

# Effects of Energy Drinks on the Cardiovascular System

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## **LIST OF REVISIONS (all highlighted in paper in yellow):**

1. Page 1: Title changed to The Effects of Energy Drinks on the Cardiovascular System.
2. Page 1. List of authors. Updated list of institutions.
3. Page 1: zip codes of institutions are added.
4. Page 1: Conflict of Interest statement added.
5. Page 2: Under Abstract section: “last few years” changed to “last decade.”
6. Page 2: Under Abstract section: “due to their strong concentration” changed to “due to their perceived strong concentration.”
7. Page 2: added “that are largely unknown to the general public.”
8. Page 2: added “In this paper” before “we focus on.”
9. Page 2: Core tip section is added.
10. Page 3: under Introduction: sentence changed to “In France, the use of Red Bull was banned at one point.”
11. The reference numbers throughout the paper are now in square brackets in superscript at the end of each citation before the full stop.
12. Page 3: first line under Scope of the Issue changed to “has thrived and after 50 years”
13. Page 3: first line under Scope of the Issue removed the second “in 2011”.
14. Page 3: “emergency department for difficulties” changed to “emergency department with complaints”.
15. Page 4: second paragraph, removed “All other guarantees by the manufacturers are yet to be substantiated.”
16. Page 4: second paragraph, “actually worsened” changed to “seemed to worsen”
17. Page 4: third paragraph, “in a bubble” changed to “as a separate entity”.
18. Page 5: third paragraph, removed parentheses around stimulants.
19. Page 5: under Physiologic Effects on Vital Signs: removed “energy drinks overdose” and added “energy drinks-related cardiovascular adverse effects”.
20. Page 8: adenosine’s “affects” corrected to “effects”
21. Page 10: removed “We do know that high doses of caffeine can do its damage” and replaced it with “There is evidence, however, that point to caffeine’s possible adverse effects especially when consumed at high doses”.
22. Page 10: Paragraph starting with “In addition” is now added to the prior paragraph.
23. Page 10: “shouldn’t be taken lightly. They may lead to” changed to “should not be overlooked as they may lead to”.
24. Page 10: removed “It has been noted as above that caffeine may also play a part in causing arrhythmias” and added, “There is a widespread belief that caffeine may be arrhythmogenic”
25. Page 11: added “,” after “in fact”.
26. Page 11: “AF risk” changed to “risk of atrial fibrillation”.

27. Page 11: second paragraph, “difficult to reconcile. Much of variation” changed to “difficult to reconcile although some of the variation”.
28. Page 11: second paragraph, “antirrythmatics” corrects to “antiarrhythmics”
29. Page 11: second paragraph, “enzyme. Defects” changed to “enzyme and defects”.
30. Page 12: “woman” corrected to “women”
31. Page 12: “companies falsely labeling” changed to “companies reportedly falsely labeling”
32. Page 12: under Taurine, “Amino Acid” changed to “amino acid”
33. Page 13, “inotropic effect. If true, when mixed with caffeine, the effect may add to the causation of ED related cardiovascular events” changed to “inotropic effect which may shed some light on the cardiovascular adverse effects of energy drinks.”
34. Page 13, third paragraph, “preformed” corrected to “performed.”
35. Page 14, “contractibility” changed to “contractility”
36. Page 14, “note” to “noted”
37. Page 15, “overdoses of caffeine” changed to “cardiovascular adverse effects”
38. Page 16, corrected “L-carnitine” and “I<sup>2</sup>”
39. Page 16, “Rockstar Energy Drinks” changed to “Rockstar™ energy drinks”
40. Page 17, removed “benefit or”
41. Page 17, “One mayo clinic” to “one Mayo Clinic”.
42. Page 19, “preforming” corrected to “performance”
43. Page 20, third paragraph joined to the end of the second paragraph.
44. Page 19, changed “detoxification effects. Supplementation” to “detoxification effects as supplementation”
45. Page 19, “There has been no suggested significant contribution towards energy by glucuronolactone and little additional research has been done on it in humans. Therefore, no conclusive conclusion can be made of its safety <sup>[85]</sup>.” changed to “There has been minimal suggested significant contribution towards energy by glucuronolactone on humans in the scientific literature and, therefore, no definitive conclusion can be made of its safety <sup>[85]</sup>.”
46. Page 20: “about such habits” to “to avoid such habits”
47. Page 20: first paragraph, “resulted due to” to “resulted were due to”
48. Page 20: first paragraph, added “and without combining other stimulants or alcohol” after “moderate use”
49. Page 21: under Conclusion, changed “On the other hand” to “Additionally”
50. Page 21: under Conclusion, removed “in order to avoid overdoses or allow” and added “in order to promote”
51. Page 21: under Conclusion: “individuals do research on” changed to “individuals research”
52. Page 21: under Conclusion: “all together” changed to “altogether”
53. Page 21: removed “Adverse cardiovascular effects have been attributed to caffeine, particularly when ingested in excessive amounts.”
54. Page 22: added “potential” after “elucidate”.
55. PMID and DOI added after references.