Caffeine in Food and Dietary Supplements: Examining Safety

Planning Committee on Potential Health Hazards Associated with Consumption of Caffeine in Food and Dietary Supplements

The National Academies
Lecture Room
2100 Constitution Avenue NW, Washington, DC 20007

August 5-6, 2013

Workshop Objectives

- Evaluate the epidemiological, toxicological, clinical, and other relevant literature to describe important health hazards associated with caffeine consumption
- Delineate vulnerable populations who may be at risk from caffeine exposure
- Describe caffeine exposure and risk of cardiovascular and other health effects on vulnerable populations, including additive effects with other ingredients and effects related to pre-existing conditions
- Explore safe caffeine exposure levels for general and vulnerable populations
- Identify data gaps on caffeine stimulant effects including but not limited to cardiovascular, central nervous system, or other health outcomes

August 5, 2013

8:00–8:45 a.m. Registration

INTRODUCTION and Opening Remarks

8:50 Welcome
Lynn Goldman, George Washington University, Chair, Planning Committee on Potential Health Hazards Associated with Consumption of Caffeine in Food and Dietary Supplements

9:00 Opening Remarks
Margaret Hamburg, Commissioner of Food and Drugs, Food and Drug Administration
# Institute of Medicine
Food and Nutrition Board and Board on Health Sciences Policy

## SESSION 1: INTAKE AND EXPOSURE TO CAFFEINE

*Moderated by Barbara Petersen, Exponent*

9:15  
**Examining Exposure to Caffeine in Foods, Beverage, and Supplements**

*Caffeine Intakes from Beverages in the U.S.*  
*Diane Mitchell, Penn State University*

*Trends in Caffeine Consumption*  
*Victor Fulgini, Nutrition Impact, LLC*

10:00  
**Panel Discussion with Speakers**

10:30  
**Break**

## SESSION 2: SAFETY SIGNALS AND SURVEILLANCE OF POPULATIONS

*Moderated by Steve Lipshultz, University of Miami*

10:50  
**Type and Frequency of Caffeine Toxicity: US and International Surveillance**  
*Alvin Bronstein, Poison Control Data System*

11:10  
**Safety Assessment of Caffeine in Foods and Beverages**  
*Ashley Roberts, Intertek-Cantox Consulting (by WebEx)*

11:30  
**Panel Discussion with Speakers**

12:00 p.m.  
**Break for Lunch**

## SESSION 3: CAFFEINE EFFECTS ON THE CARDIOVASCULAR SYSTEM

*Moderated by Stephen Daniels, Children’s Hospital Colorado*

1:00  
**Vascular Effects of Caffeine**  
*John Higgins, University of Texas Health Sciences Center*

1:20  
**Caffeine and Risk of Arrhythmia**  
*Jeffrey Goldberger, Northwestern University*

1:40  
**Caffeine and Risk of Hypertension**  
*Ahmed El-Sohemy, University of Toronto (by WebEx)*

2:00  
**Panel Discussion with Speakers**
SESSION 4: CAFFEINE EFFECTS ON THE CENTRAL NERVOUS SYSTEM  
**Moderated by Thomas Gould, Temple University**

2:20  **Neuropharmacologic Effects of Caffeine Exposure**
Sergi Ferre, National Institutes of Health, National Institute on Drug Abuse

2:40  **Developmental Neurological Effects of Caffeine Exposure**
Jennifer Temple, University of Buffalo (by WebEx)

3:00  Panel Discussion with Speakers

3:20  Break

SESSION 5: PANEL DISCUSSION: BEHAVIORAL EFFECTS ASSOCIATED WITH CAFFEINE CONSUMPTION  
**Moderated by Richard Adamson, TPN Associates**

3:30  **Dependence/Tolerance**
Roland Griffiths, Johns Hopkins University

**Addiction**
Charles O’Brien, University of Pennsylvania

**Risk-Taking**
Amelia Arria, University of Maryland

PUBLIC COMMENTS AND CONCLUDING REMARKS

4:30  Public Comments

5:00  **Concluding Remarks for Day 1**
Lynn Goldman, George Washington University, Chair, Planning Committee on Potential Health Hazards Associated with Consumption of Caffeine in Food and Dietary Supplements

5:10 pm  Adjourn for the Day

August 6, 2013

8:50 a.m.  **Welcome and Summary from Day 1**
Lynn Goldman, George Washington University, Chair, Planning Committee on Potential Health Hazards Associated with Consumption of Caffeine in Food and Dietary Supplements

9:00  **Opening Remarks**
Michael Taylor, Deputy Commissioner for Foods and Veterinary Medicine, Food and Drug Administration
## SESSION 1: OTHER COMPOUNDS IMPACTING CAFFEINE EFFECTS

*Moderated by: James Coughlin, Coughlin & Associates*

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<tr>
<td>9:15</td>
<td>Facilitated Discussion: Other Components Impacting Caffeine Effects</td>
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<td><em>Led by: Stephen Schaffer, University of South Alabama</em></td>
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<td></td>
<td><strong>Summary of the Issues</strong></td>
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<td>Stephen Schaffer</td>
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<td><strong>Panel Discussion</strong></td>
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<td>Speakers from Day 1</td>
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## SESSION 2: USE OF CAFFEINATED PRODUCTS

*Moderated by: James Coughlin, Coughlin & Associates*

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<tr>
<td>10:15</td>
<td>Trends in Usage and Potential Benefits from Caffeine</td>
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<td><em>Andrew Smith, Cardiff University, UK (by WebEx)</em></td>
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<td>10:35</td>
<td>Q&amp;A</td>
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## SESSION 3: EXPLORING SAFE CAFFEINE EXPOSURE LEVELS

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<tr>
<td>10:45</td>
<td>Panel Discussion: Exploring Safe Caffeine Exposure Levels for Vulnerable Populations</td>
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<td><strong>Panel Moderator</strong></td>
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<td>Mark Feeley, Health Canada</td>
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<td><strong>Pregnancy/Infants</strong></td>
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<td>Christina Chambers, University of California, San Diego</td>
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<td><strong>Children/ Young Adults</strong></td>
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<td>Steve Lipshultz, University of Miami</td>
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<td>11:30</td>
<td>Break for Lunch</td>
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## SESSION 4: DATA GAPS

*Moderated by: Joe Rodrigs, Environ International*

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<tr>
<td>12:30 p.m.</td>
<td>Panel Discussion on Data Gaps and Future Research</td>
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<td>Stephen Schaffer, University of South Alabama</td>
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<td>Regan Bailey, National Institutes of Health Office of Dietary Supplements</td>
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<td>1:45</td>
<td>Chair’s Summary and Final Thoughts</td>
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<td>Lynn Goldman, George Washington University, Chair, Planning Committee on Potential Health Hazards Associated with Consumption of Caffeine in Food and Dietary Supplements</td>
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<td>2:00</td>
<td>Adjourn Meeting</td>
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