Index of ME/CFS Published Research

An A-Z index of the most important published research

31st May 2019

The ME Association
Forward

Welcome to the ME Association Index of Published ME/CFS Research.

This is an A-Z index of the most important published research studies and selected key documents and articles, listed by subject matter, on myalgic encephalomyelitis or chronic fatigue syndrome (ME/CFS). It is correct to 31st May 2019.

The Index will be updated at the end of each month and made available in the research section of the ME Association website. Each update will be accompanied by a website blog of that month’s published research abstracts to help keep you informed of the latest research developments.

The Index adopts the subject headings used in the ME Association’s authoritative clinical and research guide which provides a thorough and fully updated review of current clinical knowledge and research evidence.

The guide is written by Dr Charles Shepherd, Hon. Medical Adviser to the ME Association and Dr Abhijit Chaudhuri, consultant neurologist at Queen’s Hospital in Romford.

The 2019 edition can be ordered from our website shop and is priced at £9.00 for UK residents. It is available in both hard copy and Kindle formats. We are also pleased to be able to offer free hard copies to health professionals.

The ME Association are very grateful to Dr Barbara de Barros, Charlotte Stephens and Russell Fleming, for producing this Index which is proving a very popular and helpful resource.

Real People. Real Disease. Real M.E.

We are a national charity working hard to make the UK a better place for people whose lives have been devastated by an often-misunderstood neurological disease.

If you would like to support our efforts and help ensure we can inform, support, advocate and invest in biomedical research, then please donate today.

Just click the image opposite and visit our JustGiving page for one-off donations, to establish a regular payment or to create your own fundraising event.

Or why not join the ME Association as a member and be part of our growing community? For a monthly (or annual) subscription you will also receive our exclusive ME Essential magazine.
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Registered charity number 801279
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Note: Research studies, debates etc. published after January 2019 (the date of the latest update to the MEA clinical and research guide) are highlighted in purple in the listing below.
1. Nomenclature and definition


2. Epidemiology


3. Co-morbidity


4. Biomedical Research

4.1 Biobank UK ME/CFS


4.2 Biomarker Landscape Project


4.3 Cardiac Function


**Campen CM and Visser FC** (2018) The Abnormal Cardiac Index and Stroke Volume Index Changes During a Normal Tilt Table Test in ME/CFS Patients Compared to Healthy Volunteers, are Not Related to Deconditioning, *Journal of Thrombosis and Circulation* 107. Link: [https://tinyurl.com/y6jq2jmb](https://tinyurl.com/y6jq2jmb)


4.4 Exercise physiology/testing


### 4.5 Gastrointestinal and microbiome


4.6 Gene expression


4.7 General reviews


4.8 Genetic predisposition


4.9 Immunology


Hornig M, et al. (2015) Distinct plasma immune signatures in ME/CFS are present early in the course of illness. *Science Advances* 1(1): e1400121. Link: [http://advances.sciencemag.org/content/1/1/e1400121](http://advances.sciencemag.org/content/1/1/e1400121)


Sweetman E, et al. (2019) Changes in the transcriptome of circulating immune cells of a New Zealand cohort with myalgic encephalomyelitis/chronic fatigue syndrome. *International Journal of Immunopathology and Pharmacology*. Link: [https://journals.sagepub.com/doi/10.1177/2058738418820402#articleCitationDownloadContainer](https://journals.sagepub.com/doi/10.1177/2058738418820402#articleCitationDownloadContainer)


### 4.10 Infection


Asprusten T et al. (2019) EBV-requisitioning physicians’ guess on fatigue state 6 months after acute EBV infection. *BMJ Paediatrics Open* 3 (1). Link: [https://tinyurl.com/y39pwy8r](https://tinyurl.com/y39pwy8r)


Coffin JM and Stoye JP. (2009) A New Virus for Old Diseases? *Science* 326(5952): 530. Link: [http://science.sciencemag.org/content/326/5952/530](http://science.sciencemag.org/content/326/5952/530)


4.11 Ion channels


4.12 Metabolomics


Tomas C et al. (2017) Cellular Bioenergetics is Impaired in patients with Chronic Fatigue Syndrome. *PLoS ONE* 12(10). Link: [https://doi.org/10.1371/journal.pone.0186802](https://doi.org/10.1371/journal.pone.0186802)


Yamano E, et al. (2016) Index markers of chronic fatigue syndrome with dysfunction of TCA and urea cycles. *Science Reports* doi: 10.1038/srep34990. Link: [https://www.nature.com/articles/srep34990](https://www.nature.com/articles/srep34990)

4.13 Miscellaneous


Thompson et al. (2019) Cognitive factors are associated with disability and pain, but not fatigue among physiotherapy attendees with persistent pain and fatigue. *Physiotherapy* [Epub ahead of print]. Link: https://tinyurl.com/yyep9zu8


4.14 Mitochondria and energy production


4.15 Muscle


4.16 Neurology: Autonomic nervous system (ANS) dysfunction


Li H, et al. (2014) Autoimmune Basis for Postural Tachycardia Syndrome. *Journal of the American Heart Association* 3: e000755. Link: [http://jaha.ahajournals.org/content/3/1/e000755](http://jaha.ahajournals.org/content/3/1/e000755)


4.17 Neurology: Central nervous system and neuroimaging


4.18 Neurology: Hypothalamic and neuroendocrine function


4.19 Neurology: Neuropsychology and cognitive function


4.20 Neurology: Neurotransmitter function


4.21 Pain


4.22 Phenotypes and sub-groups


4.23 Post-Exertional Malaise (PEM)


4.24 Post-mortem research


4.25 Sleep disturbance


4.26 Vision

5. Psychiatry and psychology


6. Sociology


7. Recommendations, challenges and ideas for future research into ME/CFS


8. Clinical assessment, symptoms and diagnosis

8.1 General


**Nojima N** (2019) paradox of diagnosis: the positive effects and limitations of diagnosis in myalgic encephalomyelitis/chronic fatigue syndrome (me/cfs) and fibromyalgia (fm) sufferers *Osaka Human Sciences* 5: 55-70. Link: https://ir.library.osaka-u.ac.jp/repo/ouka/all/71746/ohs_05_055.pdf?fbclid=IwAR0w2Qci1_nfwLW_dHP2FLDIBqq0qM5f65ZK15yvwAzcJNuulcrqGuLKJsM


8.2 Investigations


8.3 Physical examination


8.4 Symptoms

Pain – see Biomedical Research, 4.21 above.
Post-Exertional Malaise – see Biomedical Research, 4.23 above.
Sleep disturbance – see Biomedical Research, 4.26 above.
Vision – see Biomedical Research, 4.28 above.
9. Management

9.1 Cognitive Behavioural Therapy (CBT)


9.2 Complementary and alternative therapies


9.3 Diet and nutrition


9.4 Exercise, Pacing and activity management


9.5 General management


9.6 PACE Trial, The


Vink M. PACE trial authors continue to ignore their own null effect. Journal of Health Psychology 22 (9): 1134-1140. Link: https://www.ncbi.nlm.nih.gov/pubmed/28805519


9.7 Pharmacological treatment


9.8 Pregnancy

10. Prognosis and quality of life

10.1 Age


10.2 Mortality


10.3 Prognosis and recovery


10.4 Quality of life


10.5 Severe ME


11. Vaccinations


12. Children and adolescents


**Brigden A, et al.** (2018) Using the internet to cope with chronic fatigue syndrome/myalgic encephalomyelitis in adolescence: a qualitative study. *BMJ Paediatrics Open* 2 (1). Link: [https://bmjpaedsopen.bmj.com/content/2/1/e000299](https://bmjpaedsopen.bmj.com/content/2/1/e000299)


**Collin SM, et al.** (2015) Chronic fatigue syndrome (CFS) or myalgic encephalomyelitis (ME) is different in children compared to in adults: a study of UK and Dutch clinical cohorts. *BMJ Open* 5(10): e008830. Link: [http://bmjopen.bmj.com/content/5/10/e008830](http://bmjopen.bmj.com/content/5/10/e008830)

Crawley E and Sterne JAC. (2009) Association between school absence and physical function in paediatric chronic fatigue syndrome/myalgic encephalopathy. Archives of Disease in Childhood 94(10): 752-756. Link: http://adc.bmj.com/content/94/10/752.info


Norris T et al. (2017) Natural course of chronic fatigue syndrome/myalgic encephalomyelitis in adolescents. Archive of Diseases in Childhood doi: 10.1136/archdischild-2016-311198. Link: http://adc.bmj.com/content/early/2017/01/19/archdischild-2016-311198


Wyller VB and Helland IB. (2013) Relationship between autonomic cardiovascular control, case definition, clinical symptoms, and functional disability in adolescent chronic fatigue


13. Government Documents

13.1 Disability support


13.2 Economic cost to the UK


13.3 General reports, debates and statements


**House of Commons.** (2013) Written evidence to Health Select Committee from the ME Association. Link: [https://publications.parliament.uk/pa/cm201415/cmselect/cmhealth/401/401vw11.htm](https://publications.parliament.uk/pa/cm201415/cmselect/cmhealth/401/401vw11.htm)


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