

# PRESS RELEASE

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Contact: Alexander Mamishev  
Phone: (206) 221-5729  
Fax: (206) 543-3842

**Sensors, Energy, and Automation Laboratory**  
Department of Electrical Engineering  
University of Washington  
Box 352500, Seattle, WA 98195-2500  
www.ee.washington.edu/research/seal  
mamishev@ee.washington.edu



## UW Dietary Recorder Offers Phone-Based Laser-Assisted Weight Loss

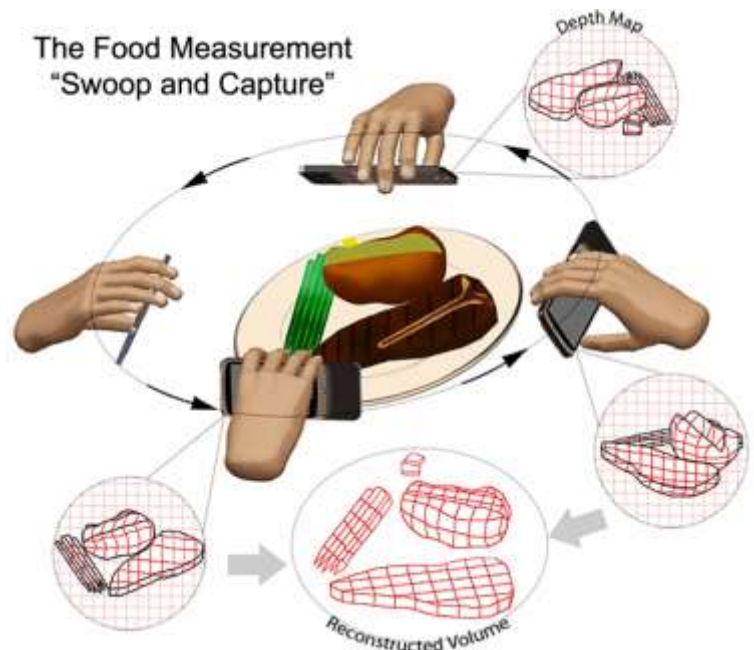
**November 25, 2011 – Seattle, WA** – The Sensors, Energy, and Automation, Laboratory at the University of Washington, in partnership with the Fred Hutchinson Cancer Research Center, has completed development of a prototype Dietary Data Recorder System (DDRS). The DDRS enables users to automatically calculate and log the caloric content of over nine thousand types of food, through the use a laser grid and a camera-equipped mobile phone. The device functions in near real-time, allowing users to view an up-to-date summary of their daily eating habits, and granting them the awareness necessary to make better choices.

The highly accurate, automated measurements that the DDRS provides transcend the capabilities of traditional dietary intake monitoring systems, which typically rely on manual estimation to calculate the caloric content of food. “Through laser-based 3D reconstruction,” explains Ph.D. candidate Junqing Shang, “the DDRS creates volumetric representations of food and beverages.” When coupled with a robust nutritional database and a powerful back-end server, the DDRS can calculate energy intake on the fly, allowing doctors, researchers, and health-conscious individuals, to observe objectively even the smallest details about eating habits.

The DDRS can currently measure everyday food items with roughly 90% accuracy, including among its recordings not only caloric content information, but also advanced nutritional information, location, time of day, and more. With this wide array of simultaneous measurements, the DDRS provides the foundation for a high-level of complex behavioral analysis that will undoubtedly improve dietary and medical research and change lives.



*A photograph of the current design. The DDRS features snap-on functionality, USB and Bluetooth connections, as well as a built-in laser. It uses the phone’s on-board GPS sensor for location tracking.*



*The DDRS uses 3D modeling to estimate food volume, analyzing user-recorded videos that are obtained with a simple “swooping” motion.*

For further information, contact Alexander Mamishev at (206) 221-5729.

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