Delicious Impressions Support Healthy Eating (DISH) Study
Executive Summary

The first multi-site study using campus dining halls as living laboratories to study eating behaviors
Co-founded and jointly led by Stanford University Residential & Dining Enterprises, Stanford Prevention Research Center and The Culinary Institute of America (CIA) – and as an extension of the groundbreaking Menus of Change initiative presented by the CIA and Harvard T.H. Chan School of Public Health, Department of Nutrition – the Menus of Change University Research Collaborative (MCURC) is a working group of leading scholars, foodservice business leaders, and executive chefs from 50+ colleges and universities who are accelerating efforts to move Americans toward healthier, more sustainable, plant-forward diets.

To learn more about MCURC, please visit moccollaborative.org
BACKGROUND

Healthy foods are typically marketed and labeled with an emphasis on nutrition, yet research suggests that **tastiness is a stronger motivator**.

Strategies are needed to **increase consumption of plant-foods**, like vegetables, among college students.

Food labels are a powerful way to **influence how people expect a food to taste** and whether they choose it.

University dining halls are ideal **living laboratories** for studying the impact of taste-focused labeling on student food choices.
BACKGROUND

The DISH Study supports the following Menus of Change principles:
The MCURC is pioneering a new research model to scale innovative research projects from one university across the MCURC network.

**RESEARCH MODEL**

<table>
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<th>INDULGENT LABELING STUDY 2017</th>
<th>Institutions</th>
<th>Days</th>
<th>Diner Decisions</th>
<th>Vegetable Dishes</th>
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DISH (Delicious Impressions Support Healthy Eating) Study
The DISH Study Asks:
Do taste-focused labels lead more people to choose vegetables across multiple campus dining halls in the MCURC?

The study was implemented using dining halls as living laboratories in five colleges and universities across the United States.
RESEARCH MODEL

Over 185 days, researchers tracked nearly 140,000 decisions about 71 vegetable dishes that had been labeled with taste-focused, health-focused or basic names.
Taste-Focused Labels Increase Vegetable Selection

Compared to health-focus labels, taste-focused labels increase selection by 29%
KEY INSIGHTS

**Taste-Focused Labels Increase Vegetable Consumption**

Compared to health-focus labels, taste-focused labels increase consumption by **39%**.
KEY INSIGHTS

Taste-Focused Labels Increase the Expectation of a Positive Flavor Experience

Choosing words that convey something specific about the taste (mentioning ingredients like “garlic” or “ginger” or preparation methods like “roasted”) and also the experience (words like “sizzlin,” “inspired,” and “tavern style”) help convey that the dish is not only tasty but exciting, indulgent, comforting, or nostalgic.

In other words, “Twisted Citrus Glazed Carrots” works because it highlights the flavor and the positive experience, while “Absolutely Awesome Zucchini” is too vague, or “Roasted Broccoli” don’t highlight a positive experience to work.
KEY INSIGHTS

Taste-Focused Labels Work Better when Dishes are Tastier

The more delicious a school’s vegetables recipes were rated overall, the more effective the taste-focused labels were in promoting selection of vegetables.

Taste-focused labels don’t work with vegetable dishes that are basic or bland, because the dish will not live up to the flavorful expectations set by the label.
Labeling is an effective strategy to increase vegetable selection and consumption resulting in a positive impact on student eating behaviors.

The *Edgy Veggies Toolkit* was developed to help foodservice operators implement taste-focused labeling in their operations. This resource is available online at [http://sparqtools.org/edgyveggies](http://sparqtools.org/edgyveggies)

If all 57 member institutions of the MCURC implemented taste-focused labeling across the 750,000 meals they serve each day, this would translate to **38,000 more vegetable servings per day**

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*We started using the toolkit at Stanford and replicated it within the MCURC. Now there is a great opportunity for university dining programs and other food services across the country to use the scientifically supported toolkit to help advocate for the delicious aspects of healthy eating.*

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*Eric Montell*

Executive Director of R&DE Stanford Dining and Co-Director of the MCURC
Stanford University
The study was important for our staff in that they were able to see first-hand how the naming conventions affect what foods students take. Menu naming is one of the ways we can influence their decisions to take healthier foods and is definitely an important tool that we will continue to use.”

Lindsey Pine, MS, RDN
Hospitality Dietitian
USC Hospitality

“OPPORTUNITIES FOR IMPACT

The DISH Study highlights the collaboration of the academic world and the culinary realm to lead with deliciousness when promoting intended eating behaviors rather than relying on healthfulness to be the driving force.”

Peggy Policastro, PhD, RDN
IFNH Director of Behavioral Nutrition
Rutgers University
OPPORTUNITIES FOR IMPACT

“Partnering on the DISH Study to increase knowledge on how to shift menu choices toward healthier food, using taste-centric labels, was not only a natural move for us but also a powerful way to acknowledge the critical role of taste in promoting healthy eating.”

Maureen Timmons, EdD
Dining Director
Northeastern University

“The DISH Study reminds us that not only do we need to develop delicious and healthy food, we need to communicate it the right way.”

Peter Balabuch
Director of Residential Dining Services
University of North Texas

“This study has demonstrated the importance of leading with flavor, not only with smart and intentional labeling, but also with a specific effort on cooking tasty vegetables and focusing on deliciousness of healthy dishes.”

Erica Holland-Toll
Executive Chef of the Stanford Flavor Lab
Stanford Residential & Dining Enterprises
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Effects of Taste-Focused vs. Health-Focused Labels on Vegetable Selection and Consumption in University Dining Halls: A Randomized Controlled Multi-Site Intervention

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ACKNOWLEDGEMENTS

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ABOUT MCURC

The Menus of Change University Research Collaborative is a nationwide network of colleges and universities using campus dining halls as living laboratories for behavior change. It is a collaboration of forward-thinking scholars, foodservice leaders, executive chefs, and administrators for colleges and universities who are accelerating efforts to move people toward healthier, more sustainable, and delicious foods using evidence-based research, education, and innovation.

The MCURC was co-founded and is jointly led by Stanford University, one of the world’s leading research institutions—specifically Stanford Residential & Dining Enterprises and Stanford Prevention Research Center at Stanford Medical School—and The Culinary Institute of America (CIA), the world’s premier culinary college.

It is a diverse, extensive, and inclusive network of 236 members representing 57 colleges and universities, two ex officio organizations, and four Research Collaborator organizations. Our work is made possible by the generous support of 22 industry-leading sponsor organizations. The MCURC’s vision is cultivating the long-term wellbeing of people and planet one student, one meal at a time. For more information, visit moccollaborative.org.