

الفرق بين الرجل والمرأة  
نورهان إبراهيم عبد الله

**Men and Women: Are they different?**

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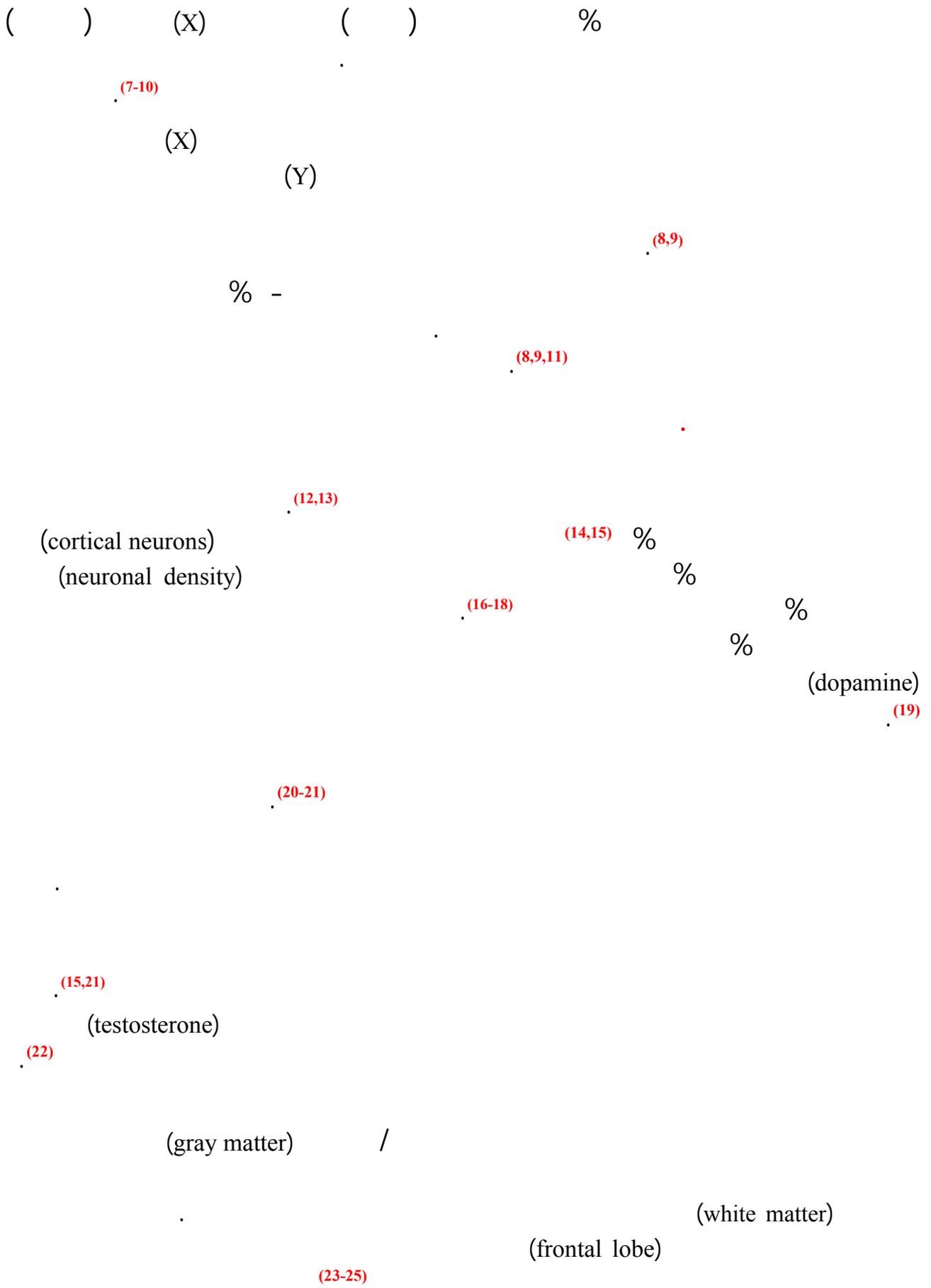
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(6)

(Y)

(7) (X)

(X)



(26)

(27)

(inferior-parietal lobule)

(28)

(schizophrenic)

(29,30)

(hypothalamic nuclei)

(31)

body )

(nucleus suprachiasmatic)

(20,21)

(rhythms

(hippocampus)

(32,33)

(limbic system)

(21)

(serotonin)

(neurotransmitter)

(serotonin)

(21,35,36)

(McGill)

(35,37)

%

(serotonin)

%

(38,39)

anterior )

(corpus callosum)

(commissure

(Verbal capabilities)  
Broca and )

(20,21,34)

% - (Wernicke areas

(40,41)

( )

%

(42)

( )

( )

(43,44)

thyroid )

(gland

(43)

(core temperature)

, )

( , )

(45)

(

%

%

(43)

) %

%

(

% -

(43,46,47)

(47, 48) %

%

%

(47)

(49)

(50)

%

%

%

(51-53)

( )

( )

(53)

%

%

(55)

(56)

(26,57,58)

%

(59)

(Depressive disorders)

(60, 61)

%

(autoimmune disease)

(lupus)

multiple )

(scleroderma)

(rheumatoid arthritis)

(sclerosis)

(X)

(14, 37)

(anesthesia)

(62-65)

- -

(66-69)

/

(alcohol dehydrogenase)

(70-72)

% (osteoporosis)

(73)

(74)

" :

(75-80)



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(74) "

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(81)

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(82)

(74)



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## REFERENCES

1. **سورة النساء: آية (١)**
2. **سورة الزمر: آية (٦)**
3. <http://hadith.al-islam.com/Display/Display.asp?Doc=9&ID=48530>
4. <http://hadith.al-islam.com/Display/Display.asp?Doc=10&ID=46415>
5. <http://hadith.al-islam.com/bayan/display.asp?Lang=eng&ID=832>
6. <http://www.narth.com/docs/york.html>
7. Nature March 17, 2005.
8. <http://www.rense.com/general63/galaxyofgeneticdifferences.htm>
9. <http://news.scotsman.com/scitech.cfm?id=295472005>
10. <http://www.psychologytoday.com/articles/PTO-20030624-000003.html>
11. <http://www.txtwriter.com/onscience/Articles/ychromosome.html>
12. <http://www.cerebromente.org.br/n11/mente/eisntein/cerebro-homens.html>
13. <http://www.alite.co.uk/newsletters/2003/february.htm>
14. <http://www.princeton.edu/pr/news/98/q3/0917-lupus.htm>
15. [http://www.umich.edu/~psycours/531/cognitive\\_function/tsld006.htm](http://www.umich.edu/~psycours/531/cognitive_function/tsld006.htm)
16. Pakkenberg, B. and H.J. Gundersen, *Neocortical neuron number in humans: effect of sex and age*. J Comp Neurol, 1997. 384 (2): p. 312-20.
17. Rabinowicz, T., et al., *Gender differences in the human cerebral cortex: more neurons in males; more processes in females*. J Child Neurol, 1999. 14(2): p. 98-107.
18. [http://en.wikipedia.org/wiki/Gender\\_differences](http://en.wikipedia.org/wiki/Gender_differences)
19. <http://www.cumc.columbia.edu/dept/partnership/brain.html>
20. <http://www.csua.berkeley.edu/~reka/hormones.htm>
21. [www.glycemic.com/gcm/print\\_index.htm](http://www.glycemic.com/gcm/print_index.htm)
22. [http://www.contentwatch.com/learn\\_center/article.php/165](http://www.contentwatch.com/learn_center/article.php/165)
23. <http://www.nytimes.com/2005/01/24/science/24women.html?>
24. <http://www.sciencedaily.com/releases/2005/01/050121100142.htm>
25. [http://today.uci.edu/news/release\\_detail.asp?key=1261](http://today.uci.edu/news/release_detail.asp?key=1261)
26. <http://www.nzdf.org.nz/update/messages/1485.htm>
27. [http://www.amren.com/mtnews/archives/2005/08/men\\_cleverer\\_th.php](http://www.amren.com/mtnews/archives/2005/08/men_cleverer_th.php)
28. Frederikse, M.E., Lu, A., Aylward, E., Barta, P., Pearlson, G. Sex differences in the inferior parietal lobule. *Cerebral Cortex* vol 9 (8) p896 - 901, 1999.
29. Frederikse M, Lu A, Aylward E, Barta P, Sharma T, Pearlson G. Sex differences in inferior parietal lobule volume in schizophrenia. *Am J Psychiatry*. 2000;157 (3):422-427.
30. Goldstein JM, Seidman LJ, O'Brien LM, et al. Impact of normal sexual dimorphisms on sex differences in structural brain abnormalities in schizophrenia assessed by magnetic resonance imaging. *Arch Gen*

- Psychiatry. 2002;59 (2):154-164
31. LeVay S. A difference in hypothalamic structure between heterosexual and homosexual men *Science*. 253(5023):1034-7, 1991.
  32. <http://www.oregoncounseling.org/ArticlesPapers/Documents/DifferencesMenWomen.htm>
  33. <http://www.oregoncounseling.org/ArticlesPapers/Documents/DifferencesMenWomen.htm>
  34. <http://www.physicspost.com/articles.php?articleId=159&page=2>
  35. [http://www.tampax.com/en\\_us/pages/wmn\\_main.shtml?pageid=AR0016](http://www.tampax.com/en_us/pages/wmn_main.shtml?pageid=AR0016)
  36. Somer, E. Food & Mood. Henry Holt and Company, LLC, 1999. (Low serotonin causes food craving and depression pg. 144.
  37. [http://www.cwhn.ca/resources/sexual\\_diff/](http://www.cwhn.ca/resources/sexual_diff/)
  38. Nishizawa S, Benkelfat C, Young SN et al. (1997), Differences between males and females in rates of serotonin synthesis in human brain. *Proceedings of the National Academy of Science USA* 94(10):5308-13.
  39. Begley, Sharon. Gray Matters. *Newsweek*, March 27, 1995, pp. 48-54.
  40. Muck-Seler D, Pivac N, Jakovljevic M. Sex differences, season of birth and platelet 5-HT levels in schizophrenic patients. *J Neural Transm*. 1999;106(3-4):337-347.
  41. Schlaepfer T.E., Harris G.J., Tien A.Y., Peng L., Lee S., Pearlson G.D. Structural differences in the cerebral cortex of healthy female and male subjects: a magnetic resonance imaging study. *Psychiatry Res*. 1995 Sep 29;61(3):129-35.
  42. Astrand P, Rodahl K, Dahl HA, Stromme SB. (2003). *Textbook of Work Physiology: Physiological Bases of Exercise*. 4<sup>th</sup> Ed. New York: McGraw-Hill.
  43. <http://www.keepmedia.com/pubs/uExpress/2000/02/06/554886?extID=10037&oliID=229>
  44. Harasty J., Double K.L., Halliday, G.M., Kril, J.J., and McRitchie, D.A. Language-associated cortical regions are proportionally larger in the female brain. *Archives in Neurology* vol 54 (2) 171-6, 1997.
  45. <http://www.junkscience.com/news2/coldhand.htm>
  46. [http://ajc.healthology.com/webcast\\_transcript.asp?b=ajc&f=cardio&c=cardio\\_malevsfemale&spg=SCH](http://ajc.healthology.com/webcast_transcript.asp?b=ajc&f=cardio&c=cardio_malevsfemale&spg=SCH)
  47. <http://www.physicallytrained.com/fm21-20/physical-fitness-training/appendix-a.shtml>
  48. Tarnopolsky, M.A., Atkinson, S.A., Phillips, S.M., MacDougall, J.D. (1995). Carbohydrate loading and metabolism during exercise in men and women. *Journal of Applied Physiology* 78 (4): 1,360-368.
  49. <http://www.muscle-fitness.com.au/380.html>
  50. Reybrouck, T., Fagard, R. Gender differences in the oxygen transport system during maximal exercise in hypertensive subjects. *Chest* 115 (3): 788-792, 1999.
  51. [http://www.overspeedtraining.com/women\\_1.htm](http://www.overspeedtraining.com/women_1.htm)
  52. <http://www.beyondmass.com/forums/showthread.php?threadid=192>
  53. Miller AE, MacDougall JD, Tarnopolsky MA, Sale DG (1993). Gender differences in strength and muscle fiber characteristics. *Eur J Appl Physiol Occup Physiol*. 66(3): 254-62
  54. Elbers, J.M., Asscheman, H., Seidell, J.C., Gooren, L.J. Effects of sex steroid hormones on regional fat depots as assessed by magnetic resonance imaging in transsexuals. *American Journal of Physiology* 276(2 Pt 1):E317-325, 1999.
  55. <http://freespace.virgin.net/martin.shakeshaft/women.html>
  56. Division of Vital Statistics—Center for Disease Control and Prevnetnion. Deaths: Final data for 1998. *National Vital Statistics Reports*. 2000;48(11).
  57. [womenshealthresearch.org/events/sam\\_houston.htm](http://womenshealthresearch.org/events/sam_houston.htm)
  58. Marrugat J, Sala J, Masiá R, Pavesi M, Sanz G, Valle V, Molina L, Serés L, and Elosua R (1998). Mortality Differences Between Men and Women Following First Myocardial Infarction. *JAMA* 280: 1405-1409.
  59. [http://www.eurekalert.org/pub\\_releases/2004-04/nmh-lci040804.php](http://www.eurekalert.org/pub_releases/2004-04/nmh-lci040804.php)
  60. Burt VK, Stein K. (2002). Epidemiology of depression throughout the female life cycle. *J Clin Psychiatry*

63 (Suppl 7): 9-15.

61. [http://www.womenshealthresearch.org/hs/facts\\_mental.htm](http://www.womenshealthresearch.org/hs/facts_mental.htm)
62. Back DJ, Orme ML. Pharmacokinetic drug interactions with oral contraceptives. *Clin Pharmacokinet.* 1990;18(6):472-484.
63. Thurmann PA, Hompesch BC. Influence of gender on the pharmacokinetics and pharmacodynamics of drugs. *Int J Clin Pharmacol Ther.* 1998;36(11):586-590.
64. Xue FS, An G, Liao X, Zou Q, Luo LK. The pharmacokinetics of vecuronium in male and female patients. *Anesth Analg.* 1998;86(6):1322-1327.
65. Xue FS, Zhang YM, Liao X, Liu JH, An G. Influences of age and gender on dose response and time course of effect of atracurium in anesthetized adult patients. *J Clin Anesth.* 1999;11(5):397-405.
66. Ma X, Baraona E, Goozner BG, Lieber CS. Gender differences in medium-chain dicarboxylic aciduria in alcoholic men and women. *Am J Med.* 1999;106(1):70-75.
67. Fernandez-Sola J, Estruch R, Nicolas JM, et al. Comparison of alcoholic cardiomyopathy in women versus men. *Am J Cardiol.* 1997;80(4):481-485.
68. Bradley KA, Badrinath S, Bush K, Boyd-Wickizer J, Anawalt B. Medical risks for women who drink alcohol. *J Gen Intern Med.* 1998;13(9):627-639.
69. Tuyns AJ, Pequignot G. Greater risk of ascitic cirrhosis in females in relation to alcohol consumption. *Int J Epidemiol.* 1984;13(1):53-57.
70. Smith WB, Weisner C. Women and alcohol problems: a critical analysis of the literature and unanswered questions. *Alcohol Clin Exp Res.* 2000;24(8):1320-1321.
71. Frezza M, di Padova C, Pozzato G, Terpin M, Baraona E, Lieber CS. High blood alcohol levels in women. The role of decreased gastric alcohol dehydrogenase activity and first-pass metabolism. *N Engl J Med.* 1990;322(2): 95-99.
72. Seitz HK, Egerer G, Simanowski UA, et al. Human gastric alcohol dehydrogenase activity: effect of age, sex, and alcoholism. *Gut.* 1993;34(10):1433-1437.
73. Rabinowicz T., Dean D.E., Petetot J.M., de Courten-Myers G.M. Gender differences in the human cerebral cortex: more neurons in males; more processes in females. *J Child Neurol.* 1999 Feb;14(2):98-107.
74. تفسير القرآن العظيم لابن كثير. المجلد الأول، ص ٥٠٣.
75. <http://www.khilafah.net/subajhisa.php?documentID=18&subDocument=20>
76. <http://www.quran-radio.com/moftians2.htm>
77. <http://www.icsfp.com/Ar/Contents.aspx?AID=1846>
78. <http://www.saaaid.net/Doat/assuhaim/n/6.htm>
79. <http://faculty.kfupm.edu.sa/IAS/howsawi/khotab/441.htm>
80. <http://arabic.islamicweb.com/books/albani.asp?id=539>
81. [http://www.hindunet.org/onps/default.php?dtstr=20031130&Formsearchresults\\_Page=3](http://www.hindunet.org/onps/default.php?dtstr=20031130&Formsearchresults_Page=3)
82. <http://quran.al-islam.com/Tafseer/DispTafsser.asp?nType=1&bm=&nSeg=0&l=arb&nSora=4&nAya>
83. <http://thetruereligion.org/modules/wfsection/article.php?articleid=254>
84. [http://www.islamonline.net/servlet/Satellite?pagename=IslamOnline-English-Ask\\_Scholar/FatwaE/FatwaE&cid=1119503544964](http://www.islamonline.net/servlet/Satellite?pagename=IslamOnline-English-Ask_Scholar/FatwaE/FatwaE&cid=1119503544964)
85. [http://www.islamonline.net/servlet/Satellite?cid=1141277534839&pagename=IslamOnline-English-Ask\\_Scholar%2FFatwaE%2FFatwaEAskTheScholar](http://www.islamonline.net/servlet/Satellite?cid=1141277534839&pagename=IslamOnline-English-Ask_Scholar%2FFatwaE%2FFatwaEAskTheScholar)
86. <http://memri.org/bin/articles.cgi?Page=archives&Area=ia&ID=IA22705>