

The graphic features a stylized computer monitor on the left. The monitor's screen displays the EBSCO logo in a dark blue serif font at the top, followed by a green horizontal bar and several grey horizontal bars. A dashed blue line is positioned to the left of the central text box. Overlaid on the right side of the monitor is a dark blue rounded rectangle containing the text 'BMF syysseminaari' in white. To the right of the monitor, the background is a solid blue area with a pattern of small, lighter blue dots. In the bottom right corner of this blue area, the year '2024' is written in white, followed by the name 'Elena Svahn' and the email address 'esvahn@ebSCO.com' in a smaller white font. The monitor's base is a grey trapezoid. The bottom of the image has a white background with a thin grey line.

EBSCO

BMF syysseminaari

2024

Elena Svahn
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EBSCO was founded by
Elton B. Stephens in 1944

EBSCO generates more than
\$3.1 billion in annual sales

2,900+ employees
920+ employees outside the U.S.

EBSCO Information Services

Over 75 years

serving the information needs of institutions
and organizations globally



EBSCO Information Services

Annie Callanan

CEO of EBSCO Information Services





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Schools



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Corporations



Government
Institutions



Public
Libraries

The World's
Leading
Aggregator of
Premium Journal
Information

A computer monitor with a dark bezel and a light-colored base. The screen is divided into a blue header bar at the top and a dark blue main area below. The text is centered in the main area.

More than
**90,000 publications in
over 450 databases**

The World's Leading Provider of Subscription Management Services

In 2022

Sold and serviced
more than 1.4 million subscriptions
to more than 11,000 customers
around the world

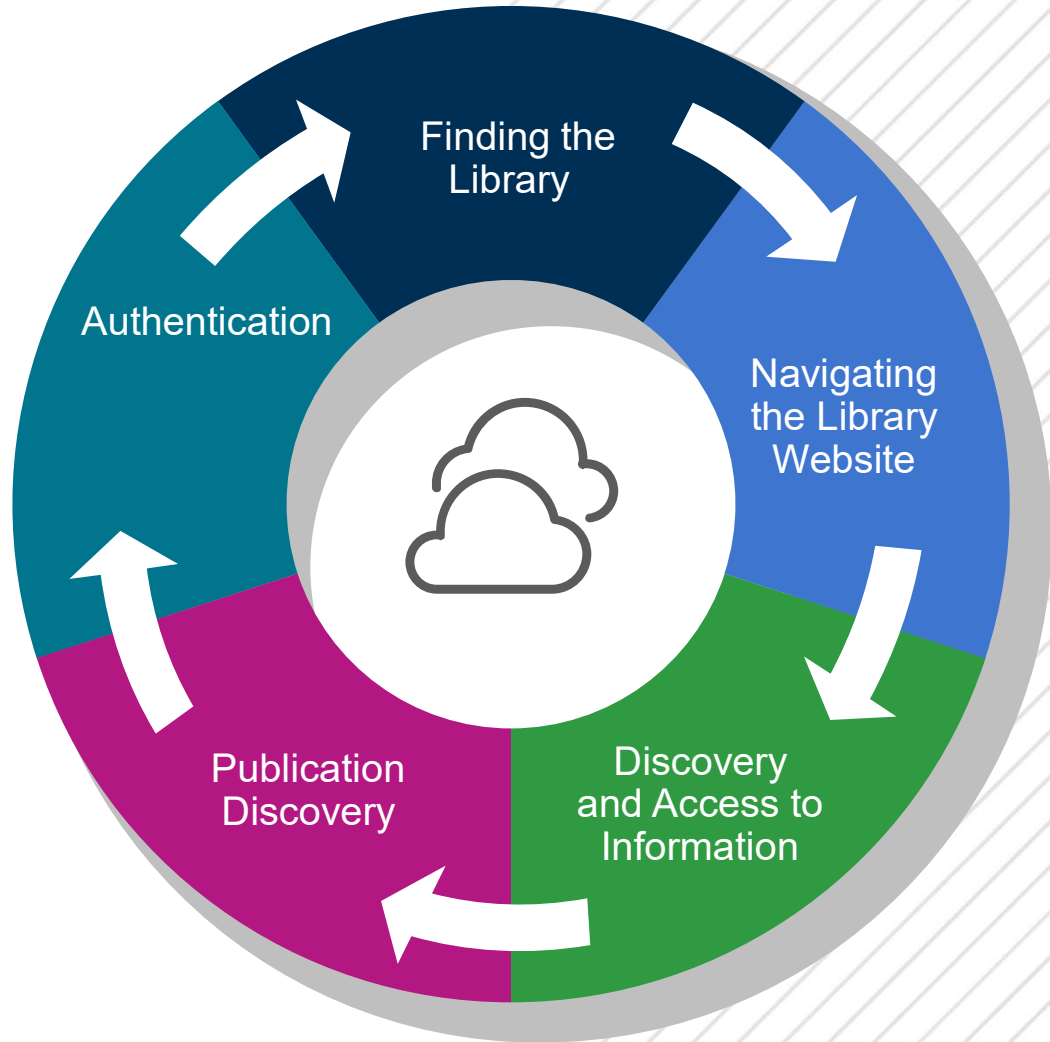
Actively working with
128,000+ publishers

Global Provider of
Print and E-books
with Supporting
Management
System

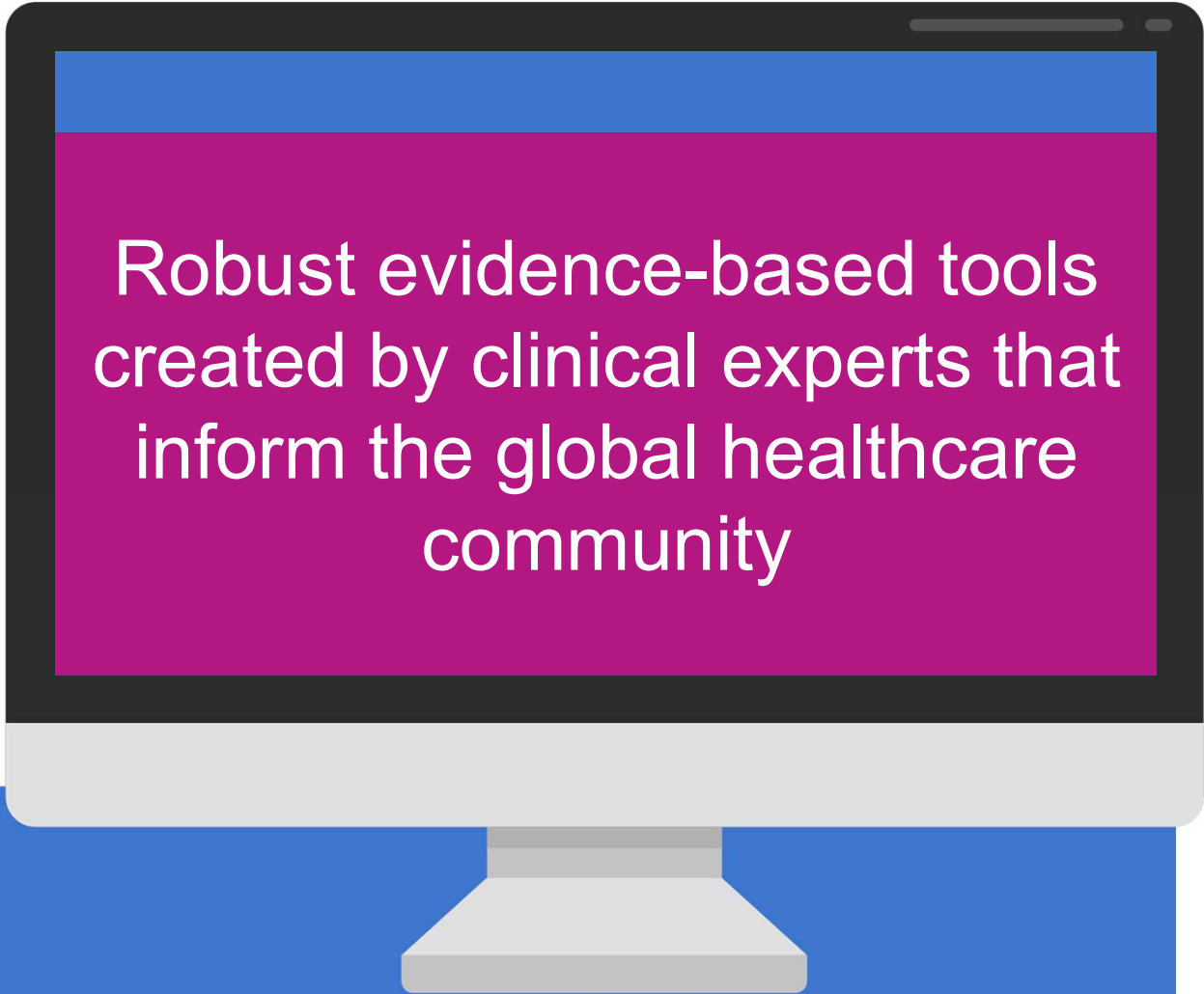
A computer monitor with a dark bezel and a light gray base. The screen is filled with a solid green color. Centered on the screen is white text. The text reads "More than" in a standard font, followed by "2,400,000 e-books" in a larger, bold font, and "available" in a standard font below it.

More than
2,400,000 e-books
available

Leading Software-as-a- Service Provider and Technology Partner for Libraries



A Leading Provider
of Point-of-Care
Resources and
Clinical Decision
Making Tools

A computer monitor with a black bezel and a light gray base. The screen displays a magenta rectangular area with white text. Above the magenta area is a blue horizontal bar. The monitor is positioned on a blue rectangular base.

Robust evidence-based tools
created by clinical experts that
inform the global healthcare
community



Generative AI at EBSCO

Generative AI: What are the challenges and opportunities in the research space (and where can/are librarians leading the way)

Challenges

Misinformation, hallucinations, inaccurate, incorrect, and inconsistent AI generation

Information, data, and AI literacy to faculty

Specificity of AI generation and domain expertise

Maintaining the rigor of research and librarianship while balancing the efficiencies AI offers

Responsibility in ethics, protecting against biases, copyright infringement, plagiarism, environmental impact, unbalanced training sets, costs; maintaining privacy

Rapid advancements in AI; slow advancements in AI standards and regulation

Opportunities

Grounding AI in the library and academic publishing sources of truth

Recommendations for content, authors, research topics, subject heading indexing, collection development and deaccessioning

Insights into content and search; hypothesis tuning and literature review surveys; research findings, topics, and authors and institutions; research habits, library habits, borrowing habits

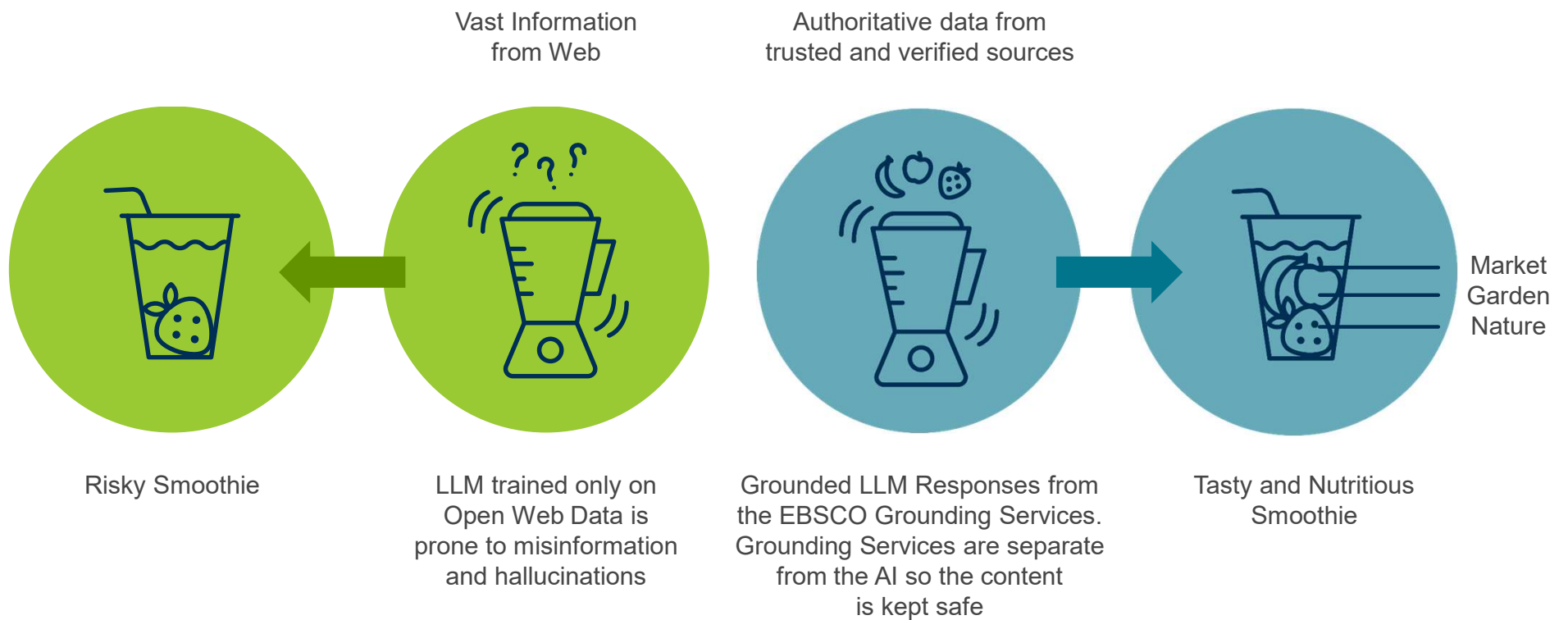
Semantic search through honoring user intent and existing query expansion

Task automation, reference desk assistant chat, copy cataloging, and matching library collection materials to curricula and syllabi

Translation, breaking down barriers to entry, and improved OCR and digitization of content

Where librarians are/can lead the conversation: ●







How does AI work?



AI at EBSCO is just one of the many tools we use to create high quality, authoritative, and trusted products and services.



EBSCO's AI Beta Program (i.e., not on live products): Experimentation Seeking Customer and User Feedback

Focusing on the Research Method Framework		2024 Betas	2025 Beta Themes (so far)
	Observe and be inspired to ask a question	Natural Language search	Reference Desk; Chat Features
	Create a hypothesis		AI Assistance w/ Literature Review; Chat Features
	Test the hypothesis with experimentation and evidence gathering		AI Assistance w/ Literature Review and Recommendations
	*Analyze findings through scholarly methods	*We are not currently investigating any AI that would affect the assessment and critical thinking pieces of the research process. Our goal is to retain the use of critical thinking and information (and AI) literacy skills during the researchers journey though EBSCO products.	
	Document findings compared to hypothesis		AI Assistance w/ Literature Review; Chat Features, Plagiarism Checkers
	Library Efficiencies		Collection Development; Cataloging; Process Automation

AI Insights are intended to help users evaluate search relevancy and increase click-throughs to the source material.

Generative AI outputs will be clearly marked with disclaimers encouraging users to evaluate outputs against the source documents.

ethereum and blockchain

All filters (0) Full Text Only Scholarly All time Advanced search

Peer reviewed Academic Journal

Enabling trust and security between fog nodes using *blockchain* technology.

Fog computing enables the data analysis done nearer to the place of data generated, which makes a very short response time. Trust is essential for the effective performance of the fog nodes to overcome...

Subjects: *Blockchains*; Security management; Data security; Data analysis; Other Computer Related Services; Computer systems design and related services (except video game design and development); +3 more

Published in: Journal of Intelligent & Fuzzy Systems, 2023, *Business Source Ultimate*

By: Ramamurthy, Priyadarshini; Nandagopal, Malarvizi

Access options View details

Generate AI Insights

Insight 1: Fog computing, combined with blockchain technology, can create a secure and efficient environment for data transmission, addressing potential attacks and enhancing data security.

Insight 2: Blockchain technology eliminates the need for third-party trust in fog computing, resulting in improved transparency, security, and faster transactions.

Insight 3: Decentralized authentication using fog nodes and blockchain technology overcomes the limitations of centralized authentication systems, ensuring a trustworthy environment for data transmission.

Disclaimer: These insights are generated by AI, and information quality may vary. Insights should be validated against the source document.



Using AI, we can support natural language queries.

The AI Search Results Insights is an optional view which the administrator can apply. It explains how the most top search results are relevant to the intent and topics of the search query.

Source documents are clearly cited and referenced, preserving the integrity of the published sources and encouraging users to click-through to the source.

The screenshot displays the EBSCO AI Search interface. At the top, a search bar contains the query "What is the relationship between gut bacteria and obesity?". To the right of the search bar are links for "Switch to: Basic search" and "Advanced search", and a "MyEBSCO" logo. Below the search bar, a message says "Refine your search - try these Keyword suggestions: Gut microbiota and obesity, Obesity-related gut microbiota dysbiosis". The results section shows "Results: 319,899" and a filter button. A prominent orange-bordered box highlights the "AI Search results insights" section. This section includes a disclaimer: "Generated with AI. The quality of AI generated responses may vary and should be validated against the source document." It provides a summary of the search results, stating that papers suggest gut microbiota plays a role in obesity development and that it may be a potential strategy for treatment. It also lists three sources: "Gut Microbiota - Obesity Relationship" by Ahmed M. Saed, Najma Habeeb M. (Benha Medical Journal), "Gut microbiota and its possible relationship with obesity" by J. DiBaise, Husen Zhang, M. Crowell, R. Krajmalnik-Brown, G. Decker, B. Rittmann (Mayo Clinic proceedings), and "The gut microbiota and obesity: from correlation to causality" by Liping Zhao (Nature Reviews Microbiology). Below the insights, there are three suggestions to refine the search: "Are there any specific gut bacteria that are associated with obesity?", "What are the mechanisms by which gut bacteria may contribute to obesity?", and "Do changes in gut bacteria cause obesity, or does obesity cause changes in gut bacteria?". At the bottom, a result for "Gut microbiota and its possible relationship with obesity" is shown, including a brief description, subjects, and publication information.

The Research Assistant allows for users to “chat” with the full text of the source document.

The Research Assistant is grounded in the full text of the document and directly references and links to the relevant sections of the document in support of its responses.

The screenshot displays the EBSCO Research Assistant interface. At the top, a search bar contains the query "What is the relationship between gut bacteria and obesity?". Below the search bar, the results section shows a journal article titled "A Review of the Relationship between Gut Microbiome and Obesity", published in Applied Sciences 1/22/2023, by Dorottya Zsálig, Anikó Berta, V. Tóth, Z. Szabó. The article is available for access and download. An orange arrow points from the article title to the Research Assistant chat window on the right. The chat window, titled "Research Assistant", shows a conversation where the user asks "What are the main findings?". The assistant responds with a summary of the main findings, including the impact of gut microbiota on energy balance and the role of diet and lifestyle. The chat window also shows a list of participants in the study and the study's duration.

What is the relationship between gut bacteria and obesity?

Results

Journal article:

A Review of the Relationship between Gut Microbiome and Obesity

Published in: Applied Sciences 1/22/2023

By: Dorottya Zsálig, Anikó Berta, V. Tóth, Z. Szabó

Access now Download

Additional information

Title
A Review of the Relationship between Gut Microbiome and Obesity

Authors
Dorottya Zsálig, Anikó Berta, V. Tóth, Z. Szabó

Source
Applied Sciences

Publication type
Journal Article

Language
English

Abstract
Obesity is a rapidly growing problem of public health on a worldwide scale, responsible for more than 60% of deaths associated with high body mass index. Recent studies underpinned the augmenting importance of the gut microbiota in obesity. Gut microbiota alterations affect the energy balance of the host organism; namely, as a factor affecting energy production from the diet and as a factor affecting host genes regulating energy expenditure and storage. Gut microbiota composition is characterised by constant variability, and is affected by several dietary factors, suggesting the probability that manipulation of the gut microbiota may promote leaning or prevent obesity. Our narrative review summarizes the results of recent years that stress the effect of gut microbiota in the development of obesity. It investigates the factors (diet, dietary components, lifestyle, and environment) that might affect the gut microbiota composition. Possible strategies for the prevention and/or treatment of obesity include restoring or modifying the composition of the microbiota by consuming prebiotics and probiotics, fermented foods, fruits, vegetables, and avoiding foods of animal origin high in saturated fat and sugar.

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Research Assistant

English

What are the main findings?

The main findings are:

- Gut microbiota composition is affected by several dietary factors, suggesting the possibility of manipulating the gut microbiota to promote weight loss or prevent obesity. (1)
- Strategies for the prevention and/or treatment of obesity include consuming prebiotics and probiotics, fermented foods, fruits, and vegetables, and avoiding foods of animal origin high in saturated fat and sugar. (2)
- Gut microbiota alterations affect the energy balance of the host organism, influencing energy production from the diet and host genes regulating energy expenditure and storage. (3)

Who were the participants in the study?

40 overweight or obese subjects participated in the study. (1)

What did this study test?

A symbiotic dose for 8 weeks. (1)

Chat

The Literature Review interface enables the display of key aspects of source documents for easy evaluation across multiple sources. It uses AI to retrieve relevant text, summarize, and populate each cell.

Generated with AI. The quality of AI generated responses may vary and should be validated against the source document.

Search results insights

Add document Add category Delete Rows & Columns

Document	Summary	Main Findings	Methods	Journal
<p>Gut Microbiota-Obesity Relationship</p> <p>By: Ahmed M. Saad, Najma Habeeb M.</p>	<p>Microbiota play an important role in pathogenesis of obesity and its complications including metabolic syndrome and fatty liver.</p>	<ul style="list-style-type: none"> Higher microbiota in obese group than ideal and overweight. Firmicutes was associated with NAFLD, higher CRP, ALT and bilirubin. Higher BMI and lower TC were associated with increased likelihood of exhibiting microbiota with sensitivity 87.9%, specificity 45.5%, PPV 72.2%, and NPV 70%. 	<p>History and clinical examination, abdominal ultrasound, measurement of body mass index (BMI), waist circumference (WC), and waist to hip ratio (WHR), blood sample analysis, and stool sample analysis for microbiota study (Bacteroidetes and Firmicutes) by polymerase chain reaction (PCR)</p>	<p>Bertha Medical Journal</p>
<p>Gut microbiota and its possible relationship with obesity</p> <p>By: J. O'Baise, Husein Zhang, M. Crowell, B. Kragmalnik-Brown, G. Decker, B. Rittmann</p>	<p>Evidence suggests that the gut microbiota affects nutrient acquisition and energy regulation.</p>	<ul style="list-style-type: none"> Evidence suggests that the metabolic activities of the gut microbiota facilitate the extraction of calories from ingested dietary substances and help to store these calories in host adipose tissue for later use. Bacterial lipopolysaccharide derived from the intestinal microbiota may act as a triggering factor linking inflammation to high-fat diet-induced metabolic syndrome. 	<p>A review of published evidence</p>	<p>Mayo Clinic proceedings</p>
<p>The gut microbiome and obesity</p> <p>By: M. Hulas, J. Lampe</p>	<p>The obese phenotype is associated with increased microbial fermentation and energy extraction from non-digestible food components.</p>	<ul style="list-style-type: none"> Obesity is associated with differences in the gut microbiota composition, reduced bacterial diversity, and altered representation of bacterial metabolic pathways. Low-grade, chronic inflammation is a hallmark of obesity-related diseases and may be linked to the gut microbiome. 	<p>A review of published evidence</p>	<p>Conference Material: Nestle Nutrition Institute Workshop Series</p>

Generated with AI. The quality of AI generated responses may vary and should be validated against the source document.

Project Research Assistant

English

Which articles had registered trials?

No mention of registered trials were found in any of the articles.

Does the diversity of gut bacteria correlate to host energy levels or caloric extraction?

There is evidence to support a correlation between gut bacteria diversity and host energy levels:

- Saad 2022 found evidence that Firmicutes being associated with NAFLD, higher CRP, ALT and bilirubin and higher amounts than the ideal weight control group.
- O'Baise 2008 found evidence that the metabolic activities of the gut microbiota facilitate the extraction of calories from ingested dietary substances and help to store these calories in host adipose tissue for later use.
- Nao, O'Baise 2008, found that gut bacterial flora of obese mice and humans include fewer Bacteroidetes and correspondingly more Firmicutes than that of their lean counterparts, suggesting that differences in caloric extraction of ingested food substances may be due to the composition of the gut microbiota.

Will drinking kefir support a healthy gut biome?

None of these studies mentioned kefir.

Chat

A stylized illustration of a computer monitor. The screen displays the EBSCO logo in a dark blue serif font. Below the logo are three horizontal grey bars. A dashed blue line starts from the left of the first bar, goes down, and then right to the second bar. The monitor has a grey base and is set against a blue background with a white dot pattern.

EBSCO

Kysymyksiä?

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