Smarter Lunchrooms Scorecard Literature Review

Researchers from many universities and countries have published papers that focus on encouraging children to select and eat nutritious food, which corroborate and strengthen the behavioral research that is the foundation of the Smarter Lunchrooms Movement. Some of this research is included below.

Focus on Fruit:

- **At least two kinds of fruit are offered.**
  - Serving a variety of vegetables and fruit as a snack increased intake in preschool children
    - Roe, L. S., Meengs, J. S., Birch, L. L., & Rolls, B. J. (2013). Serving a variety of vegetables and fruit as a snack increased intake in preschool children. *The American journal of clinical nutrition*, 98(3), 693-699.
  - Increasing Consumption of Fruits and Vegetables in the School Cafeteria: The Influence of Active Choice.
    - Hakim, S. M. and G. Meissen. (2013) "Increasing Consumption of Fruits and Vegetables in the School Cafeteria: The Influence of Active Choice." *Journal of Health Care for the Poor and Underserved*, 24(2): 145-157.

- **Sliced or cut fruit is offered.**
  - Promoting consumption of fruit in elementary school cafeterias. The effects of slicing apples and oranges
    - Swanson, M., Branscum, A., & Nakayima, P. J. (2009). Promoting consumption of fruit in elementary school cafeterias. The effects of slicing apples and oranges. *Appetite*, 53(2), 264-267.
  - Childhood overweight and the relationship between parent behaviors, parenting style, and family functioning
    - Rhee, K. (2008). Childhood overweight and the relationship between parent behaviors, parenting style, and family functioning. *The ANNALS of the American Academy of Political and Social Science*, 615(1), 11-37.
  - Psychosocial correlates of dietary intake: advancing dietary intervention
    - Baranowski, T., Cullen, K. W., & Baranowski, J. (1999). Psychosocial correlates of dietary intake: advancing dietary intervention. *Annual review of nutrition*, 19(1), 17-40.
  - How to promote fruit consumption in children. Visual appeal versus restriction
    - Jansen, E., Mulkens, S., & Jansen, A. (2010). How to promote fruit consumption in children. Visual appeal versus restriction. *Appetite*, 54(3), 599-602.

- **A variety of mixed whole fruits are displayed in nice bowls or baskets (instead of stainless steel pans).**
  - How to promote fruit consumption in children. Visual appeal versus restriction
    - Jansen, E., Mulkens, S., & Jansen, A. (2010). How to promote fruit consumption in children. Visual appeal versus restriction. *Appetite*, 54(3), 599-602.

- **Fruit is offered in at least two locations on all service lines, one of which is right before each POS.**

- Determinants of fruit and vegetable consumption among 6–12-year-old children and effective interventions to increase consumption
  - Blanchette, L., & Brug, J. (2005). Determinants of fruit and vegetable consumption among 6–12-year-old children and effective interventions to increase consumption. *Journal of human nutrition and dietetics*, 18(6), 431-443.

- Influencing healthful food choices in school and home environments: Results from the TEENS study
  - Lytle, L. A., Kubik, M. Y., Perry, C., Story, M., Birnbaum, A. S., & Murray, D. M. (2006). Influencing healthful food choices in school and home environments: results from the TEENS study. *Preventive medicine*, 43(1), 8-13.

- **At least one fruit is identified as the featured fruit-of-the-day and is labeled with a creative, descriptive name at the point of selection.**
  - Choosing between an Apple and a Chocolate Bar: the Impact of Health and Taste Labels
    - Forwood, S. E., Walker, A. D., Hollands, G. J., & Marteau, T. M. (2013). Choosing between an apple and a chocolate bar: the impact of health and taste labels. *PloS one*, 8(10), e77500.

  - Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods
    - Musher-Eizenman, D. R., Oehlhof, M. W., Young, K. M., Hauser, J. C., Galliger, C., & Sommer, A. (2011). Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods. *Journal of Early Childhood Research*, 9(3), 191-195.

- **A fruit taste test is offered at least once a year.**
  - A Garden Pilot Project Enhances Fruit and Vegetable Consumption among Children
    - Heim, S., Stang, J., & Ireland, M. (2009). A garden pilot project enhances fruit and vegetable consumption among children. *Journal of the American Dietetic Association*, 109(7), 1220-1226.

  - Parent food purchases as a measure of exposure and preschool-aged children's willingness to identify and taste fruit and vegetables
    - Busick, D. B., Brooks, J., Pernecky, S., Dawson, R., & Petzoldt, J. (2008). Parent food purchases as a measure of exposure and preschool-aged children's willingness to identify and taste fruit and vegetables. *Appetite*, 51(3), 468-473.

Vegetable Variety:

- **At least two kinds of vegetables are offered.**
  - Vegetable variety: an effective strategy to increase vegetable choice in children
    - Bucher, T., Siegrist, M., & van der Horst, K. (2014). Vegetable variety: an effective strategy to increase vegetable choice in children. *Public health nutrition*, 17(6), 1232-1236.

- **Vegetables are offered on all service lines.**

- Influencing healthful food choices in school and home environments: Results from the TEENS study
  - Lytle, L. A., Kubik, M. Y., Perry, C., Story, M., Birnbaum, A. S., & Murray, D. M. (2006). Influencing healthful food choices in school and home environments: results from the TEENS study. *Preventive medicine*, 43(1), 8-13.

- Determinants of fruit and vegetable consumption among 6–12-year-old children and effective interventions to increase consumption
  - Blanchette, L., & Brug, J. (2005). Determinants of fruit and vegetable consumption among 6–12-year-old children and effective interventions to increase consumption. *Journal of human nutrition and dietetics*, 18(6), 431-443.

- **Hot and cold vegetables are offered.**
  - Improvement of meal composition by vegetable variety
    - Bucher, T., van der Horst, K., & Siegrist, M. (2011). Improvement of meal composition by vegetable variety. *Public health nutrition*, 14(08), 1357-1363.3

  - Vegetable variety: an effective strategy to increase vegetable choice in children
    - Bucher, T., Siegrist, M., & van der Horst, K. (2014). Vegetable variety: an effective strategy to increase vegetable choice in children. *Public health nutrition*, 17(6), 1232-1236.

- **At least one vegetable is identified as the featured vegetable-of-the-day and is labeled with a creative, descriptive name at the point of selection.**
  - Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods
    - Musher-Eizenman, D. R., Oehlhof, M. W., Young, K. M., Hauser, J. C., Galliger, C., & Sommer, A. (2011). Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods. *Journal of Early Childhood Research*, 9(3), 191-195.

- **Self-serve spices and seasonings are available for students to add flavor to vegetables.**
  - Changes in the Nutrient Content of School Lunches: Results from the CATCH Eat Smart Food Service Intervention
    - Osganian, S. K., Ebzery, M. K., Montgomery, D. H., Nicklas, T. A., Evans, M. A., Mitchell, P. D., ... & Bachman, K. J. (1996). Changes in the nutrient content of school lunches: results from the CATCH Eat Smart Food service Intervention. *Preventive Medicine*, 25(4), 400-412.

- **A serving of vegetables is incorporated into an entrée item at least once a month.**
  - Improvement of meal composition by vegetable variety
    - Bucher, T., van der Horst, K., & Siegrist, M. (2011). Improvement of meal composition by vegetable variety. *Public health nutrition*, 14(08), 1357-1363.3

  - Vegetable variety: an effective strategy to increase vegetable choice in children
    - Bucher, T., Siegrist, M., & van der Horst, K. (2014). Vegetable variety: an effective strategy to increase vegetable choice in children. *Public health nutrition*, 17(6), 1232-1236.

- **Cut vegetables, when offered, are paired with a low-fat dip such as ranch, hummus, or salsa.**
  - Offering "Dip" Promotes Intake of a Moderately-Liked Raw Vegetable among Preschoolers with Genetic Sensitivity to Bitterness
    - Fisher, J. O., Mennella, J. A., Hughes, S. O., Liu, Y., Mendoza, P. M., & Patrick, H. (2012). Offering "dip" promotes intake of a moderately-liked raw vegetable among preschoolers with genetic sensitivity to bitterness. *Journal of the Academy of Nutrition and Dietetics*, 112(2), 235-245.

  - The Addition of a Plain or Herb-Flavored Reduced-Fat Dip Is Associated with Improved Preschoolers' Intake of Vegetables
    - Savage, J. S., Peterson, J., Marini, M., Bordi, P. L., & Birch, L. L. (2013). The addition of a plain or herb-flavored reduced-fat dip is associated with improved preschoolers' intake of vegetables. *Journal of the Academy of Nutrition and Dietetics*, 113(8), 1090-1095.

- **A vegetable taste test is offered at least once a year.**
  - Repeated taste exposure increases liking for vegetables by low-income elementary school children
    - Lakkakula, A., Geaghan, J., Zanovec, M., Pierce, S., & Tuuri, G. (2010). Repeated taste exposure increases liking for vegetables by low-income elementary school children. *Appetite*, 55(2), 226-231.

  - A Garden Pilot Project Enhances Fruit and Vegetable Consumption among Children
    - Heim, S., Stang, J., & Ireland, M. (2009). A garden pilot project enhances fruit and vegetable consumption among children. *Journal of the American Dietetic Association*, 109(7), 1220-1226.

  - Parent food purchases as a measure of exposure and preschool-aged children's willingness to identify and taste fruit and vegetables
    - Busick, D. B., Brooks, J., Pernecky, S., Dawson, R., & Petzoldt, J. (2008). Parent food purchases as a measure of exposure and preschool-aged children's willingness to identify and taste fruit and vegetables. *Appetite*, 51(3), 468-473.

Salad:

- **Pre-packaged salads or a salad bar is available.**
  - Salad Bars and Fruit and Vegetable Consumption in Elementary Schools: A Plate Waste Study
    - Adams, M. A., Pelletier, R. L., Zive, M. M., & Sallis, J. F. (2005). Salad bars and fruit and vegetable consumption in elementary schools: a plate waste study. *Journal of the American Dietetic Association*, 105(11), 1789-1792.

- **Self-serve salad bar tongs, scoops, and containers are larger for vegetables and smaller for croutons, dressing, and other non-produce items.**
  - Can schools save kids' palates? Cooking from scratch in schools—The greatest food service challenge of our time

- Collins, B. (2012). Can schools save kids' palates? Cooking from scratch in schools—The greatest food service challenge of our time. *Childhood Obesity (Formerly Obesity and Weight Management)*, 8(4), 323-326.

- **Pre-packaged salads or a salad bar is in a high traffic area and is available to all students.**
  - Location of school lunch salad bars and fruit and vegetable consumption in middle schools: A cross-sectional plate waste study
    - Adams, M. A., Bruening, M., Ohri-Vachaspati, P., & Hurley, J. C. (2016). Location of school lunch salad bars and fruit and vegetable consumption in middle schools: A cross-sectional plate waste study. *Journal of the Academy of Nutrition and Dietetics*, 116(3), 407-416.

  - Salad Bars and Fruit and Vegetable Consumption in Elementary Schools: A Plate Waste Study
    - Adams, M. A., Pelletier, R. L., Zive, M. M., & Sallis, J. F. (2005). Salad bars and fruit and vegetable consumption in elementary schools: a plate waste study. *Journal of the American Dietetic Association*, 105(11), 1789-1792.

- **Pre-packaged salads or salad bar choices are labeled with creative, descriptive names and displayed next to each choice.**
  - Salad Bars and Fruit and Vegetable Consumption in Elementary Schools: A Plate Waste Study
    - Adams, M. A., Pelletier, R. L., Zive, M. M., & Sallis, J. F. (2005). Salad bars and fruit and vegetable consumption in elementary schools: a plate waste study. *Journal of the American Dietetic Association*, 105(11), 1789-1792.

  - Location of school lunch salad bars and fruit and vegetable consumption in middle schools: A cross-sectional plate waste study
    - Adams, M. A., Bruening, M., Ohri-Vachaspati, P., & Hurley, J. C. (2016). Location of school lunch salad bars and fruit and vegetable consumption in middle schools: A cross-sectional plate waste study. *Journal of the Academy of Nutrition and Dietetics*, 116(3), 407-416.

Move More White Milk:

- **Milk cases/coolers kept full throughout meal service.**
  - The nutritional role of flavored and white milk in the diets of children
    - Nicklas, T. A., O'Neil, C. E., & Fulgoni, V. L. (2013). The nutritional role of flavored and white milk in the diets of children. *Journal of School Health*, 83(10), 728-733.

- **White milk is offered in all beverage coolers.**
  - The nutritional role of flavored and white milk in the diets of children
    - Nicklas, T. A., O'Neil, C. E., & Fulgoni, V. L. (2013). The nutritional role of flavored and white milk in the diets of children. *Journal of School Health*, 83(10), 728-733.

- **White milk is displayed in front of other beverages in all coolers.**
  - The nutritional role of flavored and white milk in the diets of children
    - Nicklas, T. A., O'Neil, C. E., & Fulgoni, V. L. (2013). The nutritional role of flavored and white milk in the diets of children. *Journal of School Health*, 83(10), 728-733.

- School Children's Consumption of Lower-Calorie Flavored Milk: A Plate Waste Study
  - Yon, B. A., Johnson, R. K., & Stickle, T. R. (2012). School children's consumption of lower-calorie flavored milk: a plate waste study. *Journal of the Academy of Nutrition and Dietetics*, 112(1), 132-136.

- **White milk is organized and represents at least 1/3 of all milk in each designated milk cooler.**
  - The nutritional role of flavored and white milk in the diets of children
    - Nicklas, T. A., O'Neil, C. E., & Fulgoni, V. L. (2013). The nutritional role of flavored and white milk in the diets of children. *Journal of School Health*, 83(10), 728-733.
  - School Children's Consumption of Lower-Calorie Flavored Milk: A Plate Waste Study
    - Yon, B. A., Johnson, R. K., & Stickle, T. R. (2012). School children's consumption of lower-calorie flavored milk: a plate waste study. *Journal of the Academy of Nutrition and Dietetics*, 112(1), 132-136.

- **1% or non-fat white milk is identified as the featured milk and is labeled with a creative, descriptive name.**
  - The nutritional role of flavored and white milk in the diets of children
    - Nicklas, T. A., O'Neil, C. E., & Fulgoni, V. L. (2013). The nutritional role of flavored and white milk in the diets of children. *Journal of School Health*, 83(10), 728-733.
  - School Children's Consumption of Lower-Calorie Flavored Milk: A Plate Waste Study
    - Yon, B. A., Johnson, R. K., & Stickle, T. R. (2012). School children's consumption of lower-calorie flavored milk: a plate waste study. *Journal of the Academy of Nutrition and Dietetics*, 112(1), 132-136.

Increase Sales of Reimbursable Meals:

- **Cafeteria staff politely prompt students who do not have a full reimbursable meal to select a fruit or vegetable.**
  - A Randomized School Trial of Environmental Strategies to Encourage Fruit and Vegetable Consumption among Children
    - Perry, C. L., Bishop, D. B., Taylor, G. L., Davis, M., Story, M., Gray, C., ... & Harnack, L. (2004). A randomized school trial of environmental strategies to encourage fruit and vegetable consumption among children. *Health education & behavior*, 31(1), 65-76.
  - The influence of a verbal prompt on school lunch fruit consumption: a pilot study
    - Schwartz, M. B. (2007). The influence of a verbal prompt on school lunch fruit consumption: a pilot study. *International Journal of Behavioral Nutrition and Physical Activity*, 4(1), 6.

- **One entrée is identified as the featured entrée-of-the-day, is labeled with a creative name next to the point of selection, and is the first entrée offered.**
  - Choosing between an Apple and a Chocolate Bar: the Impact of Health and Taste Labels

- Forwood, S. E., Walker, A. D., Hollands, G. J., & Marteau, T. M. (2013). Choosing between an apple and a chocolate bar: the impact of health and taste labels. *PloS one*, 8(10), e77500.

- Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods
  - Musher-Eizenman, D. R., Oehlhof, M. W., Young, K. M., Hauser, J. C., Galliger, C., & Sommer, A. (2011). Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods. *Journal of Early Childhood Research*, 9(3), 191-195.

- **Creative, descriptive names are used for featured items on the monthly menu.**
  - Choosing between an Apple and a Chocolate Bar: the Impact of Health and Taste Labels
    - Forwood, S. E., Walker, A. D., Hollands, G. J., & Marteau, T. M. (2013). Choosing between an apple and a chocolate bar: the impact of health and taste labels. *PloS one*, 8(10), e77500.
  - Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods
    - Musher-Eizenman, D. R., Oehlhof, M. W., Young, K. M., Hauser, J. C., Galliger, C., & Sommer, A. (2011). Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods. *Journal of Early Childhood Research*, 9(3), 191-195.

- **One reimbursable meal is identified as the featured combo meal and is labeled with a creative name like The Chef's Feast, The Athlete's Meal, or The Brain Boosting Meal next to the point of selection.**
  - Choosing between an Apple and a Chocolate Bar: the Impact of Health and Taste Labels
    - Forwood, S. E., Walker, A. D., Hollands, G. J., & Marteau, T. M. (2013). Choosing between an apple and a chocolate bar: the impact of health and taste labels. *PloS one*, 8(10), e77500.
  - Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods
    - Musher-Eizenman, D. R., Oehlhof, M. W., Young, K. M., Hauser, J. C., Galliger, C., & Sommer, A. (2011). Emerald dragon bites vs veggie beans: Fun food names increase children's consumption of novel healthy foods. *Journal of Early Childhood Research*, 9(3), 191-195.

- **Signs show students how to make a reimbursable meal on any service line (for example, a sign that says "Add a milk, fruit and carrots to your pizza for the Power Pizza Meal Deal!")**
  - Signage as a tool for behavioral change: Direct and indirect routes to understanding the meaning of a sign
    - Meis, J., & Kashima, Y. (2017). Signage as a tool for behavioral change: Direct and indirect routes to understanding the meaning of a sign. *PloS one, 12(8), e0182975*.

- **The combo meal of the day or featured entrée-of-the-day is displayed on a sample tray or photograph.**

- Photographs in Lunch Tray Compartments and Vegetable Consumption Among Children in Elementary School Cafeterias
  - Reicks, M., Redden, J. P., Mann, T., Mykerezi, E., & Vickers, Z. (2012). Photographs in lunch tray compartments and vegetable consumption among children in elementary school cafeterias. *Jama*, 307(8), 784-785.

- Smarter Lunchrooms - Ohio: Using Production and Sales Records to Measure Change in Food Selection (Master's publication)
  - Narayan, R. J. (2014). Smarter Lunchrooms - Ohio: Using Production and Sales Records to Measure Change in Food Selection (Master's publication). *Retrieved from Core Scholar (WSU).* http://corescholar.libraries.wright.edu/mph/120/

- **A (reimbursable) combo meal is offered as a grab-and-go meal (for example, a lunch bag with a sandwich, apple, carrots and ranch, and milk).**
  - Making Lunchrooms Smarter in the Ithaca City School District
    - Godfrey, J. R. (2012). Making Lunchrooms Smarter in the Ithaca City School District. *Childhood Obesity*, 8(6), 588-590. DOI: 10.1089/chi.2012.0086.lunch

  - Pairing Vegetables with a Liked Food and Visually Appealing Presentation: Promising Strategies for Increasing Vegetable Consumption among Preschoolers
    - Correia, D. C., O'Connell, M., Irwin, M. L., & Henderson, K. E. (2014). Pairing vegetables with a liked food and visually appealing presentation: promising strategies for increasing vegetable consumption among preschoolers. *Childhood Obesity, 10(1), 72-76.*

- **Students can pre-order lunch in the morning or day before.**
  - Effect of a free prepared meal and incentivized weight loss program on weight loss and weight loss maintenance in obese and overweight women: a randomized controlled trial.
    - Rock CL, Flatt SW, Sherwood NE, Karanja N, Pakiz B, Thomson CA. Effect of a free prepared meal and incentivized weight loss program on weight loss and weight loss maintenance in obese and overweight women: a randomized controlled trial. *JAMA*. 2010;304(16):1803-1810.

  - Asymmetric paternalism to improve health behaviors
    - Loewenstein G, Brennan T, Volpp KG. Asymmetric paternalism to improve health behaviors. *JAMA.* 2007;298(20):2415-2417.

- **Students must use cash to purchase á là carte snack items if available.**
  - Fat and Sugar Levels are High in Snacks Purchased From Student Stores in Middle Schools
    - Wildey, M. B., Pampalone, S. Z., Pelletier, R. L., Zive, M. M., Elder, J. P., & Sallis, J. F. (2000). Fat and sugar levels are high in snacks purchased from student stores in middle schools. *Journal of the American Dietetic Association*, 100(3), 319-322.

  - The Association of the School Food Environment With Dietary Behaviors of Young Adolescents
    - Kubik, M. Y., Lytle, L. A., Hannan, P. J., Perry, C. L., & Story, M. (2003). The association of the school food environment with dietary behaviors of young adolescents. American journal of public health, 93(7), 1168-1173.

- **Students have to ask a food service worker to select á là carte snack items if available.**
  - Fat and Sugar Levels are High in Snacks Purchased From Student Stores in Middle Schools
    Wildey, M. B., Pampalone, S. Z., Pelletier, R. L., Zive, M. M., Elder, J. P., & Sallis, J. F. (2000). Fat and sugar levels are high in snacks purchased from student stores in middle schools. *Journal of the American Dietetic Association*, 100(3), 319-322.

- **Students are offered a taste test of a new entrée at least once a year.**
  - Factors in the School Cafeteria Influencing Food Choices by High School Students
    - Shannon, C., Story, M., Fulkerson, J. A., & French, S. A. (2002). Factors in the school cafeteria influencing food choices by high school students. *Journal of School Health*, 72(6), 229-234.

  - Repeated taste exposure increases liking for vegetables by low-income elementary school children
    - Lakkakula, A., Geaghan, J., Zanovec, M., Pierce, S., & Tuuri, G. (2010). Repeated taste exposure increases liking for vegetables by low-income elementary school children. *Appetite*, 55(2), 226-231.

  - Parent food purchases as a measure of exposure and preschool-aged children's willingness to identify and taste fruit and vegetables
    - Busick, D. B., Brooks, J., Pernecky, S., Dawson, R., & Petzoldt, J. (2008). Parent food purchases as a measure of exposure and preschool-aged children's willingness to identify and taste fruit and vegetables. *Appetite*, 51(3), 468-473.

  - A Garden Pilot Project Enhances Fruit and Vegetable Consumption among Children
    - Heim, S., Stang, J., & Ireland, M. (2009). A garden pilot project enhances fruit and vegetable consumption among children. *Journal of the American Dietetic Association*, 109(7), 1220-1226.

  - Sampling tomorrow's lunch today: Examining the effect of sampling on school lunch participation
    - J Kolodinsky, E Pope, E Roche – 2017 - *Journal of Nutrition Education and Behavior*

Lunchroom Atmosphere:

- **Cafeteria staff smile and greet students upon entering the service line and continually throughout meal service.**
  - Variables Affecting High School Students' Perceptions of School Foodservice
    - Meyer, M. K., & T CONKLIN, M. A. R. T. H. A. (1998). Variables affecting high school students' perceptions of school foodservice. *Journal of the American Dietetic Association*, 98(12), 1424-1431.

- **Attractive, healthful food posters are displayed in dining and service areas.**
  - Photographs in Lunch Tray Compartments and Vegetable Consumption Among Children in Elementary School Cafeterias

- Reicks, M., Redden, J. P., Mann, T., Mykerezi, E., & Vickers, Z. (2012). Photographs in lunch tray compartments and vegetable consumption among children in elementary school cafeterias. *Jama*, 307(8), 784-785.

- **A menu board with today's featured meal options with creative names is readable from 5 feet away when approaching the service area.**
  - The effect of menu labels associated with affect, tradition and patriotism on sales

    - Guéguen, N., & Jacob, C. (2012). The effect of menu labels associated with affect, tradition and patriotism on sales. *Food quality and preference, 23(1), 86-88.*

  - The roles of attitude, subjective norm, and perceived behavioral control in the formation of consumers' behavioral intentions to read menu labels in the restaurant industry

    - Kim, E., Ham, S., Yang, I. S., & Choi, J. G. (2013). The roles of attitude, subjective norm, and perceived behavioral control in the formation of consumers' behavioral intentions to read menu labels in the restaurant industry. *International Journal of Hospitality Management, 35, 203-213.*

- **The lunchroom is branded and decorated in a way that reflects the student body.**
  - The Role Of Permanent Student Artwork In Students' Sense Of Ownership In An Elementary School

    - Killeen, J. P., Evans, G. W., & Danko, S. (2003). The role of permanent student artwork in students' sense of ownership in an elementary school. *Environment and Behavior*, 35(2), 250-263.

  - Environmental personalization and elementary school children's self-esteem

    - Maxwell, L. E., & Chmielewski, E. J. (2008). Environmental personalization and elementary school children's self-esteem. *Journal of Environmental Psychology*, 28(2), 143-153.

  - Feeding strategies derived from behavioral economics and psychology can increase vegetable intake in children as part of a home-based intervention: results of a pilot study.

    - Cravener, Terri L., et al. (2015). Feeding strategies derived from behavioral economics and psychology can increase vegetable intake in children as part of a home-based intervention: results of a pilot study. *Journal of the Academy of Nutrition and Dietetics* 115(11), 1798-1807.

  - Use a rabbit or a rhino to sell a carrot? The effect of character–product congruence on children's liking of healthy foods

    De Droog, Simone M., Moniek Buijzen, and Patti M. Valkenburg. (2012). Use a rabbit or a rhino to sell a carrot? The effect of character–product congruence on children's liking of healthy foods. Journal of health communication 17(9), 1068-1080.
  - Influence of food companies' brand mascots and entertainment companies' cartoon media characters on children's diet and health

- Kraak, Vivica I., and Mary Story (2015). Influence of food companies' brand mascots and entertainment companies' cartoon media characters on children's diet and health: a systematic review and research needs. Obesity Reviews 16.2 (2015): 107-126.

- The influence of cartoon character advertising on fruit and vegetable preferences of 9-to 11-year-old children
  - Bezbaruah, Nandita, and Ardith Brunt. (2012). The influence of cartoon character advertising on fruit and vegetable preferences of 9-to 11-year-old children. *Journal of Nutrition Education and Behavior*, 44(5): 438-441.

- Influence of licensed characters on children's taste and snack preferences.
  - Roberto, Christina A., et al. (2010). Influence of licensed characters on children's taste and snack preferences. *Pediatrics*, 126(1): 88-93.

- Using brand characters to promote young children's liking of and purchase requests for fruit
  - De Droog, Simone M., Patti M. Valkenburg, and Moniek Buijzen. (2010). Using brand characters to promote young children's liking of and purchase requests for fruit. *Journal of Health Communication*, 16(1): 79-89.

- Using brand characters to promote young children's liking of and purchase requests for fruit
  - De Droog, Simone M., Patti M. Valkenburg, and Moniek Buijzen. (2010). Using brand characters to promote young children's liking of and purchase requests for fruit. *Journal of Health Communication*, 16(1): 79-89.

- Food branding and young children's taste preferences: a reassessment
  - Elliott, Charlene D., Rebecca Carruthers Den Hoed, and Martin J. Conlon. (2013). Food branding and young children's taste preferences: a reassessment. *Can J Public Health,* 104(5): e364-e368.

- Food packaging cues influence taste perception and increase effort provision for a recommended snack product in children.
  - Enax, Laura, et al. (2015). Food packaging cues influence taste perception and increase effort provision for a recommended snack product in children. *Frontiers in Psychology,* 6: 882.

- Food packaging cues influence taste perception and increase effort provision for a recommended snack product in children.
  - Enax, Laura, et al. (2015). Food packaging cues influence taste perception and increase effort provision for a recommended snack product in children. *Frontiers in Psychology,* 6: 882..

- **Cleaning supplies or broken/unused equipment are not visible during meal service.**
  - Effect of ambience on food intake and food choice

- Stroebele, N., & De Castro, J. M. (2004). Effect of ambience on food intake and food choice. *Nutrition*, 20(9), 821-838.

- **All lights in the dining and meal service areas work and are turned on.**
  - Effect of ambience on food intake and food choice
    - Stroebele, N., & De Castro, J. M. (2004). Effect of ambience on food intake and food choice. *Nutrition*, 20(9), 821-838.

- **Compost/recycling and trash cans are at least 5 feet away from dining students.**
  - Effect of ambience on food intake and food choice
    - Stroebele, N., & De Castro, J. M. (2004). Effect of ambience on food intake and food choice. *Nutrition*, 20(9), 821-838.

- **There is a clear traffic pattern. Signs, floor decals, or rope lines are used if necessary.**
  - Signage as a tool for behavioral change: Direct and indirect routes to understanding the meaning of a sign
    - Meis, J., & Kashima, Y. (2017). Signage as a tool for behavioral change: Direct and indirect routes to understanding the meaning of a sign. *PloS one, 12(8), e0182975*.

- **Trash is removed between each lunch period if necessary.**
  - Effect of ambience on food intake and food choice
    - Stroebele, N., & De Castro, J. M. (2004). Effect of ambience on food intake and food choice. *Nutrition*, 20(9), 821-838.

- **A menu board with tomorrow's featured meal with creative names is readable from 5 feet away in the service or dining area.**
  - The effect of menu labels associated with affect, tradition and patriotism on sales
    - Guéguen, N., & Jacob, C. (2012). The effect of menu labels associated with affect, tradition and patriotism on sales. Food quality and preference, 23(1), 86-88.

Student Involvement:

- **Student artwork is displayed in the service area or dining space.**
  - The Role Of Permanent Student Artwork In Students' Sense Of Ownership In An Elementary School
    - Killeen, J. P., Evans, G. W., & Danko, S. (2003). The role of permanent student artwork in students' sense of ownership in an elementary school. *Environment and Behavior*, 35(2), 250-263.

  - Environmental personalization and elementary school children's self-esteem
    - Maxwell, L. E., & Chmielewski, E. J. (2008). Environmental personalization and elementary school children's self-esteem. *Journal of Environmental Psychology*, 28(2), 143-153.

- **Students, teachers, or administrators announce today's menu in daily announcements.**
  - Teachers' Interaction With Children in the School Meal Situation: The Example of Pedagogic Meals in Sweden

  - Osowski, C. P., Göranzon, H., & Fjellström, C. (2013). Teachers' interaction with children in the school meal situation: The example of pedagogic meals in Sweden. *Journal of nutrition education and behavior*, 45(5), 420-427.

- **Students are involved in the development of creative and descriptive names for menu items.**
  - The Role Of Permanent Student Artwork In Students' Sense Of Ownership In An Elementary School
    - Killeen, J. P., Evans, G. W., & Danko, S. (2003). The role of permanent student artwork in students' sense of ownership in an elementary school. *Environment and Behavior*, 35(2), 250-263.

  - Environmental personalization and elementary school children's self-esteem
    - Maxwell, L. E., & Chmielewski, E. J. (2008). Environmental personalization and elementary school children's self-esteem. *Journal of Environmental Psychology*, 28(2), 143-153.

- **Students are involved in the creation of artwork or marketing materials to promote menu items.**
  - The Role Of Permanent Student Artwork In Students' Sense Of Ownership In An Elementary School
    - Killeen, J. P., Evans, G. W., & Danko, S. (2003). The role of permanent student artwork in students' sense of ownership in an elementary school. *Environment and Behavior*, 35(2), 250-263.

  - Environmental personalization and elementary school children's self-esteem
    - Maxwell, L. E., & Chmielewski, E. J. (2008). Environmental personalization and elementary school children's self-esteem. *Journal of Environmental Psychology*, 28(2), 143-153.

- **Students provide feedback (informal – 'raise your hand if you like...' or formal - focus groups, surveys) to inform menu development.**
  - Improving the School Food Environment: Results from a Pilot Study in Middle Schools
    - Cullen, K. W., Hartstein, J., Reynolds, K. D., Vu, M., Resnicow, K., Greene, N., ... & Studies to Treat or Prevent Pediatric Type 2 Diabetes Prevention Study Group. (2007). Improving the school food environment: results from a pilot study in middle schools. *Journal of the American Dietetic Association*, 107(3), 484-489.

  - "How Can We Stay Healthy when you're Throwing All of this in Front of Us?" Findings from Focus Groups and Interviews in Middle Schools on Environmental Influences on Nutrition and Physical Activity
    - Bauer, K. W., Yang, Y. W., & Austin, S. B. (2004). "How can we stay healthy when you're throwing all of this in front of us?" Findings from focus groups and interviews in middle schools on environmental influences on nutrition and physical activity. *Health Education & Behavior*, 31(1), 34-46.

  - Factors Influencing Food Choices of Adolescents: Findings from Focus-Group Discussions with Adolescents

- Neumark-Sztainer, D., Story, M., Perry, C., & Casey, M. A. (1999). Factors influencing food choices of adolescents: findings from focus-group discussions with adolescents. *Journal of the American dietetic association*, 99(8), 929-937.

- **Students have the opportunity to volunteer in the lunchroom.**
  - Involving students in learning and health promotion processes - clarifying why? what? and how?
    - Jensen, B. B., & Simovska, V. (2005). Involving students in learning and health promotion processes-clarifying why? what? and how?. *Promotion & Education*, 12(3-4), 150-156.

School Community Involvement:

- **A monthly menu is posted in the main office.**
  - The effect of menu labels associated with affect, tradition and patriotism on sales
    - Guéguen, N., & Jacob, C. (2012). The effect of menu labels associated with affect, tradition and patriotism on sales. Food quality and preference, 23(1), 86-88.

- **A menu board with today's featured meal options with creative, descriptive names is located in the main office.**
  - The effect of menu labels associated with affect, tradition and patriotism on sales
    - Guéguen, N., & Jacob, C. (2012). The effect of menu labels associated with affect, tradition and patriotism on sales. Food quality and preference, 23(1), 86-88.

- **A monthly menu is provided to students, families, teachers, and administrators.**
  - Randomized intervention to increase children's selection of low-fat foods in school lunches
    - Whitaker, R. C., Wright, J. A., Koepsell, T. D., Finch, A. J., & Psaty, B. M. (1994). Randomized intervention to increase children's selection of low-fat foods in school lunches. *The Journal of pediatrics*, 125(4), 535-540.

  - A Garden Pilot Project Enhances Fruit and Vegetable Consumption among Children
    - Heim, S., Stang, J., & Ireland, M. (2009). A garden pilot project enhances fruit and vegetable consumption among children. *Journal of the American Dietetic Association*, 109(7), 1220-1226.

- **Information about the benefits of school meals is provided to teachers and administration at least annually.**
  - School Food Policies and Practices: A State-Wide Survey of Secondary School Principals
    - French, S. A., Story, M., & Fulkerson, J. A. (2002). School food policies and practices: a state-wide survey of secondary school principals. *Journal of the American Dietetic Association*, 102(12), 1785-1789.

  - Teachers' Interaction With Children in the School Meal Situation: The Example of Pedagogic Meals in Sweden
    - Osowski, C. P., Göranzon, H., & Fjellström, C. (2013). Teachers' interaction with children in the school meal situation: The example of pedagogic meals in Sweden. *Journal of nutrition education and behavior*, 45(5), 420-427.

- **Nutrition education is incorporated into the school day.**

- School-based nutrition education: lessons learned and new perspectives
  - Perez-Rodrigo, C., & Aranceta, J. (2001). School-based nutrition education: lessons learned and new perspectives. *Public Health Nutrition*, 4(1a), 131-139.

- Do school based food and nutrition policies improve diet and reduce obesity?
  - Jaime, P. C., & Lock, K. (2009). Do school based food and nutrition policies improve diet and reduce obesity?. *Preventive medicine*, 48(1), 45-53.

- Longitudinal Behavioral Effects of a School-Based Fruit and Vegetable Promotion Program
  - Hoffman, J. A., Franko, D. L., Thompson, D. R., Power, T. J., & Stallings, V. A. (2009). Longitudinal behavioral effects of a school-based fruit and vegetable promotion program. *Journal of pediatric psychology*, jsp041.

- A Garden Pilot Project Enhances Fruit and Vegetable Consumption among Children
  - Heim, S., Stang, J., & Ireland, M. (2009). A garden pilot project enhances fruit and vegetable consumption among children. *Journal of the American Dietetic Association*, 109(7), 1220-1226.

- Teachers' Interaction With Children in the School Meal Situation: The Example of Pedagogic Meals in Sweden
  - Osowski, C. P., Göranzon, H., & Fjellström, C. (2013). Teachers' interaction with children in the school meal situation: The example of pedagogic meals in Sweden. *Journal of nutrition education and behavior*, 45(5), 420-427.

- Modifying the eating behavior of young children
  - Perry, Cheryl L., Rebecca M. Mullis, and Marla C. Maile. (1985). Modifying the eating behavior of young children. *Journal of School Health*, 55(10): 399-402.

- **The school participates in other food promotion programs such as: Farm to School, Chefs Move to Schools, Fuel Up to Play 60, Share our Strength, etc.**
  - Long-Term Impact of a Chef on School Lunch Consumption: Findings from a 2-Year Pilot Study in Boston Middle Schools
    - Cohen, J. F., Smit, L. A., Parker, E., Austin, S. B., Frazier, A. L., Economos, C. D., & Rimm, E. B. (2012). Long-term impact of a chef on school lunch consumption: findings from a 2-year pilot study in Boston middle schools. *Journal of the Academy of Nutrition and Dietetics*, 112(6), 927-933.

  - Do Farm-to-School Programs Make a Difference? Findings and Future Research Needs
    - Joshi, A., Azuma, A. M., & Feenstra, G. (2008). Do farm-to-school programs make a difference? Findings and future research needs. *Journal of Hunger & Environmental Nutrition*, 3(2-3), 229-246.

  - Effects of Choice Architecture and Chef-Enhanced Meals on the Selection and Consumption of Healthier School Foods A Randomized Clinical Trial

- Cohen, J. F., Richardson, S. A., Cluggish, S. A., Parker, E., Catalano, P. J., & Rimm, E. B. (2015). Effects of choice architecture and chef-enhanced meals on the selection and consumption of healthier school foods: a randomized clinical trial. *JAMA pediatrics*, 169(5), 431-437.

- **The school has a garden.**
  - School Gardens: An Experiential Learning Approach for a Nutrition Education Program to Increase Fruit and Vegetable Knowledge, Preference, and Consumption among Second-grade Students
    - Parmer, S. M., Salisbury-Glennon, J., Shannon, D., & Struempler, B. (2009). School gardens: an experiential learning approach for a nutrition education program to increase fruit and vegetable knowledge, preference, and consumption among second-grade students. *Journal of nutrition education and behavior*, 41(3), 212-217.
  - A Garden Pilot Project Enhances Fruit and Vegetable Consumption among Children
    - Heim, S., Stang, J., & Ireland, M. (2009). A garden pilot project enhances fruit and vegetable consumption among children. *Journal of the American Dietetic Association*, 109(7), 1220-1226.
  - The child in the garden: An evaluative review of the benefits of school gardening
    - Blair, D. (2009). The child in the garden: An evaluative review of the benefits of school gardening. *The Journal of Environmental Education*, 40(2), 15-38.
  - Impact of the Use of Produce Grown in an Elementary School Garden on Consumption of Vegetables at School Lunch
    - Cotugna, N., Manning, C. K., & DiDomenico, J. (2012). Impact of the use of produce grown in an elementary school garden on consumption of vegetables at school lunch. *Journal of Hunger & Environmental Nutrition*, 7(1), 11-19.
  - The Effects of School Garden Experiences on Middle School-Aged Students' Knowledge, Attitudes, and Behaviors Associated With Vegetable Consumption
    - Ratcliffe, M. M., Merrigan, K. A., Rogers, B. L., & Goldberg, J. P. (2011). The effects of school garden experiences on middle school-aged students' knowledge, attitudes, and behaviors associated with vegetable consumption. *Health promotion practice*, 12(1), 36-43.
  - Long-Term Impact of a Chef on School Lunch Consumption: Findings from a 2-Year Pilot Study in Boston Middle Schools
    - Cohen, J. F., Smit, L. A., Parker, E., Austin, S. B., Frazier, A. L., Economos, C. D., & Rimm, E. B. (2012). Long-term impact of a chef on school lunch consumption: findings from a 2-year pilot study in Boston middle schools. *Journal of the Academy of Nutrition and Dietetics*, 112(6), 927-933.

- **Elementary schools provide recess before lunch.**

- The relationship of meal and recess schedules to plate waste in elementary schools
  - Bergman, E. A., Buergel, N. S., Englund, T. F., & Femrite, A. (2004). The relationship of meal and recess schedules to plate waste in elementary schools. *J Child Nutr Manag*, 28(2), 1-10.

- **The school has applied for the Healthier US School Challenge.**
  - Nutrient Intakes among Children and Adolescents Eating Usual Pizza Products in School Lunch Compared with Pizza Meeting HealthierUS School Challenge Criteria
    - Hur, I. Y., Marquart, L., & Reicks, M. (2014). Nutrient Intakes among Children and Adolescents Eating Usual Pizza Products in School Lunch Compared with Pizza Meeting HealthierUS School Challenge Criteria. *Journal of the Academy of Nutrition and Dietetics*, 114(5), 768-773.

- **Smarter Lunchrooms strategies are included in the District Wellness Policy.**
  - Schools and Obesity Prevention: Creating School Environments and Policies to Promote Healthy Eating and Physical Activity
    - Story, M., Nanney, M. S., & Schwartz, M. B. (2009). Schools and obesity prevention: creating school environments and policies to promote healthy eating and physical activity. Milbank Quarterly, 87(1), 71-100.

Further Resources on Marketing:

- Encouraging children to eat more healthily: The influence of packaging
  - Pires, Carla, and Luísa Agante. (2011). Encouraging children to eat more healthily: The influence of packaging. *Journal of Consumer Behaviour* 10(3): 161-168.

- The impact of visual and child-oriented packaging elements versus information on children's purchase influence across various age groups
  - Hota, Monali, and Karine Charry. (2014). The impact of visual and child-oriented packaging elements versus information on children's purchase influence across various age groups. *International Journal of Retail & Distribution Management* 42(11/12): 1069-1082.