Energy Drinks

Beverages called energy drinks are popular, especially with teenagers and young adults. These energy drinks are advertised to give individuals a higher energy level, to make a person feel more awake, and to boost attention span.

Energy drinks are marketed in different serving sizes and have varying amounts of caffeine. Sodas (also known as pop, colas, or soft drinks) may contain sugar and caffeine, although most sodas contain less caffeine than energy drinks on an ounce-by-ounce basis. As a comparison, an 8-oz cup of coffee has about 100 mg of caffeine (see table at right, and expanded table online at www.jama.com). The January 16, 2013, issue of JAMA contains 2 articles discussing the harms associated with energy drinks.

Common Ingredients in Energy Drinks

- Caffeine
- Sugar
- Guaraná (a plant with seeds that contain caffeine)
- Cocoa
- B vitamins
- Herbs, including ginseng, licorice, and kola nut

Health Risks Associated with Energy Drinks

- Increased heart rate
- Irregular heart rate and palpitations
- Diuresis (increased urine production)
- Hyperglycemia (increased blood sugar) is related to all beverages with high sugar content. This can be harmful for individuals with diabetes or other metabolic health problems.
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- Sleep disturbances, including insomnia
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The American Academy of Pediatrics recommends that young children should not consume energy drinks. Caffeine may be especially harmful for children. Adolescents should not have more than 100 mg of caffeine each day. Parents should monitor how much soda or coffee (or other beverages containing caffeine, including energy drinks of any kind) their teenagers drink and help them understand the risks associated with taking in large amounts of caffeine.

Adults should limit their caffeine intake to 500 mg per day. Individuals who have heart problems, high blood pressure, or trouble sleeping or who are taking medications should be careful to limit the amount of caffeine they drink. Older persons may be more sensitive to the effects of caffeine.

Energy drinks are regulated by the US Food and Drug Administration. However, the ingredients in energy drinks may be harmful to some individuals. It is important to read labels for any food or drink product that you consume. If you choose to use energy drinks, make sure you understand the ingredients and serving sizes listed on the label.


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CAFFEINE CONTENT OF BEVERAGES AND OTHER PRODUCTS

<table>
<thead>
<tr>
<th>Energy drinks</th>
<th>Caffeine content (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Hour Energy</td>
<td>207</td>
</tr>
<tr>
<td>Amp, 16 oz</td>
<td>102</td>
</tr>
<tr>
<td>BAWLS Guarana, 16 oz</td>
<td>100</td>
</tr>
<tr>
<td>Full Throttle, 16 oz</td>
<td>197</td>
</tr>
<tr>
<td>Monster, 16 oz</td>
<td>160</td>
</tr>
<tr>
<td>No Fear, 16 oz</td>
<td>174</td>
</tr>
<tr>
<td>NOC, 16 oz</td>
<td>260</td>
</tr>
<tr>
<td>Red Bull, 16 oz</td>
<td>152</td>
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<tr>
<td>Rip It, 16 oz</td>
<td>200</td>
</tr>
<tr>
<td>Rockstar, 16 oz</td>
<td>160</td>
</tr>
<tr>
<td>SPIKE Shooter</td>
<td>286</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sodas</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca-Cola, 20-oz bottle</td>
<td>58</td>
</tr>
<tr>
<td>Dr Pepper, 20-oz bottle</td>
<td>70</td>
</tr>
<tr>
<td>Mountain Dew, 20-oz bottle</td>
<td>90</td>
</tr>
<tr>
<td>Pepsi, 20-oz bottle</td>
<td>63</td>
</tr>
<tr>
<td>Pepsi MAX, 20-oz bottle</td>
<td>115</td>
</tr>
<tr>
<td>Vault, 20-oz bottle</td>
<td>118</td>
</tr>
</tbody>
</table>

Other Sources: 2012

- Arizona Iced Tea, green, 16 oz 15
- Black tea (brewed), 8 oz 170
- Coffee (brewed), 16 oz 70
- Excedrin Extra Strength, 2 pills 130
- Hot chocolate, 8 oz 9
- NoDoz Maximum Strength, 1 pill 200
- StayAlert gum, 1 piece 100
- Vivarin, 1 pill 200

*Average values; individual brands may vary.

Source: Center for Military Psychiatry and Neuroscience at the Walter Reed Army Institute of Research, 2012

FOR MORE INFORMATION

- American Academy of Pediatrics
  www.aap.org
- American Academy of Pediatrics:
  Clinical Report—Sports Drinks and Energy Drinks for Children and Adolescents: Are They Appropriate?
  pediatrics.aappublications.org/content/early/2011/05/25/peds.2011-0965
- National Institutes of Health
  www.nih.gov

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