

1 Wansink, Brian and Keong-mi Lee (2004), "Cooking Habits Provide a Key to 5 a Day
2 Success," Journal of the American Dietetic Association, (November), 104:11, 1648-1650.

3 4 5 **Of Professional Interest**

6 7 8 9 **Cooking Habits Provide a Key to Five-a-Day Success***

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21 July 11, 2004

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29 **Word Count:** 1260 without references

30 31 32 **Key Words:**

33 Fruits and vegetables
34 Profiling Vegetable-prone consumers
35 "Five a Day" program
36 Consumption frequency
37 Cooking habits
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Cooking Habits Provide a Key to Five-a-Day Success

Fruits are not vegetables. What makes one person become a fruit lover and another become a vegetable lover? If we knew what these differences were, we could more effectively encourage our clients and our country to eat more fruits or vegetables simply by tailoring our education efforts by using different and more relevant messages and media (e.g., 1-3).

Although fruit-prone and vegetable-prone lovers may have some demographic (4) and genetic (5) differences, they might also differ in their cooking habits and food preferences (6). Take a person's cooking habits. While fruits are typically eaten raw for breakfast, lunch, or snacks, vegetables are typically cooked with meals or supplemented with sauces and dressings. Even when eaten raw, vegetables require some degree of preparation such as peeling or trimming. Because they often require more involvement, people who are vegetable-prone may also be more accustomed to food preparation (7).

Fruit-prone and vegetable-prone people may also differ in the other types of foods they prefer. Fruits are generally sweeter than vegetables, and fruit lovers may prefer sweeter foods and desserts compared to vegetable lovers (6). Conversely, vegetables tend to run the range from bitter to savory, and a vegetable lover might prefer the strong and savory tastes of exotic or spicy foods, and perhaps even the bitter tannins of red wines (8).

Of course not all fruit lovers are the same, nor are all vegetable lovers the same. There are sub-segments of fruit lovers who are adventurous gourmet chefs, and there are sub-segments of vegetable lovers who hate spices and love desserts. The purpose of this *FYI* is to show how

1 treating fruit-prone people differently than vegetable-prone people can improve your clinical
2 effectiveness. Knowing how fruit lovers differ from vegetable lovers will give us insight in this
3 direction.

4 To do this, we first conducted in-depth interviews about the cooking habits and
5 food preferences of 37 supermarket shoppers in Illinois and Michigan. Based on these
6 findings and the literature, an IRB-approved survey was developed. The survey first
7 asked questions which enabled people to be categorized as fruit lovers, vegetable lovers,
8 both, or neither. It then asked standard frequency questions (9) related to their cooking
9 habits and food preferences (“In a typical month, how many times have you had guests
10 for dinner?”). Demographic questions were asked last.

11 Two thousand Americans were randomly selected from census data, and paid
12 \$6.00 to complete a mailed survey. The 770 people (38.5%) who completed it within six
13 weeks had an average of 1.6 children living at home, were 37.3 years old, had a median
14 household income of \$38,000, were 70% Anglo-American, and were 61% female. Of
15 these, 508 could be categorized as vegetable lovers or as fruit lovers using a cross-
16 classification technique (10) based upon their preference ratings for fruits and vegetables
17 and by their self-perceptions.

18 As Table 1 shows, vegetable lovers differ from fruit lovers in both their cooking
19 habits and their food preferences. Consider their cooking habits. Vegetable lovers tend to
20 entertain guests more frequently (4.1 vs. 2.6 times per month), cook nutritious meals
21 more frequently (5.4 vs. 4.4 times per week), and try new recipes more frequently (6.9 vs.
22 4.4 times per month) than fruit lovers. These differences are consistent with the
23 observations of Franey (11) who noted that adventurous good cooks tend to have an
24 appreciation and a talent for working with vegetables and enjoy cooking for others.

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Table 1.
Vegetable Lovers are Different than Fruit Lovers

	Vegetable Lovers . . . (n=250)	Fruit Lovers . . . (n=258)	F-value
They Differ in their Cooking Habits	...More frequently have guests for dinner	...Less frequently have guests for dinner	15.72*
	...More frequently claim to cook nutritious meals	...Less frequently claim to cook nutritious meals	5.78*
	...More frequently make new recipes they have never made before	...Less frequently make new recipes they have never made before	9.72*
They Differ in their Food Preferences	...More frequently eat spicy food	...Less frequently eat spicy food	7.68*
	...More frequently drink wine with dinner	...Less frequently drink wine with dinner	6.72*
	...Less frequently eat dessert after dinner	...More frequently eat dessert after dinner	12.09*

* p < .01

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The two groups also have different food preferences. Vegetable lovers eat spicy foods more frequently (6.3 vs. 5.5 times per month), drink wine with dinner more frequently (4.2 vs. 2.6 times per month), but eat desserts less frequently (2.0 vs. 2.9 times per week) than fruit lovers. The results are consistent with what we might expect. A vegetable-lover's taste for savory or bitter taste sensations is consistent with an attraction to spicy foods and tannic red wine (6), and a fruit-lover's sweet tooth is consistent with an attraction to desserts.

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This is an important topic. Yet due to its exploratory nature, it has limitations of scale. It involved a moderate-sized sample (n=770), it used no control group, and IRB confidentiality restrictions limited the demographic information that could be collected. Future efforts can validate and extend these findings using multi-stage clustering

1 techniques (12). Yet while the findings reported here are exploratory, they still offer
2 important insights for dietary therapy and prevention.

3 Our clinical education efforts will be more effective if we approach fruit-prone
4 people differently than those who are instead vegetable-prone. If you know that a client
5 enjoys cooking, entertaining, and experimenting with new recipes, she or he is likely to
6 be more responsive to a specific vegetable-related message than to a general, “I’ve-heard-
7 it-all-before” lecture about how fruits and vegetables are healthy. You can show them
8 how vegetables can enhance a meal, can impress dinner guests, can make recipes taste
9 different, can be used with spices, and can compliment the right wine.

10 Conversely, if you know that a client is less adventurous in their cooking habits
11 and tends to prefer sweets and desserts after a meal, he or she might be more responsive
12 to a specific fruit-related message than a colorful-but-boring brochure on how vegetables
13 and fruits are good for them. You can show them how fruits are healthy replacements for
14 desserts or for sweet snacks, and how fruits offer a convenient and easy way to
15 compliment a meal without requiring much time, talent, effort, or know-how.

16 It is easy to ask a couple simple questions that will give you a rough idea whether
17 a person is more likely to be vegetable-prone, fruit-prone, both, or neither. Simply ask
18 them about their cooking habits and the foods they like to eat. If they say they like to
19 cook, like to entertain, like to try new recipes, and like spicy food, tell them how
20 vegetables can make their meals even better. If they say they like desserts and foods that
21 do not take much time or talent to cook, tell them how fruits can quickly and sweetly add
22 something to their routine.

23 Let’s move beyond your professional practice. Targeting fruit-prone and
24 vegetable-prone people differently is also relevant to national education and promotional

1 efforts, such as the Five-a-Day for Better Health program. Such programs could enhance
2 their effectiveness by altering a generic “fruits and vegetables” message and by tailoring
3 a different message and media strategy to fruit-prone segments than they do to vegetable-
4 prone segments. Knowing the basic cooking habits and food preferences of these two
5 different groups can offer insights into what types of media (such as which magazines or
6 which form of in-store signage) would be most likely to reach which group. Messages
7 can then be tailored appropriately. For health professionals and educators, the
8 importance of targeting different messages to differently predisposed target markets can
9 mean the difference between a cost-effective program and a wasted effort (6).

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