

Vagus nerve bibliography

1. Carta G, Seregni A, et.al., **(2021) Validation and Reliability of a Novel Vagus Nerve Neurodynamic Test and Its Effects on Heart Rate in Healthy Subjects: Little Differences Between Sexes.** *Front. Neurosci.* 15:698470. doi: 10.3389/fnins.2021.698470
2. Haens G, et.al., **Neuroimmune Modulation Through Vagus Nerve Stimulation Reduces Inflammatory Activity in Crohn's Disease Patients: A Prospective Open-label Study,** *Journal of Crohn's and Colitis*, 2023, 17, 1897–1909 <https://doi.org/10.1093/ecco-jcc/jcad151> Advance access publication 21 September 2023
3. Okornogi T., et.al., **Stress-induced vagal activity influences anxiety-relevant prefrontal and amygdala neuronal oscillations in male mice**, *Nature Communications* | (2024)1 5:183 <https://doi.org/10.1038/s41467-023-44205-y>.
4. Koenig J., et.al., **Vagally mediated heart rate variability in headache patients—a systematic review and meta-analysis**, 2016, Vol. 36(3) 265–278 ! International Headache Society 2015 DOI: 10.1177/0333102415583989.
5. Steenbergen L., et.al., **Recognizing emotions in bodies: Vagus nerve stimulation enhances recognition of anger while impairing sadness** *Cognitive, Affective, & Behavioral Neuroscience* (2021) 21:1246–1261
6. Powley T. **Vagal input to the enteric nervous system**, *Gut* 2000;(Suppl IV)47:iv30–iv32.
7. Steenbergen L., et.al., **Recognizing emotions in bodies: Vagus nerve stimulation enhances recognition of anger while impairing sadness**, *Cognitive, Affective, & Behavioral Neuroscience* (2021) 21:1246–1261
8. Jameson, K. et.al., **Select microbial metabolites in the small intestinal lumen regulates vagal activity via receptor-mediated signaling**, *iScience* 28, 111699, February 21, 2025 ^a 2024 The Author(s). Published by Elsevier Inc.
9. DeCouck M., et.al., **The Role of the Vagus Nerve in Cancer Prognosis: A Systematic and a Comprehensive Review**, *Hindawi Journal of Oncology* Volume 2018, Article ID 1236787, 11 pages <https://doi.org/10.1155/2018/1236787>
10. SchaeferM, Mathot S, LundqvistM, Lundstrom JN, Arshamian A. 2024. **The respiratory-pupillary phase effect: Pupils size is smallest around inhalation onset and largest during exhalation.** *bioRxiv*. <https://doi.org/10.1101/2024.06.27.599713>
11. Davis, J., Feldman, R.I., Traylor, M.K., Gray, S.M., Drake, S.M., Keller, J.L., **Myofascial release induces declines in heart rate and changes to microvascular reactivity in young healthy adults**, *Journal of Bodywork & Movement Therapies* (2024), doi: <https://doi.org/10.1016/j.jbmt.2024.01.006>.
12. Yuenyongchaiwat K., et.al., **Effects of breathing training on hemodynamic changes, cardiac autonomic function and neuroendocrine response in people with high blood pressure: A randomized control trial**, *Journal of Bodywork & Movement Therapies* 37 (2024) 136–141.
13. Alkatout I., et. Al., **Review: Pelvic nerves – from anatomy and physiology to clinical applications.**, *Tran.slational Neuroscience* 2021; 12: 362–378.

14. Lukacs, M.J., Melling, C.W.J., Walton, D.M., **Exploring the relationship between meaningful conditioned pain modulation and stress system reactivity in healthy adults following exposure to the cold pressor task**, *Musculoskeletal Science and Practice* (2021), doi: <https://doi.org/10.1016/j.msksp.2021.10248>
15. Ellis E., Thayer J., **Music and Autonomic Nervous System (Dys)function**, *Music Percept.* 2010 April ; 27(4): 317–326. doi:10.1525/mp.2010.27.4.317.
16. Goldenberg, M., Kalichman, L., **The underlying mechanism, efficiency, and safety of manual therapy for functional gastrointestinal disorders: A narrative review**, *Journal of Bodywork & Movement Therapies* (2024), doi: <https://doi.org/10.1016/j.jbmt.2023.10.005>.
17. Baisells A. et. Al., **Brain-gut photobiomodulation restores cognitive alterations in chronically stressed mice through the regulation of Sirt1 and neuroinflammation** , *Journal of Affective Disorders* 354 (2024) 574–588.
18. Alves, S.P., Zimerer, C., Leite, R.D., Neves, Letí.Nascimento.Santos., Moreira, C., Carletti, L., **Cardiac autonomic responses to high-intensity kettlebell training in untrained young women: A pilot study**, *Journal of Bodywork & Movement Therapies* (2023), doi: <https://doi.org/10.1016/j.jbmt.2022.12.001>.
19. Mohr M. et. Al., **Social interoception: Perceiving events during cardiac afferent activity makes people more suggestible to other people's influence**, *Cognition* 238 (2023) 105502.
20. Rosen D. et.al., **Creative flow as optimized processing: Evidence from brain oscillations during jazz improvisations by expert and non-expert musicians**, *Neuropsychologia* 196 (2024) 108824.
21. Blitor, **The widespread myofascial pain of fibromyalgia is sympathetically maintained and immune mediated**, *Journal of Bodywork & Movement Therapies* 35 (2023) 394–399
22. Cefal., A.; Santini, D.; Lopez, G.; Maselli, F.; Rosettini, G.; Crestani, M.; Lullo, G.; Young, I.; Dunning, J.; de Abreu, R.M.; et al. **“Effects of Breathing Exercises on Neck Pain Management: A Systematic Review with Meta-Analysis”**. *J. Clin. Med.* **2025**, *14*, 709. <https://doi.org/10.3390/jcm14030709>
23. Galaasen Bakken et al. **“The effect of spinal manipulative therapy and home stretching exercises on heart rate variability in patients with persistent or recurrent neck pain: a randomized controlled trial”** *Chiropractic & Manual Therapies* (2021) *29*:48 <https://doi.org/10.1186/s12998-021-00406-0>
24. Alan Taylor, Firas Mourad, Roger Kerry & Nathan Hutting (2021) **“A guide to cranial nerve testing for musculoskeletal clinicians”**, *Journal of Manual & Manipulative Therapy*, *29*:6, 376-389, DOI: 10.1080/10669817.2021.1937813
25. Chaiduang, S., Klinsophon, T., Wattanapanyawech, J., **“The effect of breathing exercise on hemodynamics and heart rate variability parameters in hypertensive patients: Asystematic review”**, *Journal of Bodywork & Movement Therapies* (2024), doi: <https://doi.org/10.1016/j.jbmt.2024.03.043>.
26. Cavanagh, M., Cope, T., Smith, D., Tolley, I., Orrock, P., Vaughan, B., **“The effectiveness of an osteopathic manual technique compared with a breathing exercise on vagal tone as indicated by heart rate variability, a crossover study”**, *Journal of Bodywork & Movement Therapies*(2024), doi: <https://doi.org/10.1016/j.jbmt.2024.01.003>.

27. Yuenyongchaiwat, K., Changsri, K., Harnmanop, S., Namdaeng, P., Aiemthaisong, M., Pongpanit, K., Pariyatkaraphan, T., "Effects of slow breathing training on hemodynamic changes, cardiac autonomic function and neuroendocrine response in people with high blood pressure: A randomized control trial, *Journal of Bodywork & Movement Therapies* (2023), doi: <https://doi.org/10.1016/j.jbmt.2023.11.042>.
28. Gerard Farrell, Matthew Reily-Bell, Cathy Chapple, Ewan Kennedy, Kesava Sampath, Angela Spontelli Gisselman, Chad Cook, Rajesh Katare & Steve Tumilty (2023) "Autonomic nervous system and endocrine system response to upper and lower cervical spine mobilization in healthy male adults: a randomized crossover trial", *Journal of Manual & Manipulative Therapy*, 31:6, 421-434, DOI: 10.1080/10669817.2023.2177071
29. Breit S, Kupferberg A, Rogler G and Hasler G (2018) "Vagus Nerve as Modulator of the Brain–Gut Axis in Psychiatric and Inflammatory Disorders". *Front. Psychiatry* 9:44. doi: 10.3389/fpsyg.2018.00044
30. Larry Z. Lockerman & Ross Hauser (2023) "The association between mandibular position to cervical spine and internal jugular vein diameters in upright position. Have we been ignoring critical generators of head and neck pathology?", *CRANIO®*, 41:5, 403-406, DOI: 10.1080/08869634.2023.2243756
31. Mourad F. et al., "A guide to identify cervical autonomic dysfunctions (and associated conditions) in patients with musculoskeletal disorders in physical therapy practice", *Brazilian Journal of Physical Therapy* 27 (2023) 100495.
32. Habib, Dr. Navaz, "Activate Your Vagus Nerve: Unleash Your Body's Natural Ability to Heal" – Ulysses Press; 1 edition 2019
33. Rosenberg, S., "Accessing the Healing Power of the Vagus Nerve: Self-Help Exercises for Anxiety, Depression, Trauma, and Autism" North Atlantic Books 2017
34. Sapolsky R., "Why Zebras Don't Get Ulcers" (Another great resource to understand the stress response) Van der Kolk, B., "The body keeps the score Brain, Mind, and Body in the Healing of Trauma" – Penguin Books; Reprint 2015
35. Tracey KJ. From CNI-1493 to the immunological homunculus: physiology of the inflammatory reflex. *J Leukoc Biol.* 2008 Mar;83(3):512-7.
36. Hadhazy, Adam. (2010). Think Twice: How the Gut's "Second Brain" Influences Mood and Well-Being. *Scientific American*. Feb 12, 2010
<http://www.scientificamerican.com/article/gut-second-brain/> Accessed Sep 2017.
37. Porges SW. (1992). Vagal Tone: A physiological marker of stress vulnerability. *Pediatrics* 90:498-504.
38. Nickel, P.; F. Nachreiner (2003). "Sensitivity and Diagnostics of the 0.1-Hz Component of Heart Rate Variability as an Indicator of Mental Workload". *Human Factors*. 45 (4): 575–590.
39. Jönsson, P. (2007). "Respiratory sinus arrhythmia as a function of state anxiety in healthy individuals". *International Journal of Psycho-physiology*. 63 (1): 48–54.
40. Hagit, C.; et al. (1998). "Analysis of heart rate variability in posttraumatic stress disorder patients in response to a trauma-related reminder". *Biological Psychiatry*. 44 (10): 1054–1059.

41. Conder, R. L., & Conder, A. A. (2014). **Heart rate variability interventions for concussion and rehabilitation.** *Frontiers in Psychology*, 5, 890.
<http://doi.org/10.3389/fpsyg.2014.00890>
42. Aubert AE, Seps B, Beckers F. **Heart rate variability in athletes.** *Sports Med.* 2003;33(12):889-919.
43. Cottingham, J. Porges, S. and Richmond, K. **Shifts in Pelvic Inclination Angle and Parasympathetic Tone Produced by Rolfing Soft Tissue Manipulation.** *Physical Therapy*, Vol. 68, No. 9, p.1364-70, September 1988.
44. **Vagus nerve stimulation.** (n.d.) In Wikipedia. Retrieved Sep 2017 from https://en.wikipedia.org/wiki/vagus_nerve_stimulation xii National Institute of Mental Health (2016). Brain Stimulation Therapies. Retrieved Sep 2017 from <https://www.nimh.nih.gov/health/topics/brain-stimulation-therapies/brain-stimulation-therapies.shtml>
45. Gothard, K. M. (2014). **The amygdalo-motor pathways and the control of facial expressions.** *Frontiers in Neuroscience*, 8, 43.
46. Howland, R. H. (2014). **Vagus Nerve Stimulation.** *Current Behavioral Neuroscience Reports*, 1(2), 64– 73; and: electroCore LLC. (n.d.) Migraine and Cluster Headache, <http://www.electrocore.com/activetherapy-areas/migraine>.
47. Howland, R. H. (2014). Ibid. xvi Field, T. et al. (2006). **Moderate versus light pressure massage therapy leads to greater weight gain in preterm infants,** In *Infant Behavior and Development*, Volume 29, Issue 4, 2006, Pages 574-578. Advanced-Trainings.com:
48. Cottingham, J. and J. Maitland (1997). **“A Three Paradigm Treatment Model Using Soft Tissue Mobilization and Guided Movement-Awareness Techniques for a Patient with Chronic Low Back Pain: A Case Study,”** *Journal of Orthopedic Sports Physical Therapy* 26(3):154-167.
49. Paschoal Mário Augusto. (2016) **Influence of classic massage on cardiac autonomic modulation.** *Fisioter. mov.* 2016 Sep; 29(3): 487-496.
50. Sarah Schwartz. (2016). **Viva vagus: Wandering nerve could lead to range of therapies.** Retrieved Sep 2017 from <https://www.sciencenews.org/article/viva-vagus-wanderingnerve-could-lead-range-therapies> V
51. Zagon A. **Does the vagus nerve mediate the sixth sense?** *Trends Neurosci.* 2001;24(11):671–673. [PubMed] [Google Scholar]
52. **Ellrich J. **Transcutaneous vagus nerve stimulation.** *Eur Neurological Rev.* 2011;6(4):254–256. [Google Scholar] This paper briefly describes the neuroanatomy of the auricular branch of the vagus nerve and the rationale for a transcutaneous form of vagus nerve stimulation.
53. Busch V, Zeman F, Heckel A, et al. **The effect of transcutaneous vagus nerve stimulation on pain perception—An experimental study.** *Brain Stimulation.* 2013;6:202–209. [PubMed] [Google Scholar]
54. Lehtimaki J, Hyvarinen P, Ylikoski M, et al. **Transcutaneous vagus nerve stimulation in tinnitus: A pilot study.** *Acta Oto Laryngologica.* 2013;133:378–382. [PubMed] [Google Scholar]
55. Sein E, Nowak M, Kiess O, et al. **Auricular transcutaneous electrical nerve stimulation in depressed patients: A randomized controlled pilot study.** *J Neural*

- Transm. 2013;120:821–827. [PubMed] [Google Scholar] This paper describes the findings from a pilot study of transcutaneous vagus nerve stimulation for non-chronic non-refractory major depression.
56. Hassanzadeh R, Jone JC, Ross EL. **Neuromodulation for intractable headaches**. Curr Pain Headache Rep. 2014;18:392. Doi: 10.1007/s11916-013-0392-1. [PubMed] [Google Scholar]
 57. Conway CR, Chibnall JT, Gebarea MA, et al. **Association of cerebral metabolic activity changes with vagus nerve stimulation antidepressant response in treatment-resistant depression**. Brain Stimulation. 2013;6:788–797. [PMC free article] [PubMed] [Google Scholar] A recent brain imaging study investigating correlations between cerebral metabolic activity and the treatment response to left cervical vagus nerve stimulation.
 58. Furmagá H, Carreno FR, Frazer A. **Vagal nerve stimulation rapidly activates brain-derived neurotrophic factor receptor TrkB in rat brain**. PLoS
 59. NE. 2012;7(5):e34844. Doi:10.1371/journal.pone.0034844. Abboud FM, Harwani SC, Chapleau MW. **Autonomic neural regulation of the immune system—Implications for hypertension and cardiovascular disease**. Hypertension. 2012;59:755–762. [PMC free article] [PubMed] [Google Scholar]
 60. Huston JM, Tracey KJ. **The pulse of inflammation: heart rate variability, the cholinergic anti-inflammatory pathway and implications for therapy**. J Intern Med. 2011;269:45–53. [PMC free article] [PubMed] [Google Scholar]
 61. Hornig M. **The role of microbes and autoimmunity in the pathogenesis of neuropsychiatric illness**. Current Opinion Rheumatology. 2013;25(4):488–495. [PubMed] [Google Scholar]
 62. Cryan JF, Dinan TG. **Mind-altering microorganisms: The impact of the gut microbiota on brain and behavior**. Nature Reviews Neuroscience. 2012;13:701–712. [PubMed] [Google Scholar]
 63. Pavlov VA, Tracey KJ. **The vagus nerve and the inflammatory reflex—linking immunity and metabolism**. Nat Rev Endocrinol. 2012;8:743–754. [PMC free article] [PubMed] [Google Scholar] This paper reviews the involvement of the vagus nerve in regulation of metabolic homeostasis, and the efferent vagus nerve-mediated control of immune function and proinflammatory response via the cholinergic inflammatory reflex.
 64. Leonard BE. **Impact of inflammation on neurotransmitter changes in major depression: An insight into the action of antidepressants**. Prog Neuro Psychopharmacol Biol Psychiatry. 2014;48:261–267. [PubMed] [Google Scholar] This review summarizes evidence that chronic low-grade inflammation plays an important role in the pathology of depression.
 65. Lotrich F. **Inflammatory cytokines, growth factors, and depression**. Current Pharmaceutical Design. 2012;18:5920–5935. [PubMed] [Google Scholar]
 66. Martin JLR, Martin-Sánchez E. **Systematic review and meta-analysis of vagus nerve stimulation in the treatment of depression**: Variable results based on study design. Eur Psychiatry. 2012;27:147–155. [PubMed] [Google Scholar]
 67. Shen MJ, Shinohara T, Park HW, et al. **Continuous low-level vagus nerve stimulation reduces stellate ganglion nerve activity and paroxysmal atrial tachyarrhythmias in**

- ambulatory canines.** Circulation. 2011;123:2204–2212. [PMC free article] [PubMed] [Google Scholar]
68. Zhang Y, Mazgalev TN. **Arrhythmias and vagus nerve stimulation.** Heart Fail Rev. 2011;16:147–161. [PubMed] [Google Scholar]
69. Bonaz, B., Sinniger, V., & Pellissier, S. (2016). **Vagal tone: Effects on sensitivity, motility, and inflammation.** Neurogastroenterology & Motility. <http://www.ncbi.nlm.nih.gov/pubmed/27010234>
70. Bonaz, B., Sinniger, V., Hoffmann, D., Clarençon, D., Mathieu, N., Dantzer, C., . . . Pellissier, S. (2016). **Chronic vagus nerve stimulation in Crohn's disease: A 6-month follow-up pilot study.** Neurogastroenterology & Motility. <http://www.ncbi.nlm.nih.gov/pubmed/26920654>
71. Bonaz, B., Sinniger, V., & Pellissier, S. (2016). **Anti-inflammatory properties of the vagus nerve: Potential therapeutic implications of vagus nerve stimulation.** The Journal of Physiology. <http://www.ncbi.nlm.nih.gov/pubmed/27059884>
72. Napadow, V., Edwards, R. R., Cahalan, C. M., Mensing, G., Greenbaum, S., Valovska, A., . . . Wasan, A. D. (2012). **Evoked Pain Analgesia in Chronic Pelvic Pain Patients Using Respiratory-Gated Auricular Vagal Afferent Nerve Stimulation.** Pain Medicine. <https://www.ncbi.nlm.nih.gov/pubmed/22568773>
73. Pereira, M. R., & Leite, P. E. (2016). **The Involvement of Parasympathetic and Sympathetic Nerve in the Inflammatory Reflex.** Journal of Cellular Physiology. <http://www.ncbi.nlm.nih.gov/pubmed/26754950>
74. Porges, S.W. (2009). **The polyvagal theory: new insights into adaptive reactions of the autonomic nervous system.** Cleve Clin J Med. (OPEN ACCESS) <https://www.ncbi.nlm.nih.gov/pubmed/19376991>
75. Straube, A., Ellrich, J., Eren, O., Blum, B., & Ruscheweyh, R. (2015). **Treatment of chronic migraine with transcutaneous stimulation of the auricular branch of the vagal nerve (auricular t-VNS): A randomized, monocentric clinical trial.** The Journal of Headache and Pain. <https://www.ncbi.nlm.nih.gov/pubmed/26156114>
76. Yuan, H., & Silberstein, S. D. (2015). **Vagus Nerve and Vagus Nerve Stimulation, a Comprehensive Review: Part I. Headache:** The Journal of Head and Face Pain. <http://www.ncbi.nlm.nih.gov/pubmed/26364692>
77. Yuan, H., & Silberstein, S. D. (2015). **Vagus Nerve and Vagus Nerve Stimulation, a Comprehensive Review: Part II. Headache:** The Journal of Head and Face Pain. <http://www.ncbi.nlm.nih.gov/pubmed/26381725>
78. Yuan, H., & Silberstein, S. D. (2015). **Vagus Nerve and Vagus Nerve Stimulation, a Comprehensive Review: Part III. Headache:** The Journal of Head and Face Pain <http://www.ncbi.nlm.nih.gov/pubmed/26364805>
79. S. L. Oke and K. J. Tracey, “**From CNI-1493 to the Immunological Homunculus: Physiology of the Inflammatory Reflex,**” Journal of Leukocyte Biology 83, no. 3 (March 2008): 512–17.

80. Adam Hadhazy, “**Think Twice: How the Gut’s ‘Second Brain’ Influences Mood and Well-Being,**” Scientific American, February 12, 2010, accessed September 2017, www.scientificamerican.com/article/gut-second-brain.
81. K. M. Gothard, “**The Amygdalo-Motor Pathways and the Control of Facial Expressions,**” Frontiers in Neuroscience 8, no. 43 (2014)
82. Tiffany Field et al., “**Moderate Versus Light Pressure Massage Therapy Leads to Greater Weight Gain in Preterm Infants,**” Infant Behavior and Development 29, no. 4 (2006): 574–78
83. Rydevik B, Lundborg G, Bagge U. **Effects of graded compression on intraneuronal blood flow: an in vivo study on rabbit tibial nerve.** J Hand Surg Am. 1981;6(1):3–12.
84. Schmid AB, Nee RJ, Coppieters MW. **Reappraising entrapment neuropathiesmechanisms, diagnosis and management.** Man Ther 2013;18(6):449–57.
85. Chien A, Eliav E, Sterling M. **Whiplash (grade II) and cervical radiculopathy share a similar sensory presentation: an investigation using quantitative sensory testing.** Clin J Pain 2008;24(7):595–603.
86. Schmid AB, Soon BT, Wasner G, Coppieters MW. **Can widespread hypersensitivity in carpal tunnel syndrome be substantiated if neck and arm pain are absent?** Eur J Pain 2012;16(2):217–28.
87. McMenamin CA, Travagli RA, Browning KN. **Inhibitory neurotransmission regulates vagal efferent activity and gastric motility.** Exp Biol Med (Maywood) 2016;241(12):1343–50.
88. Raybould HE. **Gut chemosensing: interactions between gut endocrine cells and visceral afferents.** Auton Neurosci 2010;153(1–2):41–6.
89. Powley TL, Spaulding RA, Haglof SA. **Vagal afferent innervation of the proximal gastrointestinal tract mucosa: chemoreceptor and mechanoreceptor architecture.** J Comp Neurol 2011;519(4):644–60.
90. Cottrell DF, Iggo A. **Tension receptors with vagal afferent fibres in the proximal duodenum and pyloric sphincter of sheep.** J Physiol 1984;354:457–75.
91. Maniscalco JW, Rinaman L. **Vagal interoceptive modulation of motivated behavior.** Physiology (Bethesda) 2018;33(2):151–67.
92. Ruffle JK, Coen SJ, Giampietro V, Williams SCR, Aziz Q, Farmer AD. **Preliminary report: parasympathetic tone links to functional brain networks during the anticipation and experience of visceral pain.** Sci Rep 2018;8(1):13410.
93. aly DM, Park SJ, Valinsky WC, Beyak MJ. **Impaired intestinal afferent nerve sensitivity signalling and vagal afferent excitability in diet induced obesity in the mouse.** J Physiol 2011;589(11):2857–70.
94. De Lartigue G, de La Serre CB, Raybould HE. **Vagal afferent neurons in high fat diet-induced obesity; intestinal microflora, gut inflammation and cholecystokinin.** Physiol Behav 2011;105(1):100–5.
95. ndrews PL, Sanger GJ. **Abdominal vagal afferent neurones: an important target for the treatment of gastrointestinal dysfunction.** Curr Opin Pharmacol 2002;2(6):650–6.
96. Dal K, Deveci OS, Kucukazman M, et al. **Decreased parasympathetic activity in patients with functional dyspepsia.** Eur J Gastroenterol Hepatol 2014;26(7):748–52.

97. Haug TT, Svebak S, Hausken T, Wilhelmsen I, Berstad A, Ursin H. **Low vagal activity as mediating mechanism for the relationship between personality factors and gas-tric symptoms in functional dyspepsia.** Psychosom Med 1994;56(3):181–6.
98. Carabotti M, Scirocco A, Maselli MA, Severi C. **The gut-brain axis: interactions between enteric microbiota, central and enteric nervous systems.** Ann Gastroenterol 2015;28(2):203.
99. Bonaz B, Sinniger V, Pellissier S. **Vagus nerve stimulation: a new promising therapeautic tool in inflammatory bowel disease.** J Intern Med 2017;282(1):46–63.
100. Iovino P, Azpiroz F, Domingo E, Malagelada J-R. **The sympathetic nervous system modulates perception and reflex responses to gut distention in humans.** Gastroenterology 1995;108(3):680–6.
101. Elsenbruch S, Orr WC. **Diarrhea-and constipation-predominant IBS patients differ in postprandial autonomic and cortisol responses.** Am J Gastroenterol 2001;96(2):460–6.
102. Berthoud HR, Neuhuber WL. **Functional and chemical anatomy of the afferent vagal system.** Auton Neurosci 2000;85(1–3):1–17.
103. Khasar SG, Reichling DB, Green PG, Isenberg WM, Levine JD. **Fasting is a physio-logical stimulus of vagus-mediated enhancement of nociception in the female rat.**
104. Randich A, Gebhart GF. **Vagal afferent modulation of nociception.** Brain Res Brain Res Rev 1992;17(2):77–99.[
105. Deleo JA, Tanga FY, Tawfik VL. **Neuroimmune activation and neuroinflammation in chronic pain and opioid tolerance/hyperalgesia.** Neuroscientist 2004;10(1):40–52.
106. Shapiro RE, Miselis RR. **The central organization of the vagus nerve innervating the stomach of the rat.** J Comp Neurol 1985;238(4):473–88.
107. Sroka K, Peimann C-J, Seevers H. **Heart rate variability in myocardial ischemia during daily life.** J Electrocardiol 1997;30(1):45–56.
108. Gidron Y, Kupper N, Kwaijtaal M, Winter J, Denollet J. **Vagus–brain communication in atherosclerosis-related inflammation: a neuroimmunomodulation perspective of CAD.** Atherosclerosis 2007;195(2):e1–9.
109. Bonaz B, Sinniger V, Pellissier S. **Anti-inflammatory properties of the vagus nerve: potential therapeutic implications of vagus nerve stimulation.** J Physiol 2016;594(20):5781–90.
110. Hayano J, Sakakibara Y, Yamada A, et al. **Accuracy of assessment of cardiac vagal tone by heart rate variability in normal subjects.** Am J Cardiol 1991;67(2):199–204.
111. Cepeda FX, Lapointe M, Tan CO, Andrew Taylor J. **Inconsistent relation of nonlinear heart rate variability indices to increasing vagal tone in healthy humans.** Auton Neurosci. 2018;213:1–7.
112. Ha SM, Cho YS, Cho GC, Jo CH, Ryu JY. **Modified carotid sinus massage using an ultrasonography for maximizing vagal tone: a crossover simulation study.** T Am J Emerg Med 2015;33(7):963–5.
113. Kim B-B, Lee J-H, Jeong H-J, Cynn H-S. **Effects of suboccipital release with craniocervical flexion exercise on craniocervical alignment and extrinsic cervical muscle activity in subjects with forward head posture.** J Electromyogr Kinesiol 2016;30:31–7.

114. Yasemin Ozel Asliyuce*, Utku Berberoglu, Ozlem Ulger Is cervical region tightness related to vagal function and stomach symptoms? *Medical Hypotheses* 142 (2020) 109819
115. Louryan S, Vanmuylde N. Contributions of embryology and comparative anatomy for teaching of cranial nerves. *Morphologie*. 2018;102(337):111–121.
doi:10.1016/j.morpho.2018.04.002
116. Adstrum S, Hedley G, Schleip R, Stecco C, Yucesoy CA. Defining the fascial system. *J Bodyw Mov Ther.* 2017;21:173–177. doi:10.1016/j.jbmt.2016.11.003.
117. Eunsoo Won and Yong-Ku Kim, **Stress, the Autonomic Nervous System, and the Immune-kynurenone Pathway in the Etiology of Depression*, *r. Curr Neuropharmacol.* 2016 Oct; 14(7): 665–673.
118. Vernino, “*Autoimmune autonomic disorders*” *Continuum* 2020 Feb:44-57 S.
PMID:31996621.
119. Marijke De Couck , Ralf Caers, David Spiegel and Yori Gidron, *The Role of the Vagus Nerve in Cancer Prognosis: A Systematic and a Comprehensive Review*, *Journal of Oncology Volume 2018, Article ID 1236787, 11 pages*
<https://doi.org/10.1155/2018/1236787>
120. Asliyuce., Yasemin Ozel Utku Berberoglu, Is Cervical Region Tightness Related To Vagal Function And Stomach symptoms? <https://doi.org/10.1016/j.mehy.2020.109819>
Ozlem Ulger Hacettepe University,