Stimulants and Your Brain

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What are stimulants?
How do they work?
## Physical effects and dangers

<table>
<thead>
<tr>
<th>Effect</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased heart rate</td>
<td>Heart attack</td>
</tr>
<tr>
<td>Increased blood pressure</td>
<td>Stroke</td>
</tr>
<tr>
<td>Increased temperature</td>
<td>Overheating &amp; Dehydration</td>
</tr>
<tr>
<td>Decreased appetite</td>
<td>Weight loss</td>
</tr>
<tr>
<td>Reduced salivation</td>
<td>Meth mouth</td>
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</tbody>
</table>
Mental effects and dangers

<table>
<thead>
<tr>
<th>Effects</th>
<th>Dangers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obsessive focus</td>
<td>Paranoia</td>
</tr>
<tr>
<td>Increased alertness</td>
<td>Crazy behavior (psychosis)</td>
</tr>
</tbody>
</table>
Combining Stimulants and Other Drugs

- Mixing with drugs that have opposite effects:
  - Alcohol
  - Sleeping pills and anxiety meds
  - Heroin and painkillers
Addiction/Withdrawal

- Withdrawal symptoms:
  - Fatigue
  - Increased appetite
  - Inability to focus

- Social problems:
  - Stealing
  - Prostitution
  - Drug cartels
Bath Salts
A Legal(?) High
Sold as legal high online and certain stores

Also sold as plant food, jewelry cleaner, phone cleaner
## Street Names

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bloom</td>
<td>Cloud Nine</td>
</tr>
<tr>
<td>Vanilla Sky</td>
<td>White Lightning</td>
</tr>
<tr>
<td>Scarface</td>
<td>Meow Meow</td>
</tr>
<tr>
<td>Drone</td>
<td>bk-MDMA</td>
</tr>
<tr>
<td>Ivory Wave</td>
<td>Lunar Wave</td>
</tr>
<tr>
<td>Explosion</td>
<td>Flakka</td>
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</tbody>
</table>
Effects and mechanism

- Same effect on synapses as meth and cocaine
- Physical and mental effects are also very similar
- Just as if not more addictive!
Safety and Legality

- Can cause someone to test positive for meth use
- Some bath salts are now illegal – state and federal laws
- If a bath salt is legal, has no regulation – may be impure
- Often sold as mixtures
ADHD Medications
What is ADHD?

- Difficulty paying attention
- Hyperactivity
- Impulsive behavior
- ~5% of children under 18 have ADHD worldwide
Types of Medications

- Adderall
- Vyvanse
- Ritalin
ADHD Medications as “Study Aids”

- Doesn’t actually make you smarter
- Could end up very focused on something aside from school
- Might end up being detrimental
Dangers of Abuse

- Inability to concentrate without the drug
- Irregular sleeping patterns
- Dangerous combinations
- Drug tests
- Legal issues
- Death
Treatment