “KINETIC has challenged me to practice proper posture daily.”
- “It sets a goal every day. A mini game to beat, helps make the day go faster.”
- “KINETIC has helped me to learn how to bend at the knees properly.”

“Wearables started off as a way for us to solve for the traditional ergonomic risks that we see, which drive some of our workers’ comp costs, but it has become an employee engagement exercise because they like and want to wear the device,” said Gilligan.

RESULTS

**Wearables Prove to Be All That,
and a Bag of Chips****Reduced Injury Rates:**

In the first two quarters of deployment of the Reflex, data collected from nine manufacturing sites showed:

- > **a 19% reduction in OSHA Recordable Injury rates (strain/sprain) among all employees, compared to the same timeframe of the previous year;**
- > **a reduction from historically 100% of strain/sprain injuries requiring modified days (when workers can't do their jobs) to now only 33%.**

Employees reduced injury rates by an average of 19%

Additionally, data from the device provided **custom insights** into how employees were moving while performing their jobs, which led to **new opportunities to improve workplace ergonomics**, ranging from training and coaching to workstation and work process redesigns.

“

We have a very transparent and proactive culture and we're always trying to do something different, something additional, to drive better safety performance. When we deployed the Reflex, the results were incredibly powerful.

- CORMAC GILLIGAN, VICE PRESIDENT OF GLOBAL ENVIRONMENT, HEALTH & SAFETY AT PEPSICO

WHAT'S NEXT

Good Ergonomics for All

KINETIC's wearable device and platform is proving to support the greater company's "Beyond Zero - Pursue Positive" environmental health and safety vision, helping to create an injury-free workplace and add value to employees' health and wellbeing.

Frito-Lay's positive early injury reduction results are extending into a broader, two-year deployment at multiple manufacturing locations. Furthermore, the company is expanding their wearable program to the PepsiCo beverage division, with thousands of devices to be deployed in an ambitious four-year program.



PLANT SPOTLIGHT:

Data Empowers Change at World's Largest Frito Factory

Following deployment of the Reflex wearable at Frito-Lay's Kern Plant in California, management used data to focus on improvement in facility hot spots, such as bakery processing.

Baseline data showed this team was performing an average of 33 repetitive twists and bends per day (the highest-risk individual was performing 88). With this knowledge, managers coached team members on alternate lifting and turning techniques to reduce incorrect movements.

Additionally, based on the associates' high risk postures, management was able to identify times of risk, such as when taking weight samples or during ingredient changeovers. They used this data to drive purchasing decisions, retrofit equipment, and modify workspace setups to reduce risk.



Learn how your company can benefit from the KINETIC Reflex wearable today. Visit us at wearkinetic.com or contact us at info@wearkinetic.com