Sweet potato improves defecation and gut microbiota of female university students

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Background
Lack of dietary fiber (DF) intake is a concern in Japan.
Dietary fiber
16 g. Recommended: 30 g.
6 g. Lack
Sweet potato: Rich in dietary fiber

Purpose
Sweet potato
- May help to improve DF intake
- Lower risk of diabetes, lower blood pressure
- Reduces stress
- Good for gut bacteria

Method
Subjects: 21 female college students (average age 20.9 years)
Randomized, double-blind, placebo-controlled study
Dietary intervention
- Sweet potato
- Placebo

Record of feces and bowel status
Questionnaire on defecation and weight

Component of roasted sweet potato
Nutrient composition per 100 g of sweet potato:

Stomach condition and fecal characteristics
Defecation and body weight

Analysis of indigenous bacteria
(Terminal-RFLP method)

Changes in indigenous bacteria
- Increased DF, fecal volume, frequency
- Feces become softer
- No change in bloating

Summary
Roasted sweet potato affects...
- Increased defecation frequency and consistency
- There are individual differences in the influence on the composition of the gut microbiota
- Increase in the abundance of bacteria producing butyrate
- Improve intestinal action and useful germs in the gut.
Food Texture and Cooking Techniques according to the Chewing Ability of the Elderly
- Korean Traditional Food ‘Bibimbap’-

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Objective
The demand for easy food to eat is increasing to improve nutritional quality of diet for elderly with decreased ability to chew. The aim of this study is to distinguish the cooking methods and to evaluate suitable ones according to the ability of chewing for the elderly.

Materials and Methods

Test food : Bibimbap, Korean traditional food
Ingredient : Rice, Eggs, Beef, Carrot, Zucchini

Cooking methods:
- Rice : Boiling
  *Control the amount of water in the rice and cooked rice
- Eggs : Frying (garnished eggs), Stir-frying
- Beef : Stir-frying and Steaming after tendering process with pineapple juice (17 hrs)
- Carrot & Zucchini : Stir-frying, Steaming, Steaming
  *Steaming : Stir until no more water is added

<table>
<thead>
<tr>
<th>Step</th>
<th>Shape</th>
<th>Cooking</th>
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<tbody>
<tr>
<td>1</td>
<td>Original form</td>
<td>Stir-frying</td>
</tr>
<tr>
<td>2</td>
<td>Used for Bibimbap</td>
<td>Steaming, Steaming</td>
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<tr>
<td>3</td>
<td>Pure form</td>
<td>Pounding, Mashing, Grinding (after steaming)</td>
</tr>
</tbody>
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Texture analysis:
- Probe : Cone type
- Test speed : 100mm/min
- Clearance : 2mm

Texture index:
- Step 1: Easy to chew
- Step 2: Can be broken up using the gums
- Step 3: Can be broken up by the tongue

Results

| Shape and hardness of materials used for the Bibimbap according to the cooking method |
|---------------------------------|-----------------|-----------------|
| Step 1 | Step 2 | Step 3 |
| Egg | Frying | Frying (garnished eggs) | Stir-frying (garnished eggs) |
| Beef | Stir-frying (meat) | Steaming | Steaming (meat) |
| Carrot | Stir-frying (carrot) | Steaming (carrot) | Steaming (carrot) |
| Zucchini | Stir-frying (zucchini) | Steaming (zucchini) | Steaming (zucchini) |

Discussion
The cooking method needs to be adjusted according to the ability to chew. The cooking using water such as the steaming is a useful technique for elderly who need soft foods. It is also important for older people with little chewing ability to maintain the shape of the food, so it is necessary to develop a lot of soft food forms while maintaining their shape in the future.

Acknowledgments
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Summary: Two cookbooks reflect the common struggle that 1960s female newspaper food editors faced as they balanced their careers and their parenting. Always on Sunday (St. Paul Pioneer Press) and Pot au Feu (Arizona Republic) These editors wrote columns that shared their personal and professional lives as they covered food news for home cooks and fancy foodies. Blended in their food columns were stories about their own busy lifestyles. Sales of these cookbooks were satisfying and there were positive reviews of the books. The authors of these columns, Eleanor Ostman and Dorothee Polson, represent the lives of newspaper editors who balanced the joy and challenges of cooking in the professional and private spheres. It draws attention to the roles of home cooks, motherhood and labor in a time prior to The Women’s Liberation Movement.

Background: Newspaper Food Editors

For generations, information about food were found in the food sections of newspapers. Until the early 1970s, these sections were housed in the women’s pages of newspapers – where women could hold an authoritative voice. The food editors – often a mix of a trained journalist and home economist – reported everything from nutrition news to features on the new chef in town. They wrote recipes and sought ideas from readers. The sections reflected the trends of the time and the cooks of the column. The editors were local celebrities, judging cooking competitions and answering calls at home about preparing a Thanksgiving turkey – a first time for many home cooks each year. They often oversaw several staff members.

Results

Dorothee Polson

At the Arizona Republic, Polson said no one interfered with the material that she wanted to put in her section during her twenty-seven year career. She said it was largely based on the management style of managing editor J. Edward Murray, who said, “When you hire creative people, just let them alone; you get much better work out of them that way.” As the mother of three children, she reported flexibility at work. After all, her husband worked for a career and motherhood – especially in the 1960s. In one column, she wrote about the expectation of her life being in the home. “This helps assuage the guilt feelings of the Working Mother, who may feel uncomfortable about enjoying her life or the business world. I soothe home sick children when the picture is significantly different. It is a fulfilling job to be in the home.

In 1971, Polson published her column and recipes in the cookbook, Pot au Feu. The title refers to a French term for “pot on the fire,” which was a dish that included meats, vegetables, and everything else. A little bit of everything was also the philosophy behind her column, which included recipes, stories about her children, and local gossip. (It was dedicated to her mother.) “All of the recipes have been fairly tested.” Polson confessed, “the most significant result being that my husband and I gained a combined total of 14 pounds. The children, of course, only grew taller.” One of the columns in the book is titled “Working Mother Makes Rules.” “It happens to be one of those statistics,” she revealed, “the 1-of-every-3 homemakers who hold jobs; the 1-of-five women who juggle careers.” In the column, she offered advice on her recipes for combining family with work: “Forget schedules. Take it one crisis at a time.” Her book explains how being a wife and mother intersected with her job as a journalist.

• Dorian’s Sour Cream Sugar Cookies: “Our daughter Dorian tasted these cookies at her friend Sue’s house and asked for the recipe. When Sue’s mother found out about it she was very angry. Dorian makes these cookies just about every week. She doesn’t tell Sue’s mother.

• Breakfast Fish: “For many years my family was on a fish-for-breakfast kick. Six a.m. would find me steaming clams, cracking crab or frying trout. I normally fished for a family meal of ready-to-eat cereal, but such thoughts were banished every time a bright, healthy face would happen to the door: ‘Oh golly, sandwich steak today.’

• They visited a ranch and her children saw a whole animal being roasted. Her daughter who regularly ate chips and pop tarts said: ‘Do you mean to say they eat their own lambs?’ She ate knitting and cheese for lunch that day.

References


Polson, Dorothee, Pot au Feu (Phoenix: Arizona Republic, 1971).


Eleanor Ostman

St. Paul Pioneer Press food editor Eleanor Ostman initiated a recipe column in 1968 called “This Sunday” that ran for more than twenty-five years. She wrote about her family’s love of a dish or a disaster that she had in the kitchen. Her readers wrote in often, and Ostman quickly learned what they wanted to know about. “Readers, I soon learned, loved my tubs,” she wrote. “I didn’t promise to be scientific, and I didn’t promise to be perfect.” Some readers later complained that they missed hearing about her mistakes as she became a more proficient cook over the years. “Her columns and recipes were later collected in the cookbook, Always on Sundays. They book provides insight to the role of food editor and a working mother.

References to her son Art:

• May 11, 1969: On April 30, 1969, a future recipe tester entered our lives. Our son, Art, was born, and the next column I wrote was headlined: "Soup Puts New Dad in a Slaw."

• May 3, 1970: "Starting an annual tradition, our son’s first chocolate birthday cake. When it comes to chocolate, my philosophy is: ‘More is never enough.’"

• May 7, 1972: “Art graduated from the Terrible Teens, and in honor of his third birthday (and the fact that he hadn’t been all that terrible). I baked this cake with a blend of chocolate intensities that makes it so tempting. We revealed it in three lovely layers.

• May 10, 1987: ‘It was like returning to the past when we prepared an 18th birthday dinner part for Art and his buddies. And I fell a momentary stab of nostalgia. This would be the last birthday party of the school kid-ik. Our empty nest will never again have chocolate frosting on the ceiling.

Conclusion

Despite the incredible contributions of these significant food journalists, their stories have largely been forgotten in the larger culture. Their stories were not on the front pages, but they were serving an important role in their communities. These food journalists reached consumers and cooks. They held local grocers and the greater industry accountable, even at the risk of advertising losses. They documented problems, such as food safety, and promoted change in nutritional expectations. They covered the intersection of food and governmental regulation. These journalists did all of this, never forgetting that while food was important, it was also fun. They also did it as they raised families – combining their public and private roles.