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UNSCN NUTRITION 45: NUTRITION IN A DIGITAL WORLD

July 2020

Microbiome research, nutrition and social media: A messaging muddle

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Author's statement: *The author declares having no conflicts of interest in the five years prior to this submission.*



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JUL 2020

GLOBAL DIGITAL GROWTH

THE YEAR-

TOTAL POPULATI


Pew Research Center
Internet & Technology

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PRESENTATIONS

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JANUARY 16, 2019



Facebook Algorithms and Personal Data


About half of Facebook users say they are not comfortable with how the platform categorizes them, and 27% say the site's classifications do not accurately represent them.

HITLIN AND LEE RAINIE

CULTURE WARLORDS

MY JOURNEY INTO THE DARK WEB OF WHITE SUPREMACY

TALIA LAVIN





Many Facebook users say they do not know the platform classifies their interests, and roughly half are not comfortable with being categorized

% of U.S. adult Facebook users who say ____ after being directed to view their Facebook 'ad preferences' page

74%

They **did not know** Facebook maintained this list of their interests and traits

51%

They are **not comfortable** with Facebook compiling this information

27%

The listings **do not very or at all accurately represent** them

Source: Survey of Facebook users conducted Sept. 4-Oct. 1, 2018. "Facebook Algorithms and Personal Data"

PEW RESEARCH CENTER



News · Posted on 19 May 2020

As The World Hopes For A COVID-19 Vaccine, Anti-Vaxxers Are Growing Their Social Media Influence

Social media analysis reveals a big spike in engagement on anti-vaxxer pages and accounts in the coronavirus pandemic.



by **Cameron Wilson**
BuzzFeed News Reporter

 [View 83 comments](#)



BuzzFeed News has reporters across five continents bringing you trustworthy stories about the impact of the coronavirus. To help keep this news free, [become a member](#) and sign up for our newsletter, [Outbreak Today](#).

JUNE 18, 2020

PEER REVIEWED

The causes and consequences of COVID-19 misperceptions: understanding the role of news and social media

We investigate the relationship between media consumption, misinformation, and important attitudes and behaviours during the coronavirus disease 2019 (COVID-19) pandemic. We find that comparatively more misinformation circulates on Twitter, while news media tends to reinforce public health recommendations like social distancing. We find that exposure to social media is associated with misperceptions regarding basic facts about COVID-19 while the inverse is true for news media. These misperceptions are in turn associated with lower compliance with social distancing measures. We thus draw a clear link from misinformation circulating on social media, notably Twitter, to behaviours and attitudes that potentially magnify the scale and lethality of COVID-19.

BY **AENGUS BRIDGMAN**

Political Science, McGill University

ERIC MERKLEY

Munk School of Global Affairs and Public Policy, University of Toronto

PETER JOHN LOEWEN

Munk School of Global Affairs and Public Policy, University of Toronto

HARVARD KENNEDY SCHOOL
Misinformation
Review

Tech

Teen has vaccinations after asking Reddit

11 February 2019



ETHAN LINDENBERGER

Ethan Lindenger from Ohio asked social media site Reddit if he could have vaccines without parental consent.

His mother would not give her permission, he wrote in the post, which had thousands of reactions.

He learned he had to wait until he was 18 - which he did, and has now had five vaccinations so far.

PRENATAL DIAGNOSIS

ORIGINAL ARTICLE | [Full Access](#)

Discussing non-invasive prenatal testing on Reddit: The benefits, the concerns, and the comradery

Alessandro R. Marcon, Vardit Ravitsky, Timothy Caulfield ✉

First published: 15 October 2020 | <https://doi.org/10.1002/pd.5841>[Go here for SFX](#)**Funding information:** Genome Canada

SECTIONS



PDF



TOOLS



SHARE

Maternal & Child Nutrition

Open Access

ORIGINAL ARTICLE | [Free Access](#)

Protecting, promoting, and supporting breastfeeding on Instagram

Alessandro R. Marcon, Mark Bieber, Meghan B. Azad ✉

First published: 05 August 2018 | <https://doi.org/10.1111/mcn.12658> | Citations: 7[Go here for SFX](#)

Attention economy

Keeping people creating and engaged
Generating clicks and shares

Advertising profiles

Content as product - users and corporations

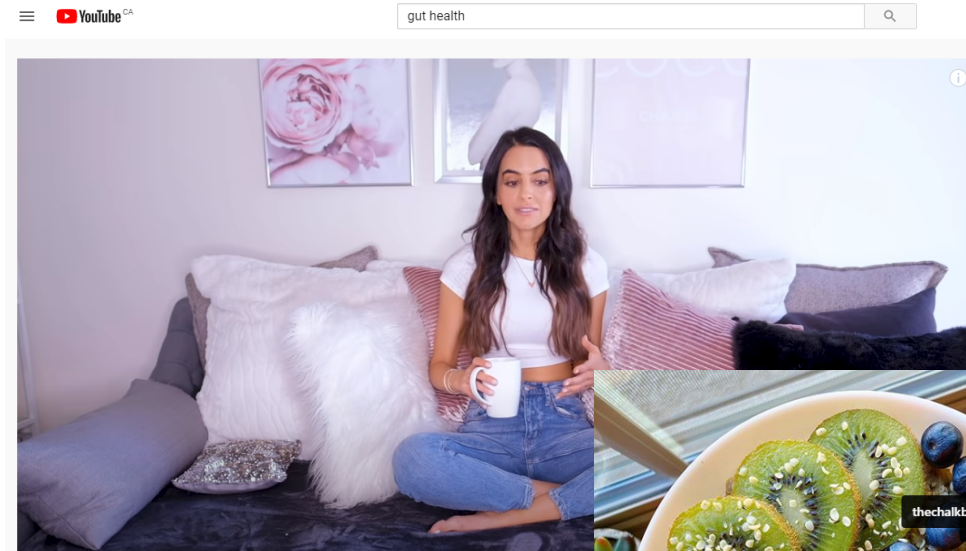
Commercial



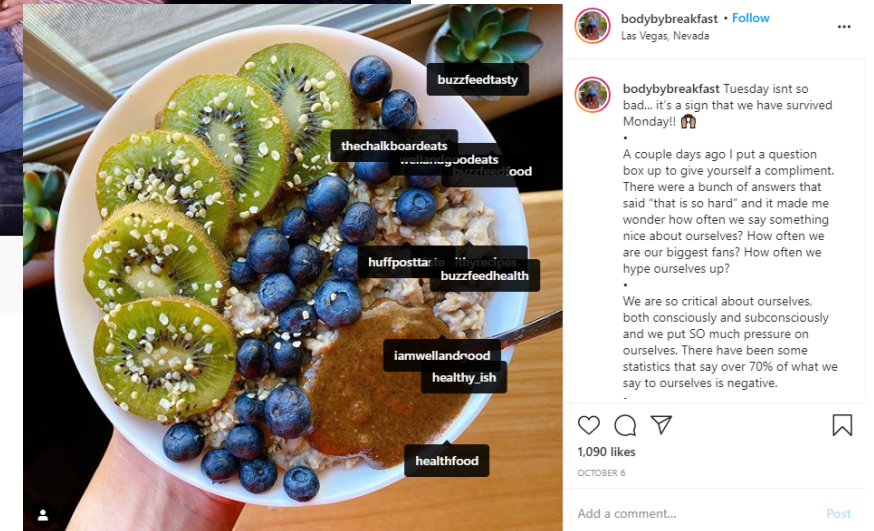
Product



Commercial? Product?



POPULARITY WINS! = MORE
CLICKS AND MORE
ATTENTION... LEADS TO MORE
CLICKS AND MORE ATTENTION



CHILD Study awarded over \$9M through Genome Canada grant



📌 posted in: Announcement, Grants | 💬 0

The researchers will look for a way to predict which babies will go on to have asthma, based on the microorganisms living in their intestines. Knowing this, in turn, may enable the elaboration of new strategies to prevent asthma from developing in the first place.



Microbiome



Healthy Gut (#guthealth)



Marketing tool for products

What's an Unhealthy Gut? How Gut Health Affects You

[Signs and symptoms](#) | [Treatment](#) | [Foods](#) | [The takeaway](#) |

[Food Fix: Beat the Bloat](#)

healthline



A rhetorical product that can be used by almost anyone

How to Nurture Your Gut Bacteria to Improve Your Mood and Health

Learn how your gut bacteria is linked to your overall mood and well-being.

By David Perlmutter, MD, FACN, ABIHM



bengreenfieldfitness

Follow

2,574 posts

306k followers

121 following

Ben Greenfield Fitness

Author. Speaker. Father. Leader. Lover. Man of God.
Co-Founder & Spokesman of @kion

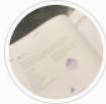
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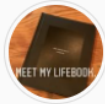
Boundless



Coconut Yo...



Ice Cream



My Lifebook



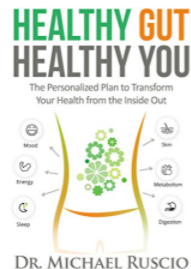
Kion Aminos

Home / Ben Recommends



Healthy Gut, Healthy You: The Personalized Plan to Transform Your Health from the Inside Out

[Affiliate Disclosure](#)



The Shocking Truth About Vaccinations: Everything You Need To Know About Vaccines And Your Health.

[Affiliate Disclosure](#)



Food Babe ✓

@thefoodbabe · Public figure

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Get the latest on the blog!
<http://foodbabe.com>

Vani Hari started FoodBabe.com in April 2011 to spread information about what is really in the American food supply. She teaches people how to make th... [See more](#)

1,180,234 people like this, including 1 of your friends

gut health

Introducing TruVani's Glorious Gut Probiotic Supplement

By Food Babe



I'm a big believer that your overall (mind and body) health starts in the gut. After experiencing a health crisis and changing my diet, I found an incredible health practitioner who recommended I start taking a probiotic. They explained to me that this would help to restore healthy bacteria in my gut, which has a ... [Read More](#) →

The Importance Of Gut Bacteria In Pregnancy (and how we destroy it with modern practices!)

By Food Babe

6





Reboot your health in just 28 days!

Happy Gut. Now Available in Paperback



Dr. Vincent Pedre
@DrPedre

The Bridge between Holistic & Western Medicine. Functional Medicine. Integrative Doctor, Author of Happy Gut

📍 New York City 🌐 happygutlife.com 📅 Joined July 2009

4,331 Following **6,975** Followers

Followed by Susan Prescott MDPHd and JMIR Publications




guthealth.nutritionist


547 posts 17.9k followers 1,527 following

Amanda I Registered Dietitian
Your gut guide to unlock lasting change 🍌
🌟 Mindful Gut Method™
Free Class 🌟
amandasauceda.com/hello




POSTS REELS IGTV TAGGED



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432 posts 5,065 followers 2,225 following








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guthealthrecipes

476 posts 29.8k followers 81 following

IBS AND GUT HEALTH DIETITIAN
DM me "results" to learn about my 1:1 client service.
Join the 5-day gut health challenge 🌟
Personal: @joe_leech
m.me/dietvsdisease?ref=w11245372

Gut Tip

Listen to your gut feelings.

QUICK VEGGIE HASH
FULL OF FIBER




kale carrot

FEED YOUR GUT
AND WORK ON YOUR IMMUNE SYSTEM

your gut holds 70% of immune cells




with fermented food




THIS WEDNESDAY AT 18:00 UTC-07
GUT HEALTH WEBINAR
Online event · 1 person going

☆ Save



THU, 19 NOV AT 04:30 UTC-07
Gut Health Masterclass
Online event · 56 people interested


☆ Save



The Gut Health Kitchen
Page · 1.4K like this


Healthy food ideas and recipes to look after your gut health.

👍 Like



Gut Health Project
Page · 31K like this

Over 2,000 years ago, the famous disease begins in the gut." Our m



HAPPENING NOW
Gut Health
Online event · 12 people interested

@karaivy_

BOOK AN IN-CLINIC CONSULTATION

BOOK AN ONLINE CONSULTATION

FIND OUT MORE BY VISITING MY WEBSITE

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BLOG: PCOS & ANXIETY




Get started NOW by Purchasing a meal plan

BLOG: Birth Control And Acne

BLOG - Could It Be Histamine Intolerance?

Using your menstrual cycle to YOUR advantage

COVID-19 and 'immune boosting' on the internet: a content analysis of Google search results

 Christen Rachul¹,  Alessandro R Marcon²,  Benjamin Collins^{1, 3}, Timothy Caulfield^{2, 4}

Author affiliations +

BMJ Journals



We included the microbiome or gut health within our coding framework as it was frequently mentioned in relation to immune boosting. Over 30% (n=70) of webpages mentioned the microbiome or gut health, which was generally intertwined within the narrative of immune boosting, and emphasised its importance for overall health. For example, one webpage states, "Yoghurt is considered a probiotic that is essential to your immune system's health. It directly affects your gut, helping the good bacteria to thrive. Your gut health is directly associated with your immune system. Therefore, a healthy gut means a healthy immune system."²⁸

CONCERNS

- Commercialization of products and programs lacking evidence
- Weakening of scientific understanding
- Contribution to **media noise** that drowns out helpful information
- Weakening of the role of experts and expertise

October 18, 2019

Neglecting Major Health Problems and Broadcasting Minor, Uncertain Issues in Lifestyle Science

John P. A. Ioannidis, MD, DSc¹

JAMA®
The Journal of the American Medical Association

What to do:

- Monitor online information critically
- Be aware of the specific bunk on specific topics in particular contexts
- Need engagement from experts!
- Help people be aware of misinformation
- Guide people towards better information
- Continual education
- Help counter misinformation (debunking information that is



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Effective Debunking:

- 1) Provide the science (yes, this works!)
- 2) Use clear & shareable content
- 3) Ref trustworthy & independent sources
- 4) If possible, note scientific consensus (and that science evolves!)
- 5) Be nice, authentic, empathetic & humble
- 6) Consider a narrative (creativity wins!)
- 7) Highlight gaps in logic & rhetorical tricks
- 8) Make facts the hook (not the misinformation)
- 9) Remember the general public is the audience (not the hardcore denier!)



THANK YOU!