



# INTERNATIONAL DAIRY FEDERATION

**GLOBAL DAIRY EXPERTISE SINCE 1903** 

- Founded in 1903
- Providing expertise and scientific knowledge in support of the development and promotion of quality milk and milk products, to offer consumers nutrition, health and well-being.
- Best practice at international level in order to guide the dairy sector and to harmonize members' work on a variety of issues along the dairy production chain including animal health and welfare, protection of the environment, nutrition, food safety and hygiene and food standards.



http://www.fil-idf.org

### **FOOD CULTURES AND GUT HEALTH** DEFINING THE FRAME FOR CONSISTENT EVIDENCE

François BOURDICHON (FR) Chair of the Standing Committee on Microbiological Hygiene International Dairy Federation





### "ESSAIS OPTIMISTES", 1907. QUATRIEME PARTIE "FAUT-IL TENTER DE PROLONGER LA VIE HUMAINE?". SOUS PARTIE V; PAGE 238.



servir pour retarder of an conclusion a priori est corroborée par tout l'ensemble de faits sur les peuplades qui se nourrissent avec du lait aigri et qui arrivent à un âge très avancé. Mais, dans une question de cette importance, il est nécessaire d'appuyer la théorie par des constatations directes. Voici pourquoi il serait si utile d'entreprendre dans les nombreux asiles de vieillards des recherches systématiques sur le rôle des microbes intestinaux dans la vieillesse précoce, ainsi que sur l'influence des régimes qui empêchent les putréfactions intestinales, sur la prolongation de la vie et sur la conservation des forces actives de l'organisme. Ce n'est donc que dans un avenir plus ou moins éloigné que l'on aura des renseignements précis sur un des problèmes principaux qui préoccupent l'humanité.

En attendant, c'est la sobriété générale et la vie d'après les règles d'hygiène rationnelle qui doivent guider les hommes désirant conserver leur intelligence aussi longtemps que possible et parcourir le cycle le plus complet de la vie la plus normale dans les conditions actuelles.

**Standing Committee on Microbiological Hygiene** 





#### **ELIAS METCHNIKOFF**

Role of the gut microbiota in early ageing, influence of food regimes against intestinal "putrefaction", conservation of life forces

And in the meantime, **sobriety** and **hygiene** will ensure the longest and most complete cycle of life in present conditions

### FERMENTED FOODS: 10 000 YEARS AND PLUS OF HISTORY OF SAFE USE

### Not to mention also tasty, nutritious, and most recently, focus on the expected / promoted / science based health benefits

#### 13 Fermented Foods for a Healthy Gut and **Overall Health**

By Jillian Levy, CHHC August 27, 2019

**Risks and Side Effects** 

5289 P 424 🔽



STAYING HEALTHY

to your diet Top 13 Fermented Foods How Fermentation Works and Traditi April 19, 2021 Health Benefits How to Get Fermented Foods in Your Diet



Health benefits come from the live microbes that thrive in foods such as yogurt, kimchi, and sauerkraut.



#### 5 Reasons to Add More **Fermented Foods to Your Diet**

From sauerkraut to kimchi, these foods help keep your gut healthy

(y) (in) (?) 📼 (f)



Trillions of bacteria live in your intestines - but don't be grossed out! Many of them are "good" bacteria that help keep us healthy.

### FERMENTED FOODS: 10 000 YEARS AND PLUS OF HISTORY OF SAFE USE

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### PROBLEMATIC

- 1. Misuse and Abuse of scientific terms (Microbiota, Microbiome e.g.)
- 2. Multiplication of "biotics" definitions
- 3. Lack of consensus definitions

IDF is worried by #1&2 vs. Consumer protection: safety considerations and potential unsubstantiated health effects

IDF SCMH, SCNH, SCDST has initiated a new Action Team endorsed by SPCC and NCs to provide support to #3, to get qualified and measurable definitions

(That's a lot of acronyms, isn't it?)



One point of concern still: Which **organization** (if any) has the **authority** to validate the definitions?

### NUMEROUS DEFINITIONS POINT RAISED IN ROMA, SEPTEMBER 2019

- While probiotic as a definition is challenged (NB: Agendo of work -CCNFSDU Guidelines for Probiotics), it should be pointed out that numerous concepts around "biotics" are being promoted without neither consensus on the definition, and most importantly its substantiation (potential negative halo effect, lack of consumer protection)
- Precibiotics, Duplibiotics, Combiotik (Hipp TM), Pharmabiotics, Microbiotics, Skinbiotics, Psychobiotics, Postbiotics, Paraprobiotics, ... what next?







### **MOST RECENT EXAMPLE: DUPLIBIOTICS**

#### Experts: Definitions only useful when they remain defined

Experts in the gut health realm were wary of opening another can of worms in the nomenclature area. Consumer research already shows significant confusion around the terms 'probiotic' and 'prebiotic,' and advocates would also like to add 'postbiotics,' 'paraprobiotics,' and now 'duplibiotics' to that list. Len Monheit, executive director of the Global Prebiotic Association, said emerging science will de facto impact the scope of definitions. He said a critical eye must be cast toward proposals to broaden the categories lest they become so ill defined as to be of little worth from either a marketing or research perspective.



### **DEFINITION: THE MANDATORY STARTING POINT**

A good definition MUST include "qualifications": statements that clarify, beyond any doubts, the definition itself

These qualifications NEED measurable values

for the consumers for the industry for the regulatory bodies





**REVIEW** published: 24 July 2020 doi: 10.3389/fmicb.2020.01662



### **Criteria to Qualify Microorganisms as** "Probiotic" in Foods and Dietary Supplements

#### Sylvie Binda<sup>1†</sup>, Colin Hill<sup>2</sup>, Eric Johansen<sup>3</sup>, David Obis<sup>4</sup>, Bruno Pot<sup>5</sup>, Mary Ellen Sanders<sup>6</sup>, Annie Tremblay<sup>7</sup> and Arthur C. Ouwehand<sup>8\*</sup>

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#### **OPEN ACCESS**

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\*Correspondence: Standing Committee on Microbiological Hygiene Common Still relevant after 19 years, the FAO/WHO definition of probiotics can be translated into four simple and pragmatic criteria allowing one to conclude if specific strains of microorganisms qualify as a probiotic for use in foods and dietary supplements. Probiotic strains must be (i) sufficiently characterized; (ii) safe for the intended use; (iii) supported by at least one positive human clinical trial conducted according to generally accepted scientific standards or as per recommendations and provisions of local/national authorities when applicable; and (iv) alive in the product at an efficacious dose throughout shelf life. We provide clarity and detail how each of these four criteria can be assessed. The wide adoption of these criteria is necessary to ensure the proper use of the word probiotic in scientific publications, on product labels, and in communications with regulators and the general public.

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### LET'S DO IT !!! YES, BUT....

IDF is a NGO (Non Governmental Organization), not a regulatory body.

This is not in our mandate (while we do have the scientific community, we don't have the legitimacy to do it), *id est*: we cannot do this alone

WHEN YOU ARE ALONE, YOU NEED "FRIENDS" (STAKEHOLDERS)



### **#TOGETHERSTRONGER: JOINT EXPERTS WORKSHOP**



## EXPECTED OUTCOMES

(Discussed in Roma dedicated workshop)

- 1. Guidelines (*reminder*?) for reviewers for the responsible and critical use of scientific terms
- 2. Finding the balance between setting a frame and letting place for innovation, breakthrough thinking
- 3. Establishing (confirming) scientific guidelines for substantiation
- 4. Promote the approach to regulatory stakeholders and authorities



### WHICH ORGANIZATION HAS THE AUTHORITY TO VALIDATE THE DEFINITIONS?





Responsibility of the IUMS (International Union Microbiological Societies)

The International Committee on Bionomenclature

http://www.bionomenclature.net/index.html





#### **FAO/WHO EXPERT REPORTS**

Probiotics: 2001, 2002 compiled 2006 FAO Food and Nutrition Paper #85 http://www.fao.org/3/a0512e/a0512e.pdf

Prebiotics: 2007. FAO Technical Meeting Report Food Quality and Standards Service Food and Agriculture Organization of the United Nations

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### **OPEN POINT**

Which organization has the authority to validate the definitions?

The definitions should be **science** based, build on consensus (*Hint: this takes time, iteration, and loooots of discussions*)

Science is the basis for regulation (in 5 years and probably plus)

Regulation is the starting point of supervision.

Supervision provides trust and consumer protection.







# **THANK YOU!**



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# **GLOBAL DAIRY EXPERTISE SINCE 1903**

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in international-dairy-federation



### **1907 – 2021:** *Still investigating ....*





