Of all the biometric data that health wearables and mobile apps can track, from miles moved to hours slept to heart beats per minute, no one has yet been able to nail down a way to accurately and passively monitor food intake.

Because nutrition is a key part of a healthy lifestyle, and food tracking has been associated with weight loss (but is cumbersome to do manually), the calories-in metric is thought by many to be a key data point that’s missing in health tracking today.

It’s not that anyone isn’t trying. If you’ll remember, last year a startup called AIRO got a little excited talking up its wristband that would supposedly use spectrometry to measure calories and nutrition. But it later reneged, canceling pre-orders and saying the device needed further testing.

Two other companies, Healbe and TellSpec, have raised hundreds of thousands of dollars on Indiegogo for devices that they say would measure caloric with sensors.

Now there’s a new player in the game and its software development firm DataArt, which is launching a series of R&D initiatives in an effort to automate nutrition tracking.

The firm’s technology takes a bit of a different approach. It scans pictures of food taken by the user and uses photo recognition to determine what it is. It also builds a context around the photo using geographic location and time of day to determine what the food in the picture might be. For example, if a person is in a restaurant in the evening and snaps a picture of food, DataArt may be able to automatically look up that restaurant’s dinner menu, said company President Eugene Goland.

The system is in prototype form and can currently identify about 100 foods, Goland told me. Once more foods are added and the team is sure the technology is a accurate as it can be, the hope will be to integrate with other tracking apps or devices within the next 12 months.

“We’re trying to position ourselves as a hub for food recognition,” he said.

This approach seems a little simpler than some of the others under development and also resembles efforts by teams at University of Washington and Purdue University and Purdue University.

Whoever can successfully bring a passive calorie tracker to market will get a piece of the $20 billion mobile health market expected by 2018.
DataArt is calling its project Orange after one of the easiest foods to identify. The company has offices in New York and throughout Europe.