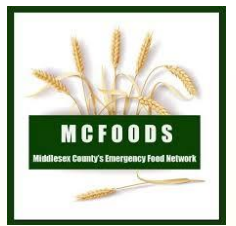


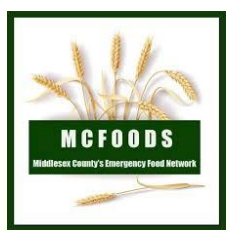


RUTGERS
New Jersey Agricultural
Experiment Station



Welcome to the School Food Waste Reduction Summit



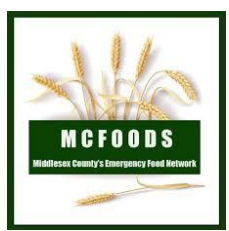


Welcome



Dr. Brian Schilling, PhD

- Director, Rutgers Cooperative Extension
- Senior Associate Director, NJ Agricultural Experiment Station



Food Insecurity & Food Waste



Dr. Shilpa Pai, MD

- Director, Resident Education in Advocacy & Community Health
- Co-Director, NJ Pediatric Residency Advocacy Collaborative
- AAP District III Community Access to Children's Health (CATCH) Facilitator
- Associate Professor of Pediatrics, Department of Pediatrics, Rutgers-Robert Wood Johnson Medical School



Case Study: Paterson, NJ



Sara Elnakib, RD, MPH

Family & Community Health Sciences
Educator, Rutgers University

The Facts about Food Waste



- Approximately **30 to 40 percent of the food supply**, ends up as food waste.
- In 2010, an estimated 133 billion pounds of food from U.S. retail food stores, restaurants, and homes—valued at approximately **\$161 billion—went uneaten.**
- The *land, water, labor, energy* and other inputs used in *producing, processing, transporting, preparing, storing, and disposing* of discarded food is wasted.
- In 2010, the bill for dumping food into landfills was more than \$2 billion.

USDA & EPA Food Waste Challenge

“On September 16, 2015, the first-ever national food loss and waste goal in the United States was launched, calling for a 50-percent reduction by 2030.”



Legislative Genesis

Food Waste Bill S3027

- Signed August 2017
- Establishes 50% MSW food waste reduction by 2030

3/12/2018 53027

SENATE, No. 3027
STATE OF NEW JERSEY
217th LEGISLATURE

INTRODUCED FEBRUARY 27, 2017

Sponsored by:
Senator BOB SMITH
District 17 (Middlesex and Somerset)
Senator LINDA R. GREENSTEIN
District 14 (Mercer and Middlesex)
Assemblywoman PAMELA R. LAMPITT
District 6 (Burlington and Camden)
Assemblywoman ANNETTE QUILANO
District 20 (Union)
Assemblyman TIM EUSTACE
District 38 (Bergen and Passaic)
Assemblyman JAMES J. KENNEDY
District 22 (Middlesex, Somerset and Union)
Assemblyman DANIEL R. BENSON
District 14 (Mercer and Middlesex)
Assemblywoman ELIZABETH MAHER MUOIO
District 15 (Hunterdon and Mercer)
Assemblyman ANDREW ZWICKER
District 16 (Hunterdon, Mercer, Middlesex and Somerset)
Assemblyman RAJ MUKHERJI
District 33 (Hudson)

Food Waste Bill A3056

- Signed August 2017
- Requests guidelines to be written for K-12 and higher education institutions to reduce, recover and recycle food waste

§1 -
C.13:1E-99.115

P.L.2017, CHAPTER 210, *approved August 7, 2017*
Assembly, No. 3056 (Second Reprint)

1 AN ACT concerning ²[the donation of excess food by school
2 districts] food waste in K-12 schools² and institutions of higher
3 education, supplementing Title ⁴[4] 13³ of the Revised Statutes,
4 and amending P.L.1982, c.178.
5
6 **BE IT ENACTED** by the Senate and General Assembly of the State
7 of New Jersey:
8
9 ²[1. a. The Department of Agriculture, in consultation with the
10 Department of Education, the Department of Health, and the Office of
11 the Secretary of Higher Education, shall establish, or work with
12 appropriate nonprofit organizations to establish, voluntary guidelines
13 to encourage and facilitate the ability of school districts and
14 institutions of higher education to donate excess, unused, edible food
15 from meals served at schools to local voluntary food assistance
16 programs including, but not limited to, food banks, food pantries, soup
17 kitchens, and other nonprofit organizations that distribute food to the
18 ...]

Legislative Genesis

The A3056 food waste bill requires the NJ Department of Agriculture, the NJ Department of Education, the NJ Department of Health, the NJ Department of Environmental Protection and the NJ Office of the Secretary of Higher Education to develop five categories of guidelines for K-8, Secondary, and Higher Education to reduce food waste in schools.

§1 –
C.13:1E-99.115

P.L.2017, CHAPTER 210, *approved August 7, 2017*
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4 and amending P.L.1982, c.178.
5



The Guidelines for Schools

- The NJDEP will be releasing the Food Waste Guidelines for both K-12 schools and Higher Education.
- To achieve the goals of Bill S3027 we need to measure baseline food waste.

Draft

- March 2018 -

NJ Department of Environmental Protection
NJ Department of Agriculture
NJ Department of Education
NJ Department of Health



How to Reduce Food Waste?



Paterson's Food Waste Program



- Through a partnership with the Paterson Public Schools we conducted an audit to assess the effect of training for Food Service Workers on food waste.
- Paterson Public Schools is under the Community Eligibility Provision
- All students receive free Breakfast & Lunch

Design of this Study

- We wanted to measure the plate waste before and after the training. We only measured 15 elementary and middle schools that cooked their own meals.
 - Sample trays were weighed as a pre-consumption measure.
 - After the food was consumed each food component was weighed separately separately. (fruits, vegetables, milk and entrée [grain/protein])
 - Each school was measured twice before and after the training.





Training Program

- Smarter Lunchrooms Movement
- Offer Vs. Serve

Smarter Lunchrooms Movement

- The Cornell B.E.N. Center researches how behavioral economics influences students' food choices.
- Make healthy choices visible, convenient, and appealing to students
- In the language of behavioral economics, these factors are called Visibility and Convenience, and they influence consumers' choices.
- Most choices are so subliminal they seem automatic
- Choices influenced by environment
- Change your environment = Change your habits.



Examples of Smarter Lunchroom Strategies

- Focus on Fruits

- At least two kinds of fruit are offered.
- Sliced or cut fruit is offered.

- Vary the Vegetables

- Both hot and cold vegetables are offered.
- When cut, raw vegetables, are offered, they are paired with a low-fat dip such as ranch, hummus, or salsa.

- Highlight the Salad

- Pre-packaged salads or a salad bar is available to all students.
- Pre-packaged salads or a salad bar is in a high-traffic area.

- Move More White Milk

- White milk is displayed in front of other beverages in all coolers.
- 1% or non-fat white milk is identified as the featured milk and is labeled with a creative, descriptive name.

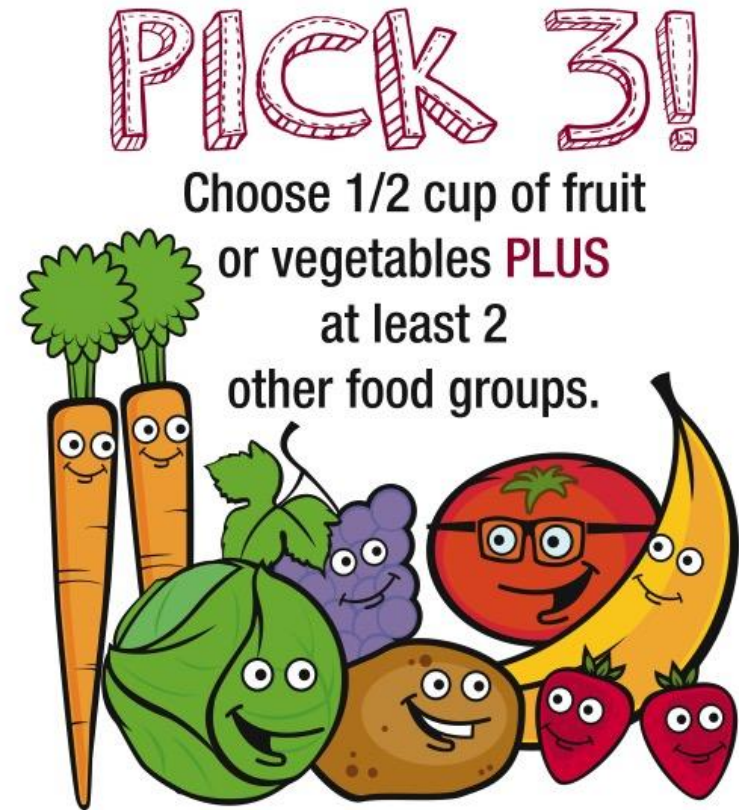
- Lunchroom Atmosphere

- Attractive, healthful food posters are displayed in dining and service areas.
- Cafeteria staff smile and greet students upon entering the service line and throughout meal service.

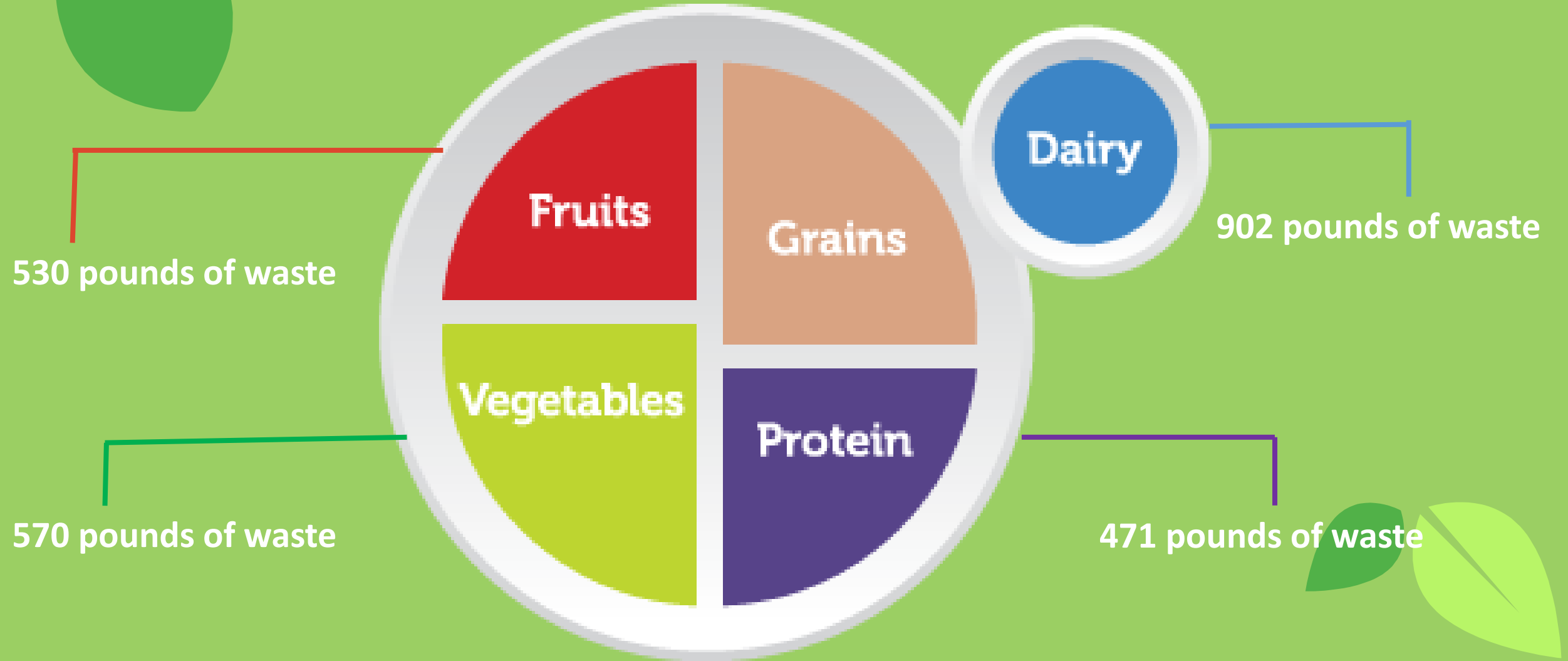


Offer vs. Serve

- According to guidelines by the USDA, students do not need to take all 5 components of a meal for the school to be reimbursed for that meal.
- A student may choose 3 out of the 5 components at lunch and the school will be reimbursed as long as the student takes a fruit or vegetable.



Food Waste-Pre Intervention





2,473 pounds

Wasted in our 30 visits in schools

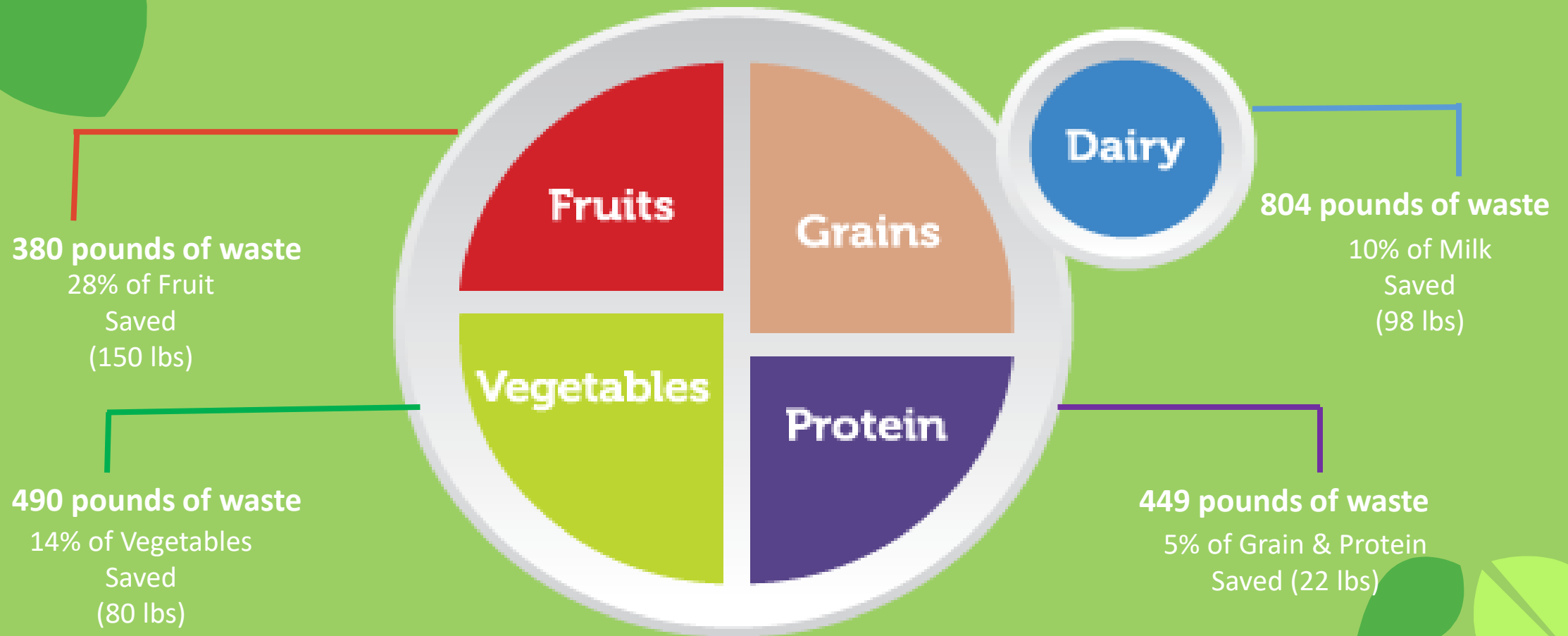




What does this mean?

- That is approximately **84** pounds of waste per school per day
- Which means it can be as much as **14,838** pounds of waste a year per school.
- **623,196** pounds of food waste for the whole district for the year.

Food Waste: Post-Intervention





350 pounds

of food saved after our training





What does this mean?

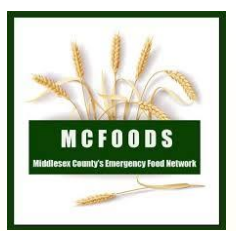
- That is approximately **12** pounds of waste **SAVED** per school per day
- Which means it can be as much as **2,160** pounds of waste **SAVED** a year per school.
- **90,720** pounds of food waste **SAVED** for the whole district for the year.



\$76,452

cost savings for the school district per year





Panel Discussion



David Buchholtz

Director of Food Services,
Paterson Public Schools



Jennifer Apostol

Director of MCFOODS



Jennifer Shukaitis

Family & Community
Health Sciences
Educator,
Rutgers University

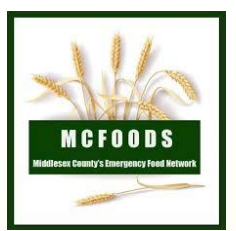


Dr. Shilpa Pai

Director, Resident Education
in Advocacy & Community
Health,
Rutgers-Robert Wood
Johnson Medical School



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School Food Waste Design-a-thon





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Thank You

