

The Brainside of Food & Beverage

PMM5 Postscript™ Number 37

Background Information: Food and Beverage arrangements are critical to meetings and conventions. Chapter 26 of *Professional Meeting Management*®, fifth edition, includes information on the:

- Role of food and beverage in a meeting
- Types of meal functions and service options
- Cost saving options

PMM5 Postscript™ Use: PMM5 Postscript™ Number 37 recognizes that food and beverage choices should not be focused solely on calories, variety, and special dietary needs.

In *Professional Meeting Management*®, fifth edition, Dr. Sandra Strick notes many different variables that affect meeting participants including nutrition. She notes “High performance in a learning environment depends on proper nutrition” (Strick, 2006, p. 260). This PMM5 Postscript™ expands upon Strick’s comments to further explore the important role food plays in meetings. PMM5 Postscript™ Number 37 also includes additional group discussion or research projects to supplement the PMM5 chapter.

Learner Outcomes: After reading this PMM5 Postscript™, you/will be able to:

- Describe the relationship between food and attendees' mood and learning ability.
- Choose foods that will enhance participant’s ability to learn.
- List a minimum of five unique food ideas to infuse food & beverage with more than taste.

Related PMM5 Chapter: Chapter 26, Food and Beverage Arrangements
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Food & Beverage Goals

Food at a meeting must be:

- Appropriate to the group
- Within the budget
- Balanced offering protein, some carbohydrates and some fat

Food, Thinking and Biochemistry

What meeting participants eat affects their ability to learn and focus during a meeting. Food affects the:

- Level of nerve chemicals in the brain that regulate all mental processes.
- Development and maintenance of brain cell function and structure.
- Speed that nerve cells transmit messages from one neuron to the next.
- Level of enzymes and their activity, which enhance brain function.
- Amount of oxygen that reaches the brain.
- Ability of brain cells to transmit electrical messages.

Food choices affect participant's ability to think and retain information. Thinking is a biochemical process. Exploring a bit of science creates an understanding of the links to the brain, thinking, memory, mood and learning. Meeting managers are challenged to select food that is appetizing and desirable but also supports the learning environment for the participants.

The smallest functioning unit in the nervous system is the nerve cell or neuron. The neuron "talks" to other nerve cells by relaying electrical messages within the brain and throughout the body. Nerve cells never touch each other. To relay messages from one cell to the next, the sending nerve cell must find a way to jump the gap or space between the two cells. That space is called the synapse. The "sparks" that allow messages to jump between cells are neurotransmitters. These neurotransmitters are critical to thinking.

Disruption to even one neurotransmitter dramatically alters nerve cell function and instigates a cascading effect on other neurotransmitters. The brain manufactures most neurotransmitters. But some are directly influenced by what people eat. Many neurotransmitters are composed of either amino acids or choline – both are obtained from food. When people consume too little of either, they experience changes in mood, appetite and thinking. The most food sensitive neurotransmitters are serotonin, dopamine and norepinephrine.

Three Neurotransmitters to Know

Although there are more than 70 different neurotransmitters, the three most important to a participant's learning are serotonin, dopamine and acetylcholine.

Serotonin — This neurotransmitter regulates a person's general mood. No other neurotransmitter is as strongly linked to diet as is serotonin. Serotonin creates a calm and relaxed state with a general sense of well being. High levels of serotonin can cause a person to feel sluggish and drowsy. Low levels of serotonin will cause intense food cravings. Serotonin rich foods are carbohydrate based like pasta, starchy vegetables, potatoes, cereals and breads. Carbohydrates enhance the absorption of tryptophan, which is converted into serotonin in the brain.

Within about thirty minutes of eating a carbohydrate meal, participants will feel more calm and relaxed. The effects will last several hours.

Dopamine and norepinephrine — These neurotransmitters elevate a person's mood and energy. Dopamine and norepinephrine are responsible for alertness and increased energy with quicker, more accurate reaction times. They are involved with voluntary movement and emotional arousal. Dopamine rich foods include all proteins (meat, milk products, fish, beans, nuts, soy products). Eating protein raises the level of tyrosine, which prompts the brain to manufacture norepinephrine and dopamine.

Acetylcholine — This neurotransmitter manages a person's memory. Acetylcholine is made by choline. The more choline one consumes, the more it makes its way to the brain, where it is converted into acetylcholine. A lack of choline can cause a lack of memory and concentration. Choline is a B complex vitamin that is found in cholesterol rich foods, like egg yolks, peanuts, wheat germ, liver, meat, fish, milk, cheese and vegetables (especially broccoli, cabbage and cauliflower).

Vitamins are also important. Vitamins and minerals are needed to convert ordinary amino acids into these powerful neurotransmitters. Certain vitamin deficiencies (e.g. B1, B3, B6, B12, folic acid) may be related to memory difficulties.

Plan food menus with an eye toward including important neurotransmitters and vitamins.

Infused with Creativity

Meeting planners can infuse food and beverage with freshness and creativity by relying on the expertise of the catering company or the executive chef at a meeting site. These five questions will help maximize the budget and the chef's creativity:

1. What indigenous or local ingredients are available?
2. What trends are you seeing?
3. What are some of the new and exciting things you have done?
4. What have you done recently that you are most proud of?
5. What is your favorite ingredient lately?

Unique Food Ideas

Food appeals to the eye, to the nose and to the palate. Food offers many ways to enrich a meeting including the following ideas:

Introduce color — Food with strong colors, like deep green, purple, blue, or red, are usually more nutritious than white or beige colored foods. Organize colored food tables — blue food stations, orange food stations for a new twist.

Create action — Buffets, food stations or action stations all promote movement. This is very appealing after sitting for an extended period of time in a meeting. Action stations where the chef prepares the food helps create more of an experience for the participant. And it allows the person to create a customized meal which is more appealing, more personalized and accommodating special dietary needs.

Leverage themes — Use food as a theme or use the food to augment the theme. Meals and breaks can enrich the content and messaging of meetings.

Build a team — Food always brings people together. Food can be used in a variety of ways for team-building including:

- Recipe Contests
- Cook Offs
- Competitive Cooking
- Collaborative Cooking
- Interactive Cooking

Culinary events create an environment that is conducive to teambuilding skills. Culinary team building promotes creativity, communication and cooperation, delegation and working under time constraints. Different from many teambuilding programs, culinary team building removes the athletic or physical skills often required for success. Finally, teams are able to establish closer relationships based upon new bonds and a common experience.

Create interactive dining experiences — Interactive dining can include the opportunity to meet the chef, a chef's table where participants observe the chef cooking, Shabu-Shabu (Japanese table side cooking) or a winemaker's dinner. Create action through a chocolate fountain fondue station, waiters in costume or staff that interacts with attendees.

Encourage conversations at the table — Meeting managers can create table topics for specific tables related to the subject of the meeting or event. Place these topics on table stands so participants know what will be discussed. Or create a table tent with a few questions (business related) to keep the conversation flowing. Or use a secret envelope where everyone pulls out one question that they must answer and share with the entire group. The questions can be personal or professional or a mixture.

Create a family atmosphere — Passing platters of food for sharing promotes conversation and networking. Another trend is to serve a variety of deserts family style for the finish.

Serve as the theme — Using food as a metaphor in a meeting is a popular trend. This trend manifests itself in various "foodie" sites being used as venues (cooking schools) or using food for team-building.

Go ethnic, regional or local — Offer buffets that offer a variety of ethnic food. Or do a buffet that focuses on regional cuisine (Cajun, Southwestern). Or focus on the local specialties.

Promote trade show traffic — To increase flow throughout the show floor, place buffet tables throughout the floor. Don't station all the food on one table. Instead create a hot station, cold station, and desert station strategically throughout the floor. Ensure people (including the exhibitors) know where to find the food.

Create sponsorship opportunities — Solicit sponsors to help offset the costs of food and beverage.

Offer time for reflection — Chef Daniel Chong-Jiminez from The Spa at Norwich Inn in Norwich Connecticut promotes Silent Meals. In the spa setting, participants taste, smell and reflect on the

dishes in complete silence. "The concept of silent dining has been around for centuries; it stems from the Buddhist practice of mindfulness," says Chong-Jiminez.

Debunking Food and Sleepiness

People blame eating turkey on their feelings of tiredness. Turkey does contain tryptophan, an amino acid which is a natural sedative. But tryptophan doesn't act on the brain unless it is taken on an empty stomach with no protein present. So turkey alone won't make meeting participants feel tired. So when people overeating during the American Thanksgiving holiday, they feel lazy and lethargic. But it is not due to the turkey but rather the combination of drinking alcohol and over-eating a carbohydrate-rich meal and the turkey.

After a big meal, most of the body's oxygen is being used by the stomach and digestive system as it digests the food eaten. This means that the brain is being denied much of the oxygen it needs to function effectively and stay mentally alert. This is why people tend to feel sleepy after a big meal.

Summary

Planning the right quantity and appealing selection of food and beverage is only part of a savvy meeting manager's job. Avoiding waste and managing to a budget are important to a meeting's success.

However, unbeknownst to most meeting attendees, the food they choose to eat will affect their mood and ability to concentrate. As a meeting planner, it is incumbent to choose foods that offer a balance of protein, some carbohydrates and some fat to ensure meeting participants are ready to perform at their peak during the meeting. Applying a bit of science to menu planning will enhance participant's moods and energy levels.

Group Discussion or Projects

1. Research current interactive dining experiences like Cirque Productions' Dinneractive. See http://www.cirqueproductions.com/corpSandE_dinner.htm for a description of Cirque Productions' Dinneractive. Discuss how such an experience could be incorporated into a meeting.
2. Research possible meeting venues through the International Association of Culinary Professionals. Use their website (Yellow Pages section) as a starting point at www.iacp.com.
3. Create an icebreaker tool that promotes continual conversation at a meal. Define the type of meeting that it would be used for.
4. Beyond nutritional needs what other ways can food be used to enrich the meeting experience?
5. People who eat breakfast think better and faster, remember more, react quicker and are mentally sharper than breakfast skippers. The trick to thinking clearly and avoiding mental fatigue is to eat a breakfast but not a high-fat breakfast which makes people feeling less vigorous. Given this information what foods would you include at a:

- Continental breakfast
- Full breakfast

And, how would you encourage people to participate in breakfast rather than sleeping in?

References

1. Shock, P. (2006). Food and Beverage Arrangements. In G. Ramsborg (Ed.), *Professional Meeting Management* (5th ed.), pp. 399-417. Dubuque, Iowa: Kendall/Hunt Publishing Company.
2. Strick, S. (2006). Strategies to Embrace the Adult Learner. In G. Ramsborg (Ed.), *Professional Meeting Management* (5th ed.), pp. 247-263. Dubuque, Iowa: Kendall/Hunt Publishing Company.
3. Tinnish, S. (2006). Brainy Side of Food & Beverage. *Tips for Innovative Meetings and Events*. Retrieved May 2007 from <http://www.suetinnish.com>.

Copies of *Professional Meeting Management*®, fifth edition, may be purchased through the PCMA Bookstore at [PCMA Bookstore](#) or http://www.pcma.org/store/index.asp?DEPARTMENT_ID=3.

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