



**Contributed by Nancy Appleton, Ph.D**

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In addition to throwing off the body's homeostasis, excess sugar may result in a number of other significant consequences. The following is a listing of some of sugar's metabolic consequences from a variety of medical journals and other scientific publications.

1. Sugar can suppress your immune system and impair your defenses against infectious disease.<sup>1,2</sup>
2. Sugar upsets the mineral relationships in your body: causes chromium and copper deficiencies and interferes with absorption of calcium and magnesium.<sup>3,4,5,6</sup>
3. Sugar can cause a rapid rise of adrenaline, hyperactivity, anxiety, difficulty concentrating, and crankiness in children.<sup>7,8</sup>
4. Sugar can produce a significant rise in total cholesterol, triglycerides and bad cholesterol and a decrease in good cholesterol.<sup>9,10,11,12</sup>
5. Sugar causes a loss of tissue elasticity and function.<sup>13</sup>
6. Sugar feeds cancer cells and has been connected with the development of cancer of the breast, ovaries, prostate, rectum, pancreas, biliary tract, lung, gallbladder and stomach.<sup>14,15,16,17,18,19,20</sup>
7. Sugar can increase fasting levels of glucose and can cause reactive hypoglycemia.<sup>21,22</sup>
8. Sugar can weaken eyesight.<sup>23</sup>
9. Sugar can cause many problems with the gastrointestinal tract including: an acidic digestive tract, indigestion, malabsorption in patients with functional bowel disease, increased risk of Crohn's disease, and ulcerative colitis.<sup>24,25,26,27,28</sup>

10. Sugar can cause premature aging.<sup>29</sup>
11. Sugar can lead to alcoholism.<sup>30</sup>
12. Sugar can cause your saliva to become acidic, tooth decay, and periodontal disease.<sup>31,32,33</sup>
13. Sugar contributes to obesity.<sup>34</sup>
14. Sugar can cause autoimmune diseases such as: arthritis, asthma, multiple sclerosis.<sup>35,36,37</sup>
15. Sugar greatly assists the uncontrolled growth of Candida Albicans (yeast infections)<sup>38</sup>
16. Sugar can cause gallstones.<sup>39</sup>
17. Sugar can cause appendicitis.<sup>40</sup>
18. Sugar can cause hemorrhoids.<sup>41</sup>
19. Sugar can cause varicose veins.<sup>42</sup>
20. Sugar can elevate glucose and insulin responses in oral contraceptive users.<sup>43</sup>
21. Sugar can contribute to osteoporosis.<sup>44</sup>
22. Sugar can cause a decrease in your insulin sensitivity thereby causing an abnormally high insulin levels and eventually diabetes.<sup>45,46,47</sup>
23. Sugar can lower your Vitamin E levels.<sup>48</sup>
24. Sugar can increase your systolic blood pressure.<sup>49</sup>
25. Sugar can cause drowsiness and decreased activity in children.<sup>50</sup>
26. High sugar intake increases advanced glycation end products (AGEs)(Sugar molecules attaching to and thereby damaging proteins in the body).<sup>51</sup>
27. Sugar can interfere with your absorption of protein.<sup>52</sup>
28. Sugar causes food allergies.<sup>53</sup>
29. Sugar can cause toxemia during pregnancy.<sup>54</sup>
30. Sugar can contribute to eczema in children.<sup>55</sup>
31. Sugar can cause atherosclerosis and cardiovascular disease.<sup>56,57</sup>
32. Sugar can impair the structure of your DNA.<sup>58</sup>
33. Sugar can change the structure of protein and cause a permanent alteration of the way the proteins act in your body.<sup>59,60</sup>
34. Sugar can make your skin age by changing the structure of collagen.<sup>61</sup>

35. Sugar can cause cataracts and nearsightedness.<sup>62,63</sup>
36. Sugar can cause emphysema.<sup>64</sup>
37. High sugar intake can impair the physiological homeostasis of many systems in your body.<sup>65</sup>
38. Sugar lowers the ability of enzymes to function.<sup>66</sup>
39. Sugar intake is higher in people with Parkinson's disease.<sup>67</sup>
40. Sugar can increase the size of your liver by making your liver cells divide and it can increase the amount of liver fat.<sup>68,69</sup>
41. Sugar can increase kidney size and produce pathological changes in the kidney such as the formation of kidney stones.<sup>70,71</sup>
42. Sugar can damage your pancreas.<sup>72</sup>
43. Sugar can increase your body's fluid retention.<sup>73</sup>
44. Sugar is enemy #1 of your bowel movement.<sup>74</sup>
45. Sugar can compromise the lining of your capillaries.<sup>75</sup>
46. Sugar can make your tendons more brittle.<sup>76</sup>
47. Sugar can cause headaches, including migraines.<sup>77</sup>
48. Sugar can reduce the learning capacity, adversely affect school children's grades and cause learning disorders.<sup>78,79</sup>
49. Sugar can cause an increase in delta, alpha, and theta brain waves which can alter your mind's ability to think clearly.<sup>80</sup>
50. Sugar can cause depression.<sup>81</sup>
51. Sugar can increase your risk of gout.<sup>82</sup>
52. Sugar can increase your risk of Alzheimer's disease.<sup>83</sup>
53. Sugar can cause hormonal imbalances such as: increasing estrogen in men, exacerbating PMS, and decreasing growth hormone.<sup>84,85,86,87</sup>
54. Sugar can lead to dizziness.<sup>88</sup>
55. Diets high in sugar will increase free radicals and oxidative stress.<sup>89</sup>
56. High sucrose diets of subjects with peripheral vascular disease significantly increases platelet adhesion.<sup>90</sup>
57. High sugar consumption of pregnant adolescents can lead to substantial decrease in gestation duration and is associated with a twofold increased risk for delivering a small-for-gestational-age (SGA) infant.<sup>91,92</sup>

58. Sugar is an addictive substance.<sup>93</sup>
59. Sugar can be intoxicating, similar to alcohol.<sup>94</sup>
60. Sugar given to premature babies can affect the amount of carbon dioxide they produce.<sup>95</sup>
61. Decrease in sugar intake can increase emotional stability.<sup>96</sup>
62. Your body changes sugar into 2 to 5 times more fat in the bloodstream than it does starch.<sup>97</sup>
63. The rapid absorption of sugar promotes excessive food intake in obese subjects.<sup>98</sup>
64. Sugar can worsen the symptoms of children with attention deficit hyperactivity disorder (ADHD).<sup>99</sup>
65. Sugar adversely affects urinary electrolyte composition.<sup>100</sup>
66. Sugar can slow down the ability of your adrenal glands to function.<sup>101</sup>
67. Sugar has the potential of inducing abnormal metabolic processes in a normal healthy individual and to promote chronic degenerative diseases.<sup>102</sup>
68. I.V.s (intravenous feedings) of sugar water can cut off oxygen to your brain.<sup>103</sup>
69. Sugar increases your risk of polio.<sup>104</sup>
70. High sugar intake can cause epileptic seizures.<sup>105</sup>
71. Sugar causes high blood pressure in obese people.<sup>106</sup>
72. In intensive care units: Limiting sugar saves lives.<sup>107</sup>
73. Sugar may induce cell death.<sup>108</sup>
74. In juvenile rehabilitation camps, when children were put on a low sugar diet, there was a 44 percent drop in antisocial behavior.<sup>109</sup>
75. Sugar dehydrates newborns.<sup>110</sup>
76. Sugar can cause gum disease.<sup>111</sup>

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