





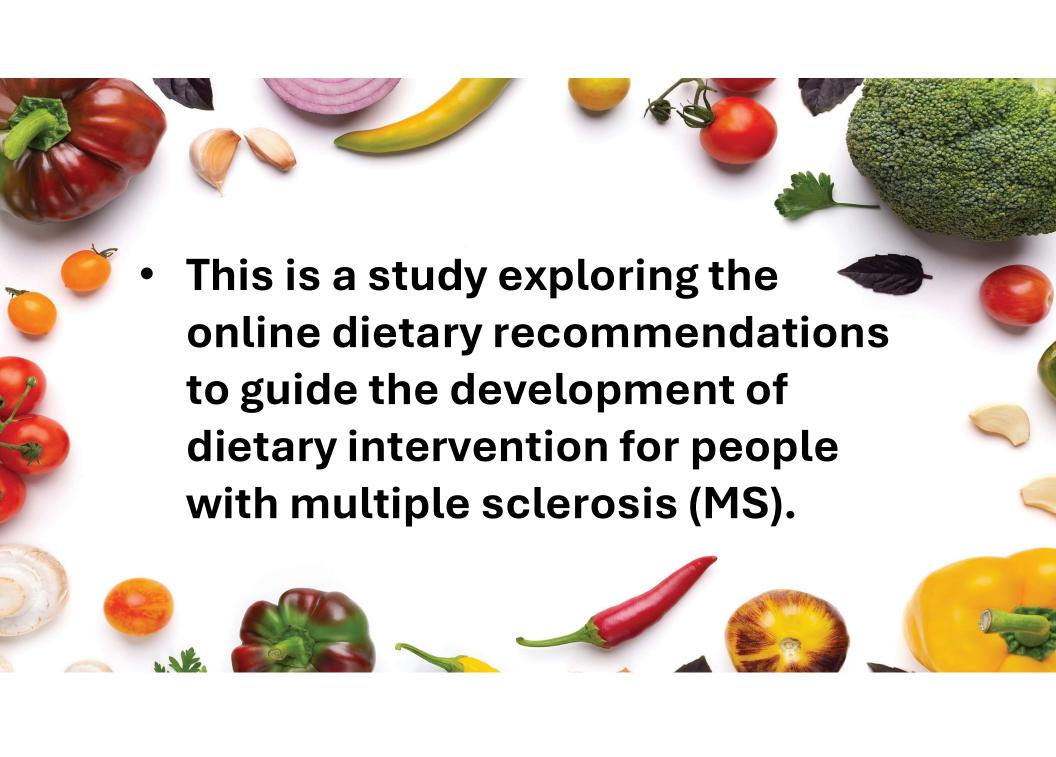




# DEAKIN AND CURTIN UNIVERSITIES COLLABORATION PROJECT THIS IS A PRELIMINARY OVERVIEW OF THE YET TO BE PUBLISHED 2024 STUDY

LED BY <u>DRS BARBARA BRAYNER (DEAKIN)</u> & <u>REBECCA RUSSELL (CURTIN)</u>
WITH REFERENCE TO THE PUBLISHED STUDY BY

<u>DRS JEFFREY BECKETT & KIRAN AHUJA</u> (UNITAS).





#### A FEW THINGS TO THINK ABOUT...

- •WE KNOW THAT A PERSON'S HEALTH IS STRONGLY AFFECTED BY THEIR NUTRITION
- •A PERSON'S FOOD INTAKE CAN BE INFLUENCED BY WHAT THEY HEAR OR READ
- TECHNOLOGY TODAY IS EVERYWHERE
- INFORMATION AND MISINFORMATION IS MORE ACCESSIBLE NOW THAN IN THE PAST THROUGH PEOPLE'S SMARTPHONE, COMPUTER OR TV SCREENS.

The aim of this scoping review study was to determine what information is encountered, by an ordinary person with Multiple Sclerosis, for MS-related dietary advice from searching the public internet. To perform the internet searches the research team included 3 people with MS (including myself).

- Advice rationale, author qualifications and their sources if any.
- Our role was to capture the first two pages of search results which consisted of around twenty website-page addresses.
- Data analysis using the same criteria applied in the original study.



# So, what's a Scoping Review?

 A type of research which aims to map the scientific literature on a topic of interest (dietary advice) to key concepts, research gaps & types of evidence.

# What are we reviewing?

 The current online dietary advice for people living with MS, and we want to ...

... contrast it with the previous study conducted by Drs Beckett, Ahuja et.al, the raw data being collected in November 2016 and published June 2017 in the Journal of Nutrition and Intermediary Metabolism. DOI: 10.1016/J.JNIM.2017.04.193 · Corpus ID: 79819531

Online dietary advice for the symptomatic management of multiple sclerosis J. Beckett, M. Bird, J. Pittaway, K. Ahuja less • Published 1 June 2017 • Medicine • Journal of Nutrition and Intermediary Metabolism









• That study was republished in the Interactive Journal of Medical Research, indexed in PubMed, and made freely accessible for download from:

#### INTERACTIVE JOURNAL OF MEDICAL RESEARCH

#### Introduction

People are increasingly turning to the internet for health information. While health professionals remain important and trusted sources of health advice, most people search the internet as their first source of information [1-3]. The Web-based recommendations may come from respected sources such as government organizations or association websites specific to medical conditions, but increasingly, personal websites, blogs,



Diet and Multiple Sclerosis: Scoping Review of Web-Based Recommendations

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https://pubmed.ncbi.nlm.nih.gov/30626570/





Identification	Google Results Total: 62,300,000 1 <sup>st</sup> two pages: 29 Primary webpages: 20 Advertisements: 9	Bing Results Total: 13,600,000 1st two pages: 25 Primary webpages: 20 Advertisements: 5	Yahoo Results Total: 7,590,000 1st two pages: 38 Primary webpages: 20 Advertisements: 18
Bu	1 <sup>st</sup> pass exclusions: 58 (out of 92 links from 1 <sup>st</sup> 2 pages for each Search engine) Repeated webpages (within and between Search Engines): 33 Advertisements (no relation to MS Diet, repeats within or between Search Engines): 25  Webpages screened: 60 Primary webpages after 1 <sup>st</sup> pass exclusion and Advertisements: 34 New Links from Primary websites: 26		
Screening	2 <sup>nd</sup> pass exclusions: 28 Scientific Journal article: 1 Duplicates (when webpage is primary page on one search engine but is a link from primary page in another): 5 Not related to dietary advice on MS: 7, broken links: 1, title or contents pages: 5, advertisements for books: 2 Advertisements: 4 broken links, 2 search engines and 1 diet book  Final Webpages included: 32		

Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses flowchart for the selection of webpages. MS: multiple sclerosis.

Government Website

> Articles 1 Blogs 0

Nongovernment MS Only Website

> Articles 10 Blogs 1

Personal Website

Articles 2 Blogs 1

Nongover' General Heak

> Articles 14 Blogs 3



# Why conduct such a study again?

In their 2016 publication
 Drs Beckett, Ahuja et.al stated...

"The objective ...was to assess the dietary advice for the symptomatic management of MS available on the internet." "There is currently NO scientific evidence supporting the use of specific diets in the management of multiple sclerosis."

"Despite inconclusive evidence, most websites (13 out of 17) suggest disease progression and relapses in MS can be improved with diet.."

"The strongest dietary associations are observed with Vitamin D and Omega-3 fatty acid supplementation.

There are many websites that provide advice or suggestions about using various dietary approaches to control symptoms or disease progression."

#### The 2024 Study sought to:

- Identify key changes in dietary advice for people with MS over last 8 years.
- Compare to previous dietary recommendations for MS.
- Identify the basis of the recommended dietary changes on managing the symptoms of MS.

# 2024 Study Design:

- <u>Capture</u> internet nutrition advice for people with MS in July 2024.
- Use 5 search word terms, such as MS Diet or Foods for MS.
- Use only Google search engine as search data analysis shows it has a > 90% share of all search results.



### Search result capturing:

- First 2 computer screen pages of each search term results (~20-25).
- For each search result, the website pages saved as a file (PDF).
- Advice results analysed, classified and tabulated.



#### How was the Internet searched?

- Our 3-member team chose 5 search terms considered from our own experience of living with MS.
- Google Chrome browser (in PRIVATE mode) & Google internet search engine.



#### **Team selection**

 Our involvement based on our backgrounds and lived experiences e.g. a Metabolic Syndrome\* diagnosis years ago led to an interest in exploring if nutritional factors could improve my health living with MS.



#### **Seeking Answers:**

- Given that the nutritional advice results
   of this study align with the Beckett, Ahuja
   et.al study, has the emphasis shifted over
   the past eight years?
- Does current evidence-based nutrition knowledge validate the advice?



#### Distinction between the 2 projects:

 This internet search task differed from the original study in only using the Google engine as we decided to reduce the size of the data-set relying on the fact this search engine accounted for over 90% of all internet searches at the time of data capture.

### **Content Analysis:**

- Involved reading and interpreting each webpage identified in the search.
- Highly time-consuming.
- Often led to re-analysis of the material to gain a clearer understanding of the context.



- Our study indicates that a large amount of web content remains outdated, relying on previously published material rather than incorporating the latest scientific or medical advancements.
- Presumably, this is because mainstream
  website publishers lack the capacity and
  resources to actively and accurately evaluate
  the scientific relevance of new studies.

- Participating in this project has highlighted the unsatisfactory level of accurate nutrition information currently available through web searches.
- A significant takeaway from this study for me is the importance of improving communication and facilitating access to precise, high-quality nutrition advice.







- Enjoyed working with Bec, Barbara, Michelle and Harpreet and wish to thank them wholeheartedly for their collaborative styles and professional courtesy shown during the project's data collection and analysis phases.
- Encourage others with MS to take part in future research projects, as outcomes far exceed the individual contributions.







- From my wider reading, human nutrition interventions guided by clinical metabolic insights provide significant benefits and enhance patient overall health outcomes, as reported by medical experts like Drs.
   Teicholz, Gerber, Palmer, and Lustig\*\*.
- [See references and POV listed in the description section below this YouTube video].

... thank you for listening, and please consider donating if you can. We are a registered taxdeductible charity, and it will help us to continue providing our services into the future.



#### My POV

ADDRESS OUR BODY'S PHYSIOLOGICAL IMBALANCES CAUSED BY INADQUATE NUTRITION AND PHYSICAL EXERCISE **•BUT FOR THAT TO HAPPEN WE NEED** TO DEVELOP A BETTER UNDERSTANDING OF HOW HUMAN METABOLISM REALLY WORKS

- •NEUROLOGICAL HEALTH IS HIGHLY DEPENDANT ON METABOLIC HEALTH.
- •DIETARY INTAKE TO SUPPORT ACTUAL HUMAN METABOLIC NUTRITIONAL REQUIREMENTS DEVELOPED DURING MILLION-YEAR-OLD EVOLUTIONARY PAST

\*Metabolic syndrome is a cluster of interconnected health conditions that increase the risk of developing cardiovascular diseases, type 2 diabetes, and other complications. It is characterized by the presence of at least three of the following five factors:

Abdominal Obesity: Excess fat around the waist, often measured by waist circumference.

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High Blood Pressure: Elevated systolic or diastolic blood pressure levels.

High Blood Sugar: Impaired fasting glucose or insulin resistance.

High Triglycerides: Elevated levels of triglycerides in the blood.

Low HDL Cholesterol: Reduced levels of high-density lipoprotein (HDL), often referred to as "good cholesterol."

The syndrome is closely linked to lifestyle factors such as poor diet, physical inactivity, and obesity, as well as genetic predispositions. Addressing these risk factors through lifestyle changes, such as improved diet and increased physical activity, is key to managing and preventing metabolic syndrome.



- \*\* Reading list in the description section of this YouTube video:
- 1. Dr Georgia Ede MD, Change your diet, change your mind (2024)
- 2. <u>Dr Steven Gundry MD</u>, The Energy Paradox: What to do when your get-up-and-go has got up and gone (2021)
- 3. <u>Dr Chris Palmer MD</u>, Brain Energy: The surprising link between your metabolism and mental health (2022). Reviewed by Prof. Robert Lustig MD, viz. "Christopher Palmer poses the hypothesis, supports it with data, and, in my humble opinion, nails the treatment: Feed the brain what it needs."
- 4. Prof Robert Lustig MD, Metabolical: The truth about processed food (2021)
- 5. Ivor Cummins and Jeffry Gerber MD, Eat Rich, Live long (2018)
- 6. Nina Teicholz, The Big Fat Surprise (2014)

