

Beiträge der Lebensmittelindustrie zum Adressieren des *Double Burden of Malnutrition*: ein Systematisches Review

61. Wissenschaft. Kongress der DGE
4.-6. März 2024, Kassel

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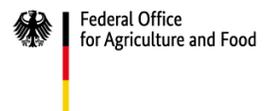


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- Forschungsmittel von **Bundesministerien** (BMBF, BMEL, BMUV)
- Vortrags- und Manuskriptonorare sowie Erstattungen von Reisekosten und Kongressgebühren von **Fachgesellschaften** (DGE, DDG, DAG, ÖGE), **gemeinnützigen Stiftungen** (Wildstiftung, Hanns-Seidel-Stiftung, Studienstiftung) und **Nichtregierungsorganisationen** (vzbv, WWF)

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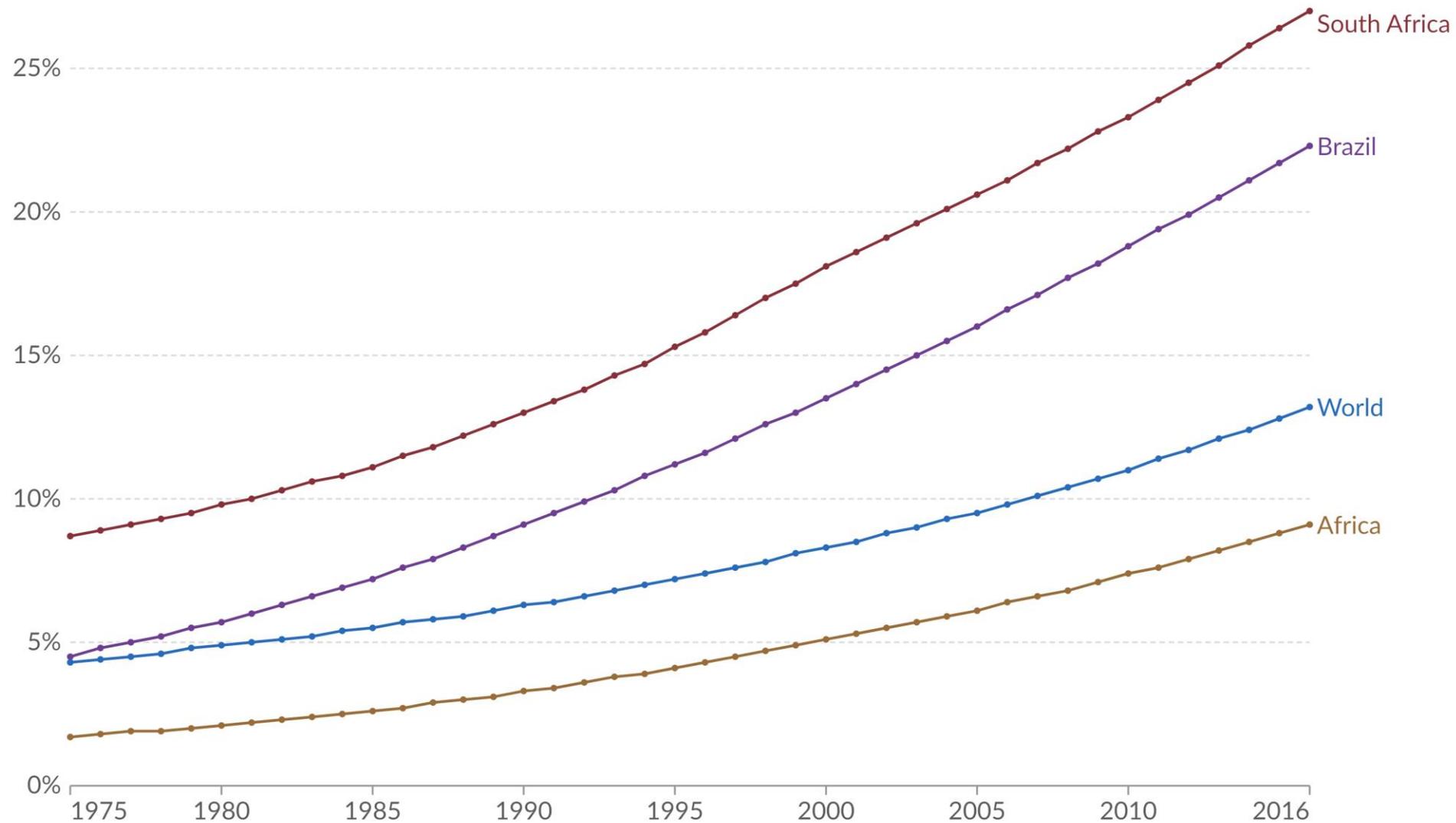
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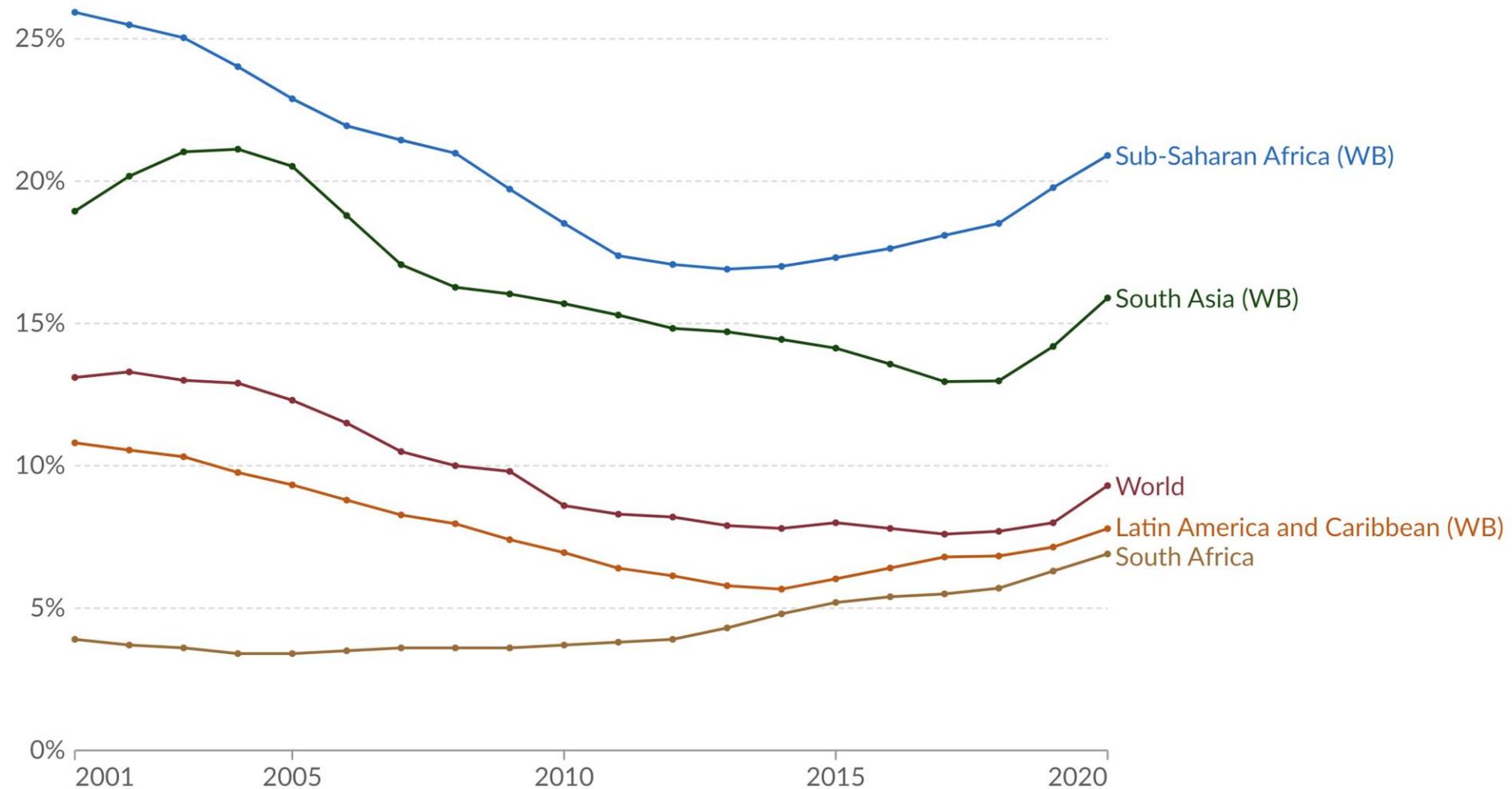
Obesity in adults, 1975 to 2016

Estimated prevalence of obesity, based on general population surveys and statistical modeling. Obesity is a risk factor for chronic complications, including cardiovascular disease, and premature death.



Share of the population that is undernourished

Share of individuals that have a daily food intake that is insufficient to provide the amount of dietary energy required to maintain a normal, active, and healthy life.



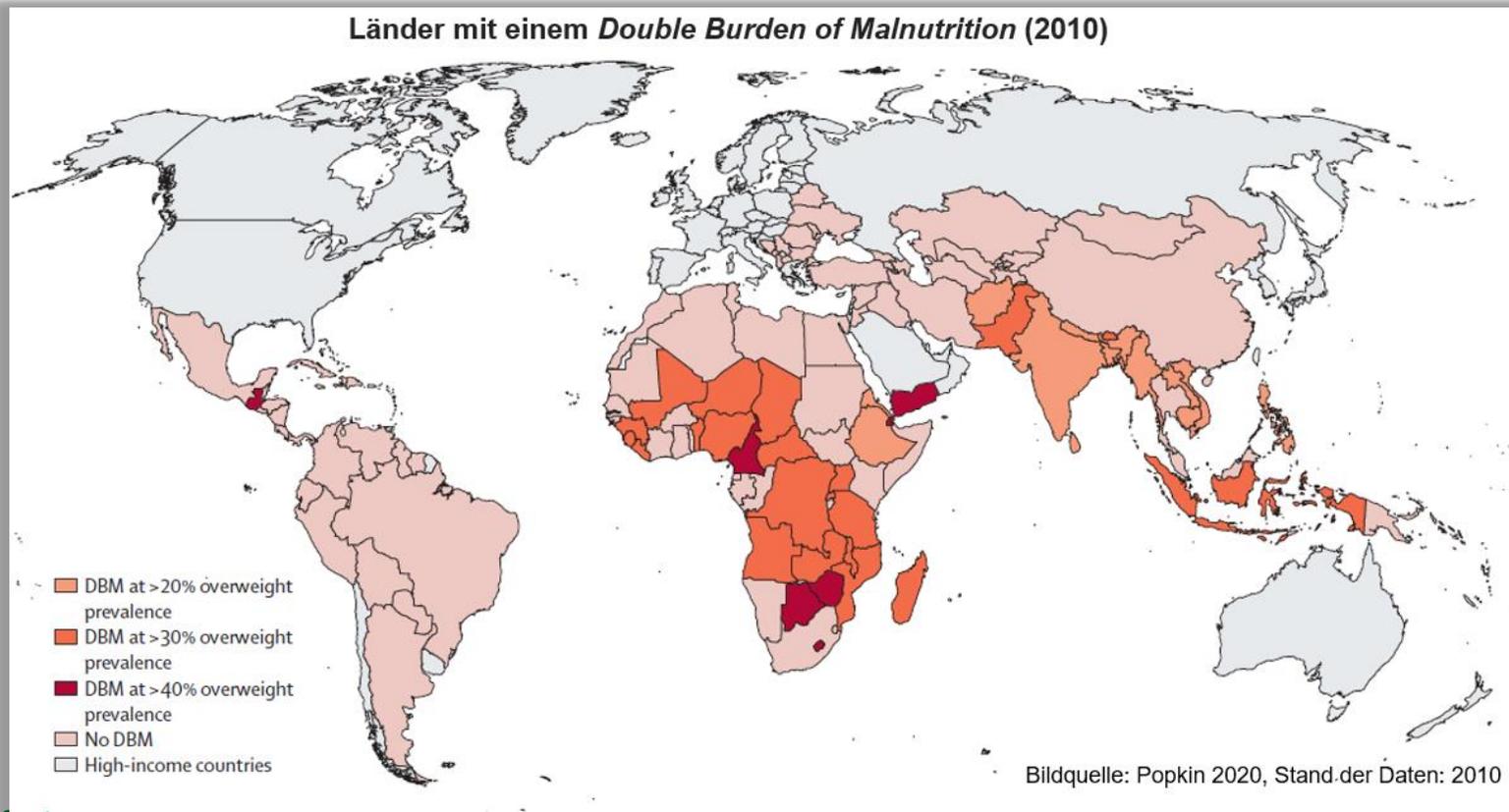
Data source: Food and Agriculture Organization of the United Nations (via World Bank)

Note: Countries and regions with rates below 2.5% are coded as "2.5%" in the FAO dataset.

OurWorldInData.org/hunger-and-undernourishment | [CC BY](https://creativecommons.org/licenses/by/4.0/)

Der *Double Burden of Malnutrition*

Die Co-Existenz und Interaktion von Über-, Fehl- und Unterernährung auf Ebene von Gesellschaften, Gemeinden, Haushalten und Individuen (Branca 2020)



Double Burden of Malnutrition 1



Dynamics of the double burden of malnutrition and the changing nutrition reality

Barry M Popkin, Camilla Covalan, Laurence M Grummer-Strawn

The double burden of malnutrition (DBM), defined as the simultaneous manifestation of both undernutrition and overweight and obesity, affects most low-income and middle-income countries (LMICs). This Series paper describes the dynamics of the DBM in LMICs and how it differs by socioeconomic level. This Series paper shows that the DBM has increased in the poorest LMICs, mainly due to overweight and obesity increases. Indonesia is the largest country with a severe DBM, but many other Asian and sub-Saharan African countries also face this problem. We also discuss that overweight increases are mainly due to very rapid changes in the food system, particularly the availability of cheap ultra-processed food and beverages in LMICs, and major reductions in physical activity at work, transportation, home, and even leisure due to introductions of activity-saving technologies. Understanding that the lowest income LMICs face severe levels of the DBM and that the major direct cause is rapid increases in overweight allows identifying selected crucial drivers and possible options for addressing the DBM at all levels.

Lancet 2020; 395: 65-74
Published Online
December 15, 2019
[https://doi.org/10.1016/S0140-6736\(19\)30493-3](https://doi.org/10.1016/S0140-6736(19)30493-3)
This is the first in a Series of four papers about the double burden of malnutrition.

See Editorial page 2
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Introduction

The global health community has been slow to acknowledge the challenge of the large proportion of low-income and middle-income countries (LMICs) facing the double burden of malnutrition (DBM), which is the coexistence of undernutrition (ie, micronutrient deficiencies, underweight, and childhood stunting and wasting) and overweight, obesity, and diet-related non-communicable diseases. 2.28 billion¹ or more children and adults worldwide are estimated to be overweight and more than 150 million children are stunted.^{2,3}

Several studies describe the double burden of nutritional deficiencies (childhood stunting or wasting, and micronutrient deficiencies) and overweight and obesity affecting countries, households, and individuals. Included are the first studies that measured the DBM at the household level,⁴⁻⁶ now this is represented by growing literature that has focused on understanding the dimensions of the problem, causes, consequences, and possible solutions.^{7,8} The analysis has pinpointed several reasons for this health crisis, many related to the stage of the nutrition transition dominated by reduced physical activity and increased access to less healthy, highly processed foods and beverages.⁹⁻¹¹ However, how to translate this evidence into effective actions is unclear.

Building on the 2013 *Lancet* Series on maternal and child undernutrition¹² and complementing other major scientific initiatives such as the EAT-Lancet Commission on healthy diets from sustainable food systems¹³ and the Lancet Commission on the global syndemic of obesity, undernutrition, and climate change,¹⁴ this Series highlights the new nutrition reality: that there are multiple forms of malnutrition that overlap in different ways and in different places.¹⁵ Additionally, addressing all forms of malnutrition will require new ways of designing, targeting, and implementing programmes and policies to accelerate progress in improving nutrition globally.

We also want to acknowledge that the effect of undernutrition over the past four to five decades will affect our health for many future years. Although stunting has declined greatly from the early 1990s, the stunting from the past three to four decades will subsequently have a great effect decades later on increases in visceral fat and greater risks of major non-communicable diseases as discussed by Wells and colleagues,¹⁶ in the second paper in this Series,¹⁷ and in the key cohort studies.¹⁸⁻²⁰

This 2019 Series is timely, with the recent UN Decade of Action on Nutrition and the Sustainable Development Goals shifting focus from predominantly undernutrition, or single sides of malnutrition, to all forms of malnutrition.^{21,22} Further, major UN and other international institutions and donors are revisiting their strategies to reconsider the scope of nutrition priorities, developing strategy documents, and formulating initiatives to focus on overweight and obesity as well as undernutrition.²³

The papers in this Series take this concern for malnutrition in all forms a step further and focus on not only the epidemiology and larger societal changes in the food system and other major demographic and economic dimensions, but also the biological underpinnings of stunting and subsequent adiposity and the risk of non-communicable disease.²⁴

The papers in this Series also take the issue of the DBM into the programme and policy arena²⁵ by building on the work of double-duty interventions,²⁶ which focus on reducing both undernutrition and overweight and obesity. This Series also shows how ignoring obesity in programmes focused on preventing malnutrition at various ages has affected obesity and the DBM²⁷ and focuses on the economic effects of health programmes and policies.²⁸ This Series paper introduces the epidemiology of the DBM, presents changes in global estimates of the DBM and its components, and uses

Definitionskriterien für einen „double burden of malnutrition“ (Popkin 2020):

1. $\geq 30\%$ *stunting* (Kinder)
2. $\geq 15\%$ *wasting* (Kinder)
3. $\geq 20\%$ Unterernährung (Frauen)
4. $\geq 20\%$ Übergewicht (Gesamtbevölkerung)

FoodSAMSA - Food Environments in Africa: Addressing Malnutrition using a Syndemics Approach



- ▶ **Partner:** South African Medical Research Council (SAMRC), University of Cape Town (UCT), LMU München
- ▶ **Finanzierung:** Bundesministerium für Ernährung und Landwirtschaft (BMEL)
- ▶ **Arbeitspaket 2:** Rolle der formellen Lebensmittelindustrie beim Adressieren des *Double Burden of Malnutrition*



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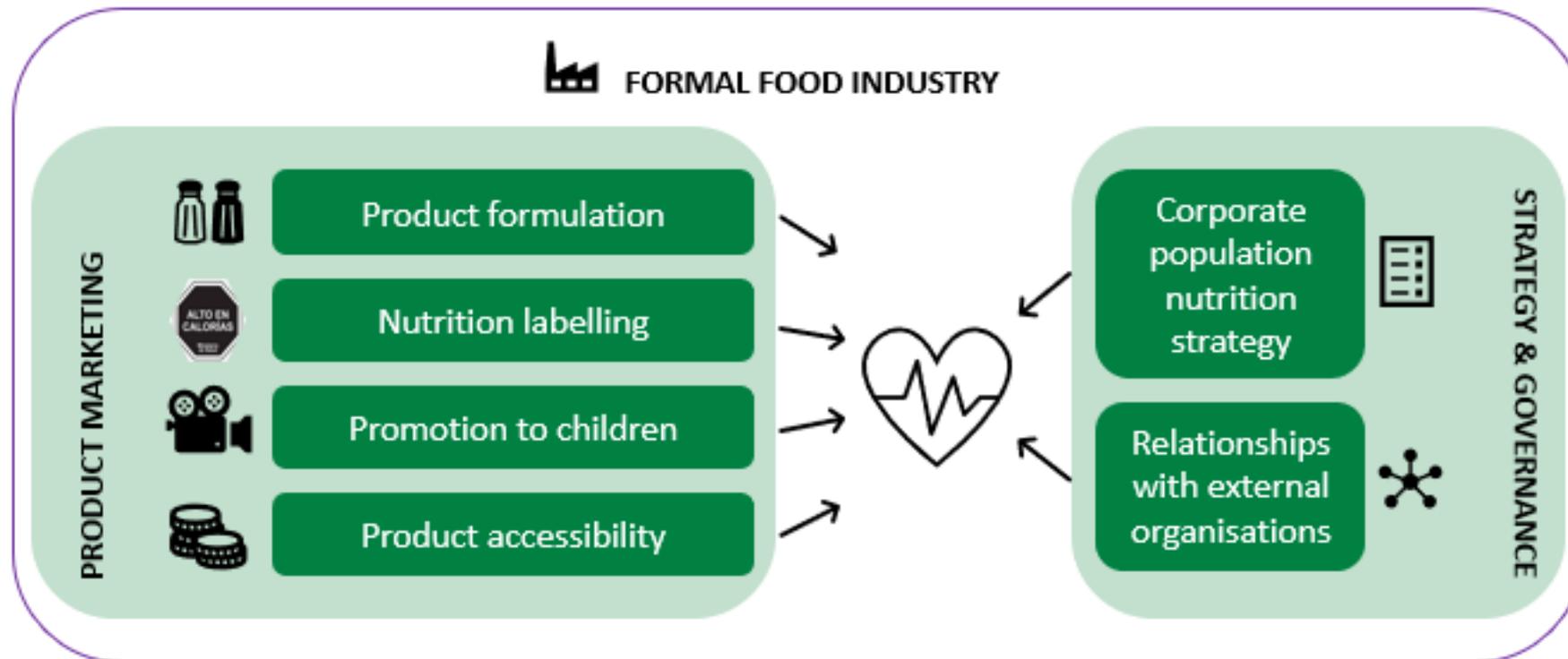
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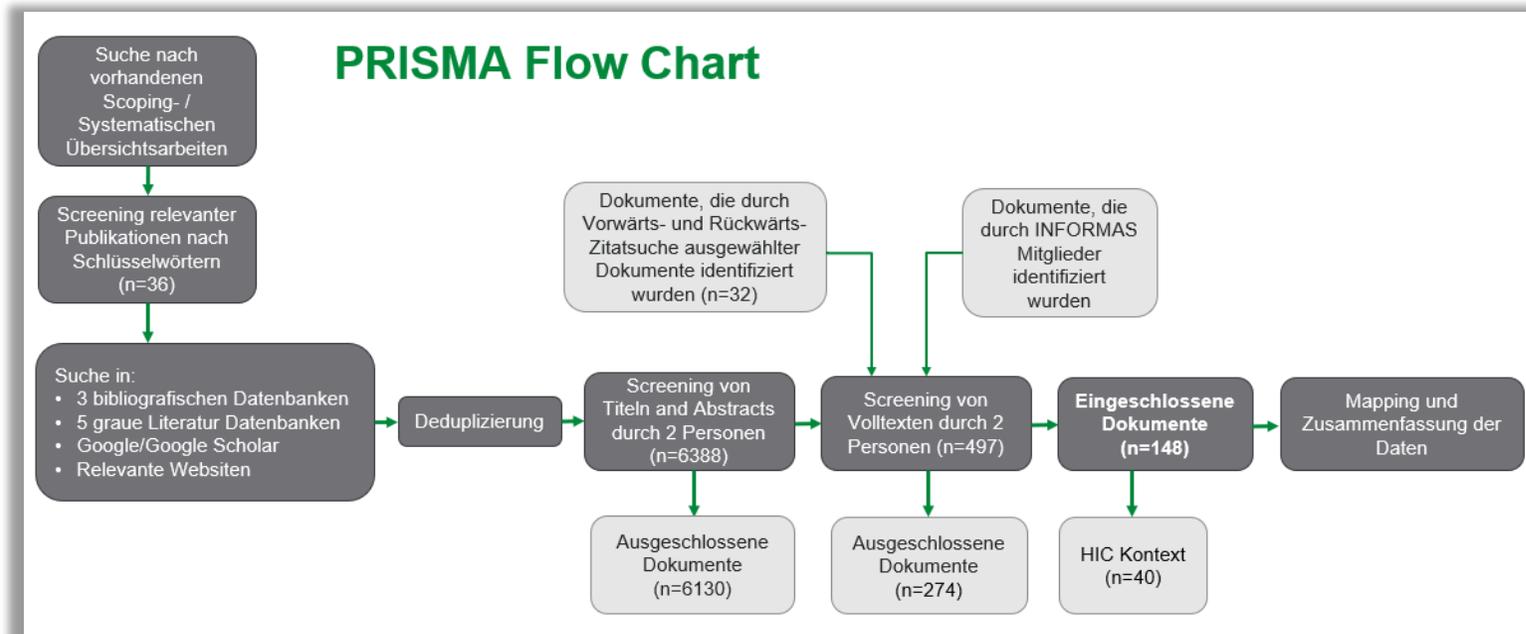


Hintergrund: Das BIA-Obesity Framework

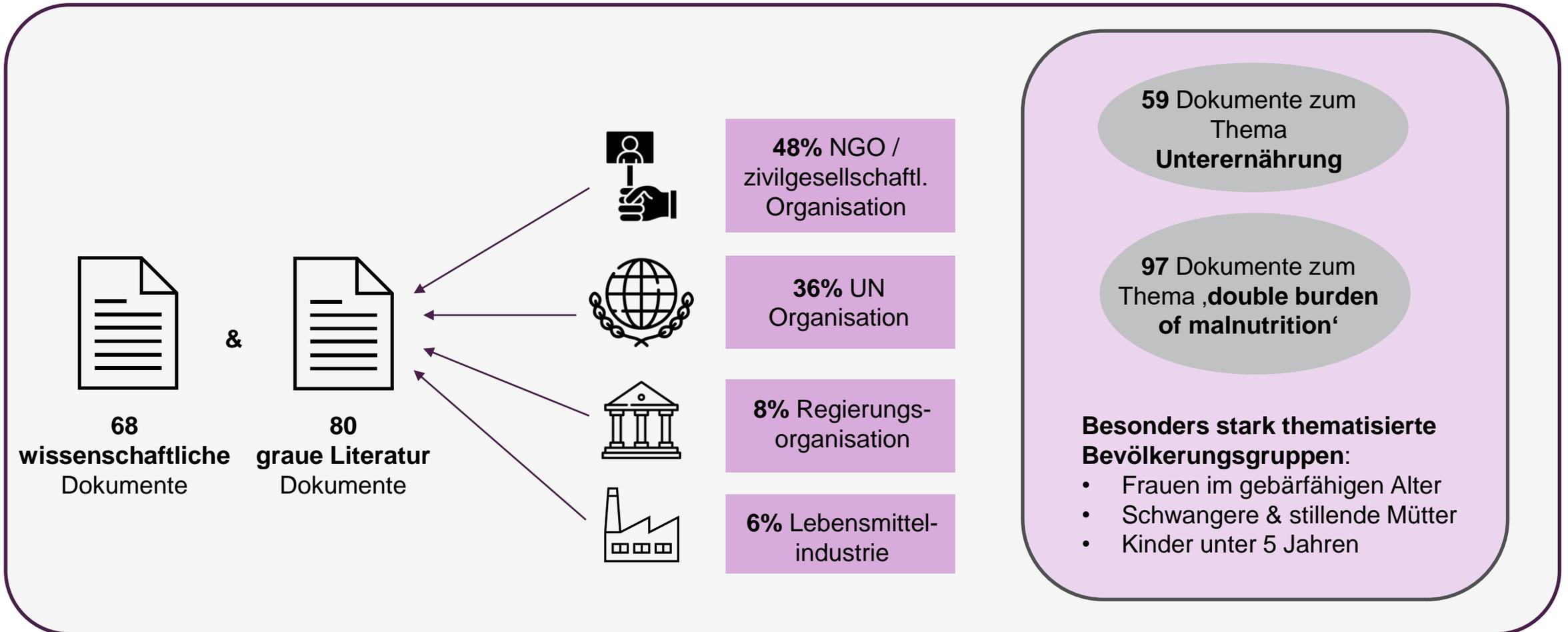
- ▶ **INFORMAS BIA-Obesity** (Business Impact Assessment on Obesity and population-level nutrition) **Framework**
- ▶ Erfassung, Bewertung and Benchmarking der **Praktiken von Lebensmittelunternehmen** in Bezug auf die Förderung einer gesunden Ernährung in **sechs Schlüsselbereichen**



- ▶ **Ansatz:** Standard systematische Review-Methodik gemäß JBI-Handbuch
- ▶ **Einschlusskriterien:** Dokumente mit Empfehlungen, Good Practice-Beispiele oder „lived experiences“ der Lebensmittelwirtschaft bzgl. des Adressierens von Unter-/Mangelernährung und/oder des Double Burden of Malnutrition
- ▶ **Analyse:** Evidenzkartierung und –synthese mit einem iterativen, qualitativen Evidenzsyntheseverfahren



Ergebnisse: Evidenzkartierung



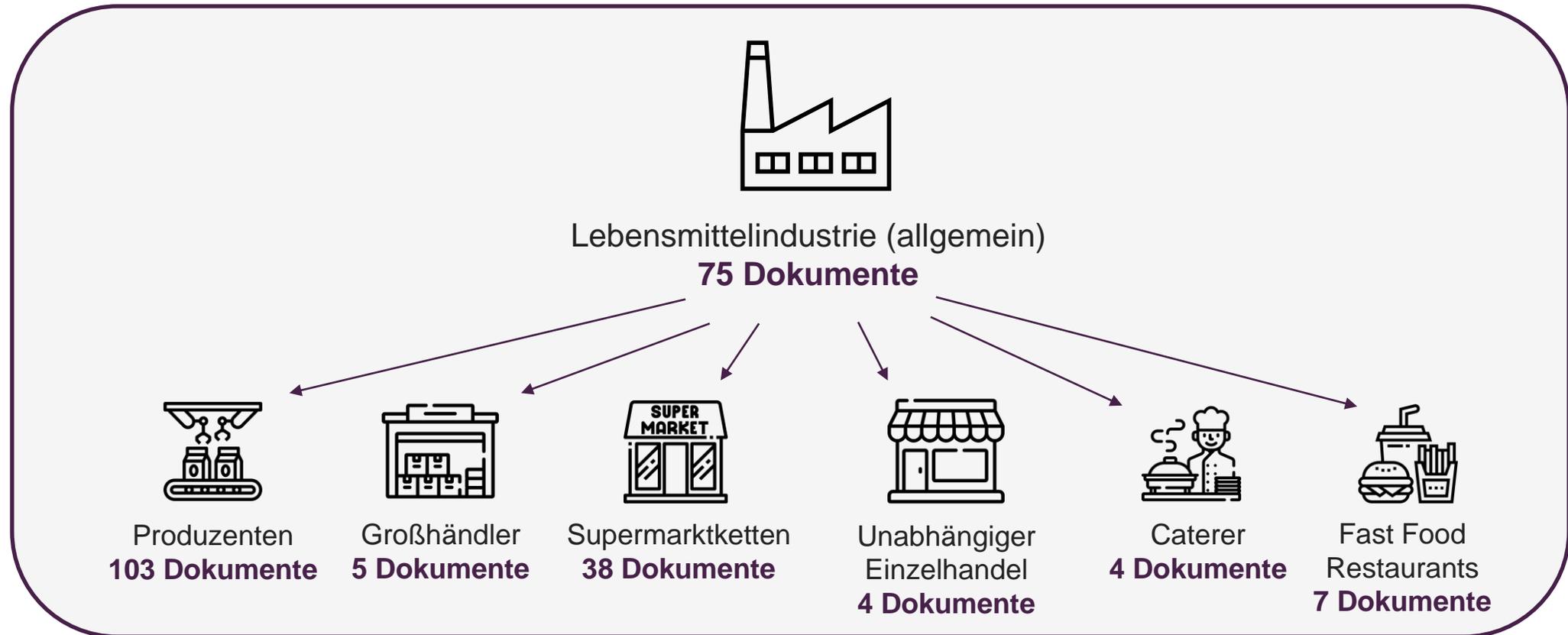
Ergebnisse: Evidenzkartierung

Empfehlungen
88 Dokumente

Good-Practice-Beispiele
95 Dokumente

Gelebte Erfahrung
20 Dokumente

Existierende Frameworks
8 Dokumente



Ergebnisse: Evidenzsynthese (vorläufig, beispielhaft)

Vermarktung von Muttermilchersatzprodukten

„Unternehmen sollten den internationalen Kodex zur Vermarktung von Muttermilchersatzprodukten und alle nachfolgenden WHA-Resolutionen und alle Empfehlungen der zugehörigen Leitlinien anerkennen“

Quellen:

- ATNI - The BMS and CF Marketing Indexes 2023
- ATNI - BMS/CF Marketing Index 2021
- Tokyo Nutrition for Growth Summit 2021 - Commitment-Making Guide April 2021
- Baker et al. First-food systems transformations and the ultra-processing of infant and young child diets: The determinants, dynamics and consequences of the global rise in commercial milk formula consumption. *Matern Child Nutr.* 2021
- UNICEF - The State of the World's Children 2019. Children, Food and Nutrition: Growing well in a changing world
- WHO - Regional nutrition strategy (South-East Asia): Addressing malnutrition and micronutrient deficiencies (2011-2015)
- WHO - International Code of Marketing of Breast-milk Substitutes (1981)

Ergebnisse: Evidenzsynthese (vorläufig, beispielhaft)

Lebensmittelanreicherung

“Bei der Lebensmittelanreicherung sollten Unternehmen geltende nationale, regionale und internationalen Standards und Empfehlungen beachten. Es sollten nur Produkte angereichert werden, die gesund und von Natur aus zur Adressierung von Unterernährung geeignet sind. Ungesunde, hoch verarbeitete Lebensmittel sollten nicht angereichert werden.”

Quellen (neueste):

- Fanzo et al. Challenges and opportunities for increasing the effectiveness of food reformulation and fortification to improve dietary and nutrition outcomes. *Food Policy*. 2023
- Dhanapal et al. Implementation of Nutrigenetics and Nutrigenomics Research and Training Activities for Developing Precision Nutrition Strategies in Malaysia. *Nutrients*. 2022
- USAID / Government of Uganda - Report for the Review of Food Fortification Marketing Strategies, and Promotional Messages, Materials and Interventions (2022)
- WFP - Understanding the Rice Value Chain in the Philippines: Defining the Way Forward for Rice Fortification (2022)
- ATNI - Global Access to Nutrition Index 2021 Methodology
- ATNI - Global Index 2021

Ergebnisse: Evidenzsynthese (vorläufig, beispielhaft)

Lieferketten

“Unternehmen sollten Maßnahmen ergreifen, um Kleinbauern den Zugang zu ihren Lieferketten zu ermöglichen, einschließlich fairer Verträge, Schulungen und sonstige Unterstützungsmaßnahmen, und dabei ihre Relevanz für die Ernährungssicherheit lokaler Gemeinden berücksichtigen.”

Quellen:

- The Behind the Brands Scorecard Methodology (2014)
- Gómez & Ricketts. Food value chain transformations in developing countries - Selected hypotheses on nutritional implications. *Food Policy*. 2013

Ergebnisse: Evidenzsynthese (vorläufig, beispielhaft)

Arbeitsbedingungen

“Unternehmen sollten Eltern die Inanspruchnahme von bezahltem Elternurlaub ermöglichen und stillenden Müttern angemessene Arbeitsbedingungen und Einrichtungen am Arbeitsplatz bereitstellen.”

Quellen:

- ATNI - Global Access to Nutrition Index 2021 Methodology
- ATNI - India Spotlight Access to Nutrition Index 2020 Methodology

- ▶ **Delphi Prozess** mit 30 Expert:innen zur Anpassung des BIA-Obesity Frameworks für Kontexte mit einem *Double Burden of Malnutrition*
- ▶ **Pilotierung** in Südafrika
- ▶ **Umsetzung** in weiteren Ländern



Dank den Co-AutorInnen und Projektpartnern

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