

### **Recognition of Culturally Diverse Cuisine in Popular Nutrition Apps**

Alexis Cathcart,<sup>1</sup> Matthew Wiggins,<sup>1</sup> William Kelly,<sup>1</sup> Christopher Doss,<sup>1</sup> Yvonne Ford,<sup>1</sup> Robert Hubal,<sup>2</sup> and Kristen Rhinehardt<sup>1</sup>

<sup>1</sup>North Carolina A&T State University and <sup>2</sup>University of North Carolina at Chapel Hill

**Objectives:** Nutrition apps have been designed to assist users in determining the nutritional value of their food in alliance with their dietary restrictions and/or health. However, many of these apps do not incorporate or recognize the cuisine of the diverse communities that they serve. In this work we assessed several of the most popular free apps and compared with the most popular dishes in Latin America, Europe, India, East Asia, West Africa, and the American South to determine the rate of recognition of culturally diverse cuisines in popular nutrition apps.

**Methods:** We built a consensus database of over 150 culturally popular foods via a web scraper for foods from Latin American, Europe, India, East Asia, West Africa, and the American South. Researched & logged popular dishes from International cuisines with their corresponding nutritional data. Each food item was run against Calorie Mama, Lose It, My Fitness Pal and My Plate to determine the recognition and availability of the nutritional value.

**Results:** European and Indian dishes were better recognized (greater than 70%) across all apps than West African and Latin American dishes. Of the dishes that were recognizable, most were due to manual entry and lacked some of the nutritional information, making the apps less useful.

**Conclusions:** We note a bias among popular nutrition apps in not taking into account cuisines, from both international and regional American communities, leaving many communities underserved and contributing to health inequalities gap.

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