

•• WageIndicator

WageIndicator

Working Paper Series

2026/003

Workforce Nutrition in Collective Bargaining Agreements

A Scoping Study of 26,015 Agreements

Naila Yaumina Rahma, Bärbel Weiligmann, Stella Nordhagen, Christina Nyhus
Dhillon, Gabriele Medas, Mila Petrova

GAIN & WageIndicator Foundation

Abstract

Many adults spend most of their waking hours at the workplace, making the latter a strategic, yet underappreciated, environment for health and well-being interventions. Evidence shows that workforce nutrition initiatives can improve workers' health and well-being as well as business outcomes, yet their full potential as occupational and public health interventions remain underexplored. This paper examines the extent to which collective bargaining agreements globally include clauses on workforce nutrition, operationalised as healthy food at work, breastfeeding support, nutrition-focused health checks and follow-up, and nutrition education.

Using web-based and bibliographic searches, the study identified open-access global, national, and sector-specific collective bargaining agreement (CBA) repositories. It analysed 26,015 agreements from the WageIndicator CBA database (global coverage), Légifrance (France), and the Office of Personnel Management (US) databases. Explicit references to workforce nutrition were rare. The term 'nutrition' appeared in 3.88% of US agreements and 0.23% of French agreements and was not a standalone variable in the global database. Keywords for relevant contexts and arrangements, such as for meal vouchers or breaks (whether or not the consumed food was nutritious and

health-promoting) or for medical care (whether or not it attended to diet-related diseases and risk factors), were captured far more frequently. Among the four workforce nutrition pillars examined, breastfeeding support received the most focused attention, though primarily in the global database. In-depth analysis of 49 agreements confirmed the quantitative findings but also provided detail of exemplar clauses of workforce nutrition.

Findings suggest a substantial gap between the growing recognition of the importance of workforce nutrition and its formal inclusion in CBAs. In countries with strong access to collective bargaining, CBAs represent an underused instrument for advancing workforce nutrition and supporting broader occupational and public health objectives, highlighting opportunities to strengthen policy through greater use of collective agreements, expand programmes through coordinated action among stakeholders, and improve practice by embedding nutrition more systematically within the workplace.

KEY MESSAGES

- Workforce nutrition has demonstrated benefits for both worker well-being and business outcomes, but its role within formal labour arrangements has received little attention.
- Explicit references to workforce nutrition are rare across global, national, and sector-specific collective bargaining agreements.
- While nutrition-specific clauses are uncommon, related provisions such as ones for meal allowances, vouchers, and breaks, and for health and medical assistance are widely included.
- Among the four workforce nutrition pillars, breastfeeding support has received the most attention, though primarily in the global database of collective agreements.

Recommended citation

Rahma NY, Weiligmann B, Nordhagen S, Dhillon CN, Medas G, and Petrova M. Workforce Nutrition in Collective Bargaining Agreements: A Scoping Study of 26,015 agreements. Global Alliance for Improved Nutrition (GAIN) and WageIndicator Foundation.

This paper is also a GAIN Working Paper and can be cited as: Rahma NY, Weiligmann B, Nordhagen S, Dhillon CN, Medas G, and Petrova M. Workforce Nutrition in Collective Bargaining Agreements: A Scoping Study of 26,015 agreements. Global Alliance for Improved Nutrition (GAIN) and WageIndicator Foundation. Working Paper #63. Geneva, Switzerland, 2026. DOI: <https://doi.org/10.36072/wp.63>

© The Global Alliance for Improved Nutrition (GAIN) & WageIndicator Foundation

This work is available under the Creative Commons Attribution-Non-Commercial-Share Alike 4.0 IGO licence (CC BY-NC-SA 4.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/4.0/>). Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that GAIN or WageIndicator endorses any specific organisation, products or services. The use of the GAIN or WageIndicator logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons license. The contributions of third parties do not necessarily represent the view or opinion of GAIN or WageIndicator.

Acknowledgements

This publication has been produced through GAIN's Nourishing Food Pathways programme which is jointly funded by the German Federal Ministry for Economic Cooperation and Development; the Ministry of Foreign Affairs of the Netherlands; the European Union; the government of Canada through Global Affairs Canada; Irish Aid through the Development Cooperation and Africa Division (DCAD); and the Swiss Agency for Development and Cooperation (SDC) of the Federal Department of Foreign Affairs (FDFA).

We would like to acknowledge Joaquim Pintado Nunes, Dafne Papandrea and Elvis Beytullayev of the International Labour Organization for their support with GAIN's Workforce Nutrition programme, including through ideas advancing the conceptualisation of this paper. We would like to thank Nina Holíčková, Fiona Dragstra, Daniela Ceccon, Leena Bhattacharya, Janna Besamusca, Kea Tijdens, and Szilvia Borbély of the WageIndicator Foundation for enabling access to and providing contextual information about the WageIndicator Collective Bargaining Agreements database. We are very grateful to Royce Wiryohandjojo, Workforce Nutrition Global Project Manager, for his support. The authors would also like to thank Ninon Alaniou for advising on keywords and sources in French and Dilara Jahan, G. M. Reza Sumon, Kris Woltering, and Sunaina Chander for checking the translations from Bengali, Dutch, and Danish.

Background

The workplace is a strategic environment for enabling improvements in nutrition and well-being, with 58% of the global population spending at least a third of their adult lives at work and up to 60% of the daily food intake consumed during working hours (1-4). Over time, poor diet quality at the workplace can contribute to the triple burden of malnutrition (comprising undernutrition, overnutrition, and micronutrient deficiencies), increase the risk of non-communicable diseases, and impact negatively on immune systems and cognitive functions, all of which can lead to lower productivity (5). Two seminal publications of the World Health Organization (WHO) and the International Labour Organization (ILO) from the mid-2000s, respectively the *Global Strategy on Diet, Physical Activity and Health* (6) and *Food at Work: Workplace Solutions for Malnutrition, Obesity and Chronic Diseases* (2), called for action and attention. WHO's strategy asserted that 'workplaces should make possible healthy food choices' (6). ILO's publication considered the rights to safe drinking water and freedom from hunger to be, apart from basic human rights, 'an essential foundation of a productive workforce', yet 'all too often ignored in the context of productivity improvement and enhanced enterprise competitiveness' (2). Similarly, '[m]easures to ensure a properly fed and healthy workforce are an indispensable element of social protection of workers, and yet frequently absent from programmes to improve working conditions and occupational safety and health' (2).

Providing or facilitating access to food at work is one component of a broad concept of 'workforce nutrition', as advanced by the Workforce Nutrition Alliance. The latter identifies four pillars of workforce nutrition: healthy food at work, breastfeeding support, nutrition-focused health checks and follow-up, and nutrition education (Box 1) (7). While we use the term 'workforce nutrition', it is important to acknowledge that neither it, nor alternatives, such as worker(s) nutrition, 'worker's food programs' (8) or 'workplace food services' (9), are widely used.

There is a growing body of evidence to support the implementation of workforce nutrition initiatives as routes to improving workers' health and well-being as well as business outcomes (12-15), even if there are also enduring concerns about study quality, uncertainty about effect sizes (in general and across types of workers and workplaces), and uncertainty about the most effective components of programmes. Workforce nutrition continues, however, to be primarily a matter of policy of individual companies, often used as a 'perk' to attract and retain workers, as opposed to a broadly shared practice supported by and/or coordinated at a national and multinational level. The full potential of workforce nutrition remains sorely unappreciated: as an occupational health and public health intervention; as a tool for improved business productivity and competitiveness; and as an aspect of the decent work agenda.

BOX 1. THE FOUR PILLARS OF WORKFORCE NUTRITION

Definitions quoted from 'scorecard' of the Workforce Nutrition Alliance (10, 11)

- **Healthy Food at Work programmes**

These programmes focus on increasing employees' access to healthy and safe foods at work. Employers may provide healthy food for free, with a subsidy, or at full cost to the employee. These programmes change the food environment of the workplace, which can include the provision of healthier canteen meals, snack offerings, vending machine options, or more balanced portion sizes. All these interventions shape people's access to nutritious foods and encourage healthier choices.

- **Breastfeeding Support programmes**

Workplace breastfeeding support includes company programmes or policies that enable working mothers to breastfeed exclusively for 6 months and continually up to 2 years. Such programmes can include: respecting or exceeding national laws on

duration of paid maternity leave (ensuring 6 months minimum), providing an appropriate place and time to express/pump milk during work hours, and providing options for working mothers such as on-site child care and flexible work schedules. Some programmes include creating nutrition-based awareness or educational campaigns for mothers and co-workers on the importance of breastfeeding.

- **Nutrition-focused Health Checks and Follow-up**

Nutrition-focused health checks are confidential and periodic one-to-one meetings with a health or nutrition professional to assess, and usually discuss, the employee's nutritional health. Health checks provide personalised data for each employee, giving them a better understanding of their nutritional risk factors. These health checks may include cholesterol and/or blood-pressure screenings, or weight monitoring and classification (for example using Body Mass Index) to assess whether an employee is underweight, overweight, or obese). Individual counselling can be coupled with health checks to help devise lifestyle change strategies and follow up counselling can support employees to track their progress towards nutrition-focused goals.

- **Nutrition Education programmes**

Nutrition education programmes aim to change the nutrition and/or lifestyle behaviours of employees through increasing employees' knowledge of beneficial health habits. Nutrition education may act on several levels, including: (1) changing attitudes towards a specific behaviour; (2) addressing normative beliefs (i.e., the perceived norm); (3) modifying beliefs about self-control and the ability to change. Interventions often work through groups with methods such as cooperative menu planning, dissemination of educational materials, interactive information sessions and workshops; an alternative approach is one-to-one counselling.

One approach that may have significant potential for increasing the availability of workforce nutrition initiatives is the incorporation of relevant clauses in collective agreements. (The term is used synonymously with 'collective bargaining agreements' or 'collective labour agreements'; here we use 'collective agreements' or abbreviate to 'CBAs', Box 2). Collective agreements

be seen as a bottom-up, worker-driven approach to improving occupational safety and health (OSH) and workplace wellbeing, complementary to top-down, policy-driven approaches. Such worker-driven approaches are particularly needed due to the limited attention to workforce nutrition at the policy level. Lok and Vidiанти (2024) reviewed OSH regulations at international and national levels and found limited examples of integration of nutrition topics (16). The authors suggested that policymakers can 'open a new dimension in worker wellbeing and employer performance' by incorporating nutrition considerations into OSH-relevant agreements, legislation, contracts, and guidelines (16). Collective agreements are one example of such OSH-relevant agreements. However, little is known about the extent to which collective agreements already address food and nutrition considerations, or the potential for increasing this. This scoping study aims to fill this gap.

BOX 2. COLLECTIVE AGREEMENT

According to Article 2 of the Collective Bargaining Convention, 1981 (No. 154) (17), collective bargaining 'extends to all negotiations which take place between an employer, a group of employers or one or more employers' organisations, on the one hand, and one or more workers' organisations, on the other, for: (a) determining working conditions and terms of employment; and/or (b) regulating relations between employers and workers; and/or (c) regulating relations between employers or their organisations and a workers' organisation or workers' organisations' (17).

The intended outcome of collective bargaining is signing a collective agreement (18). The ILO defines collective agreements as 'all agreements in writing regarding working conditions and terms of employment concluded between an employer, a group of employers or one or more employers' organisations, on the one hand, and one or more representative workers' organisations, or, in the absence of such organisations, the representatives of the workers duly elected and authorised by them in accordance with national laws and regulations, on the other' (Part II.2.(1) of

the Collective Agreements Recommendation, 1951 (No. 91), as quoted in [18]).

Collective agreements are intended to 'bind the signatories and those on whose behalf they are concluded'; 'apply to all workers of the classes concerned in the undertakings they cover, unless the agreement specifically provides for the contrary'; and 'take precedence over individual contracts of employment, while recognizing stipulations in individual contracts that are more favourable to workers' (18).

As collective bargaining is 'free and voluntary', outcomes contained in collective agreements are generated by the parties themselves, not imposed on them (18).

Working conditions and terms of employment, one of the three main foci of collective agreements and the broader context of this study, 'could include issues such as wages, hours of work, annual bonus, annual leave, maternity leave, occupational safety and health, and other matters' (18).

Methodology

Approach to searching for databases of collective agreements

Following pilot searches – web searches for databases of collective agreements and searches for mentions of these in peer-reviewed literature in bibliographic databases (MEDLINE through PubMed, PsycINFO, CABI Global Health, Sociological Abstracts and Web of Science) – we decided to prioritise web searches due to superior retrieval. Searches were conducted using Google Chrome. They were constructed by combining search terms for 1) collective agreements, 2) industries characterised by working in confined environments (work in confined environments tends to impose greater obligations on employers for securing access to food for workers), and 3) search terms for individual countries. Filters for file types or source were added selectively. See Box 3 for detail on search terms and screening approach and Table 1 for priority countries. We also reached out to key contacts at the ILO

and the UK Advisory, Conciliation and Arbitration Service and reviewed highly relevant peer-reviewed publications, e.g. (19). Searches were conducted between April and July 2025.

BOX 3: SEARCH TERMS AND SCREENING APPROACH IN GOOGLE SEARCHES

1. **Collective agreements search terms:** 'collective bargaining agreement', 'collective labour agreement' and 'collective agreement'.
2. **Industry-focused search terms:** 'Mining', 'construction', 'transportation' and 'shipping' were chosen as focus industries by virtue of requiring work in confined environments. The latter are enclosed or partially enclosed working spaces, with limited entry and exit points. As this means that access to food is also harder, likelihood that employers provide food for workers is greater.
3. **Country search terms:** Searches were run for countries where GAIN has significant current presence and/or countries known for their mining, construction, transportation and shipping sectors. 12 GAIN countries and 13 countries with well-developed sectors of the above four types were included (see **Table 1**).
4. **File type or source filters:** If initial returns were of no or limited relevance, search terms were paired with a filter for pdf files (filetype:pdf) or government webpages (site:.gov).

Typically, a couple of pages of Google retrieval were reviewed before commencing a new search. With Google arranging retrieval by relevance, the approach was considered unlikely to miss highly relevant contents.

On non-English language websites and platforms, translations of the above search terms were also used, as generated by DeepL (<https://www.deepl.com/en/translator>) or by the researcher if fluent in a particular language (see **Annex 2**).

Table 1: Priority countries for searches, by WHO region.

African Region	Region of the Americas	South-East Asian Region	European Region	Eastern Mediterranean	Western Pacific Region
Benin (GAIN)	Brazil (C)	Bangladesh (GAIN)	Denmark (C)	Iran (C)	Australia (C)
Ethiopia (GAIN)	US (C)	India (GAIN)	France (C)	Pakistan (GAIN)	
Kenya (GAIN)		Indonesia (GAIN)	Norway (C)	Saudi Arabia (C)	
Mozambique (GAIN)			Netherlands (C)	United Arab Emirates (C)	
Nigeria (GAIN)			Portugal (C)		
Rwanda (GAIN)			Sweden (C)		
Tanzania (GAIN)			United Kingdom (C)		

Note: (GAIN) indicates current presence of GAIN in a country. (C) stands for confined working environments

Approach to searching for nutrition-relevant contents in databases

Depending on the structure and/or search capacities of a particular database, we either ran searches in its online version, using free-text search terms for the four pillars of workforce nutrition, or obtained frequencies for relevant variables in RStudio 4.5.1. Search terms and variables are reported in the Findings, Figures 1 to 4, with further detail in Annex 1. Briefly, we separated terms and variables into ones which reflected 'focused' or 'contextual' attention to workforce nutrition. Search terms in English were generated and variables were

selected by four of the co-authors (CND, NYR, MP, and BW). Search terms in French were proposed by a native speaker who is also a nutritionist.

Approach to selecting documents and extracting data for in-depth analysis

From collective agreements which were pre-identified through keyword searches as having nutrition-relevant contents, we iteratively collated – as new repositories and standalone agreements were found – a subsample for in-depth exploratory data extraction. We sought to collate a ‘maximum variation’ sample in terms of industries and countries, aiming to capture countries in all six WHO regions and all levels of income. Non-English language sources were translated using DeepL or Google Translate. Examples reported in this paper have been checked by native speakers. The following types of data were extracted in an Excel spreadsheet: basic information about the agreement (title, access link, year signed, country, language, sector, and parties to the agreement); contents on workforce nutrition; contents on OSH; contents on the health and well-being of the workforce more broadly; and contents on social security (maternity, paternity and sick leave). Relevant sections in collective agreements were identified in Adobe by using search terms from the set used in the quantitative analysis. Illustrative quotes were extracted.

Findings

The only global database was the WageIndicator Collective Agreements Database [MP1] (<https://wageindicator.org/labour-laws/collective-bargaining-agreements>), which, as of July 2025, included 3,330 agreements from 75 countries, with the contents of each agreement coded using a framework of 809 codes. Six national databases were found: two from the US and one each from France, the Netherlands, Brazil, and the UK. Of the six databases, three were fully open access: Légifrance (France), the US Office of Personnel Management (OPM)

database, and the Uitvoeringstaken Arbeidsvoorwaardenwetgeving (Netherlands). The database of the US Department of Labor was partially open access. The databases from Brazil and the UK required login credentials. One sector-specific database was identified (of Danish Shipping), with limited access to agreements on it (See Table 2).

Quantitative analysis was only possible for the WageIndicator (based on their coding framework), Légifrance, and US OPM databases, with the latter two being both open access and supporting keyword searches at the level of the whole database (as opposed to requiring each collective agreement to be downloaded and searched individually).

Quantitative indicators of attention to the four pillars of workforce nutrition in WageIndicator, Légifrance, and US OPM

The presence of keywords indicating either 'focused attention' or 'contextual attention' to workforce nutrition in the three analysed databases – WageIndicator, Légifrance and US OPM – is visualised in Figures 1 to 4. Additional information is presented in Annex 1.

Overall, workforce nutrition was rarely attended to explicitly, while contextual issues were well addressed, such as arrangements for workers having their meals (whether or not these were nutritious and health-promoting) or having access to medical care (whether or not it attended to diet-related diseases and risk factors). For instance, 'healthy food' was found in less than 0.5% of the collective agreements in Légifrance and US OPM (respectively 0.07% and 0.40%; no relevant WageIndicator variable). 'Nutrition' was found in 3.88% (48) agreements in US OPM and 0.23 (50) agreements in Légifrance (no relevant WageIndicator variable). In contrast, the contextual variable 'meal allowances/ vouchers agreed' was coded in over a quarter of the global (WageIndicator) collective agreements (27.45%; 914/3330); 'lunch', 'meal' and 'food' were found, respectively, in 47.98% (593), 41.59% (514) and 31.88% (394) of the US OPM agreements; and 'meal' ('repas') and 'meal allowance' ('indemnité de

repas') in 15.72% (3371) and 11.81% (2534) of the Légifrance agreements. Similarly, in the context of the Nutrition-focused Health Checks and Follow-up Pillar, none of the search terms indicative of focused attention was found with a frequency higher than 3%: in the US OPM, 'nutritional counselling' (and spelling variants) performed best at 2.59% (32), closely followed by 'cardiovascular' at 2.35% (29). In contrast, the variable for health/ medical assistance for employees was coded for 84.56% (2,816) of the global collective agreements and 'medical' was found in 45.39% (561) of the US OPM agreements. See Figures 1 and 3 and Annex 1.

Attention to breastfeeding (Figure 2) deviated from this general tendency of minimal focused attention – fair to high attention to contextual variables and broad similarity of patterns across the three databases. In the WageIndicator database, the variable for 'breastfeeding breaks and/or facilities' was coded for 18.05% (601) of agreements and health and safety clauses related to pregnancy and breastfeeding were found in 22.40% (746) agreements. Three further breastfeeding-related variables were found with a frequency above or only slightly lower than 10% in the WageIndicator database: pregnant or breastfeeding workers not being obliged to perform dangerous or unhealthy work (12.22%, 407), paid breastfeeding breaks (10.96%, 365), and alternatives to dangerous or unhealthy work for pregnant or breastfeeding workers (9.70%, 323). Attention to relevant contextual variables was also fairly high in the sample of global agreements: e.g. 48.86% (1,627) of them had a clause on paid maternity leave and 41.44% (1,380) on paid paternity leave.

In contrast, frequencies for the focused breastfeeding search terms were very low in both the French and US databases: the highest frequency was of 1.29% (16) for 'lactation room'/ 'lactation space' in US OPM. The contextual terms were also found far more rarely than in the global sample: e.g. 'maternity leave' at 11.95% (2564) in Légifrance and 8.82% (109) in US OPM.

Table 2: Databases of collective agreements identified

Database	Coverage and language(s)	Curator	Notes on access, availability of full texts of individual agreements and the full dataset for analysis, and search functions	Total CBAs (July 2025)
GLOBAL COVERAGE				
Collective Agreements Database of the WageIndicator https://wageindicator.org/labour-laws/collective-bargaining-agreements	Global – 75 countries in Africa, Asia, North America, South America and Europe Languages: 83	Non-profit, global: The WageIndicator Foundation	Open access. Availability of full texts of individual agreements: yes, at country pages accessible from main website. Availability of full dataset: yes, at Zenodo repository: https://wageindicator.org/about/researchlab/cba-data-base Latest full dataset obtained through a request to the WageIndicator team; Memorandum of Understanding signed. Search functions: contents of each CBA coded using a manual of 809 codes.	3,330
NATIONAL COVERAGE				
Légifrance The official website of the French government for publishing legislation, regulations, and legal information. www.legifrance.gouv.fr	France French	Government	Open access. Availability of full texts of individual agreements: yes. Availability of the full dataset: unclear. Search functions: users can search by keyword, file type (e.g. collective agreement, the Official Journal of the French Republic, date signed and publication date.	21,449

Database	Coverage and language(s)	Curator	Notes on access, availability of full texts of individual agreements and the full dataset for analysis, and search functions	Total CBAs (July 2025)
U.S. Office of Personnel Management (OPM) Collective Bargaining Agreement Database Centralized repository of CBAs between federal agencies and unions representing federal employees. https://www.opm.gov/policy-data-oversight/labor-relations/collective-bargaining-agreements/	United States English	Government	Open access. Availability of full texts of individual agreements: yes. Availability of the full dataset: yes, can be exported. Search functions: users can search by agency, sub-agency, activity/office/region, union, local, Bargaining Unit Status (BUS) codes, and document contents (keywords).	1,236
UAW (Uitvoeringstaken Arbeidsvoorwaardenwetgeving) Official Dutch government platform focused on the implementation and enforcement of labour conditions legislation in the Netherlands, particularly concerning collective labour agreements. www.uitvoeringarbeidsvoorwaardenwetgeving.nl	Netherlands Dutch	Government	Open access. Availability of full texts of individual agreements: high but incomplete (in a test of 50 records, 46 included the full text). Availability of the full dataset: unclear. Search functions: can filter by date, document type, and title keywords; does not support keyword searches within documents.	Unclear
Online Public Disclosure Room Provides access to CBAs submitted by labour unions and employers across various industries to the Office of Labor-Management Standards (OLMS), a division of the US Department of Labour. https://www.dol.gov/agencies/olms/public-disclosure-room	United States English	Government	Partially open access. Availability of full texts of individual agreements: Yes. Availability of the full dataset: Unclear. Search functions: can filter by date, location, union, expiration date, The North American Industry Classification System (NAICS) document type, number of workers, and publicity; does not support keyword search within documents.	4,764

Database	Coverage and language(s)	Curator	Notes on access, availability of full texts of individual agreements and the full dataset for analysis, and search functions	Total CBAs (July 2025)
Interactive Collective Agreements Database of Unite, the Union https://www.uniteunion.org/work-voice-pay/interactive-collective-agreements-database	United Kingdom	Trade union	Access limited to Unite shop stewards and representatives. Request for access for research purposes (paid if needed) declined.	Unclear
Mediador Free online platform for the creation, registration, and public consultation of collective labour agreements nationwide, promoting transparency and access to collective bargaining information. https://www3.mte.gov.br/sistemas/mediador/ConvencaoColetiva	Brazil	Government	Login credentials required.	Unclear
SECTOR COVERAGE				
Danish Shipping Trade and employers' organisation for Denmark's shipping industry. https://danishshipping.dk/arbejdsmarked/overenskomster-og-aftaler/	Denmark	Shipping industry	Some open access. Login credentials required for further access. Availability of full texts of individual agreements: 15. Availability of the full dataset: unclear. Search functions: no filters.	15

While breastfeeding was the workforce nutrition pillar which received the most focused attention of the four, the one on nutrition education received the least (0.07%, 16, for 'éducation nutritionnelle' in Légifrance; 0.59%, 6, for 'nutrition education' in US OPM; no corresponding WageIndicator variable) (Figure 4).

Figure 1. Healthy food at work

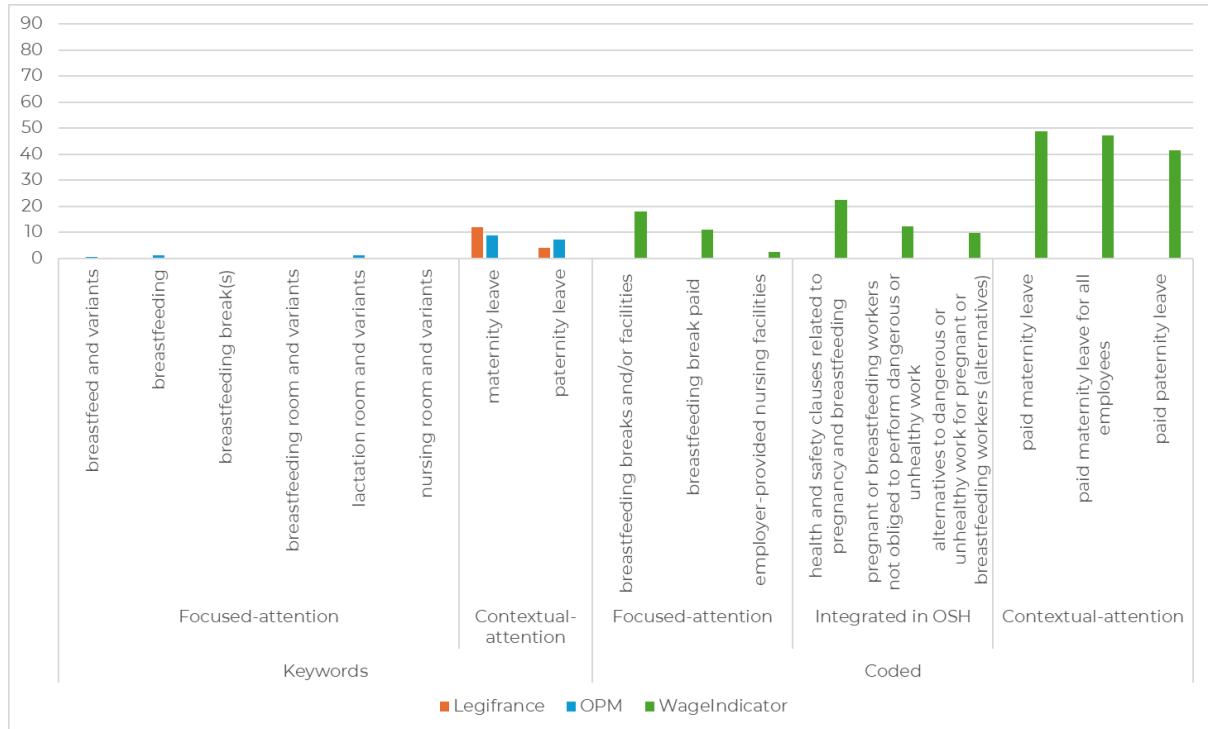


Figure 2. Breastfeeding support

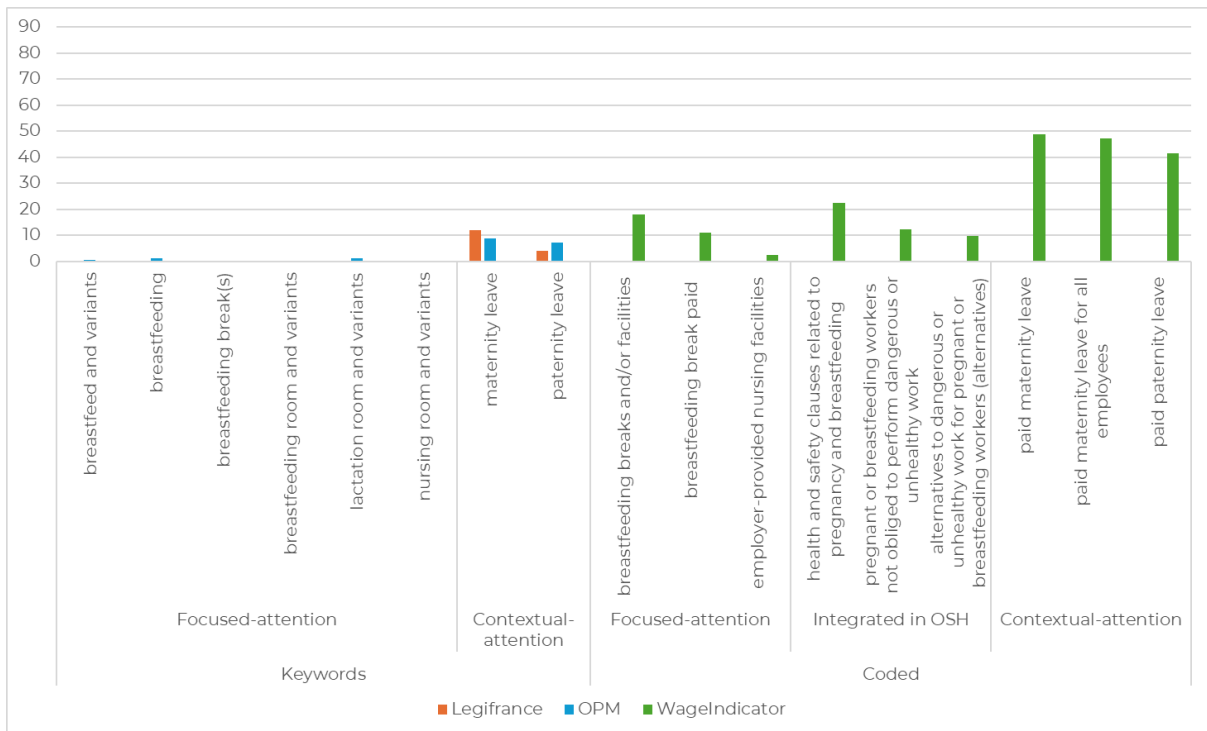


Figure 3. Nutrition-focused health checks and follow-up

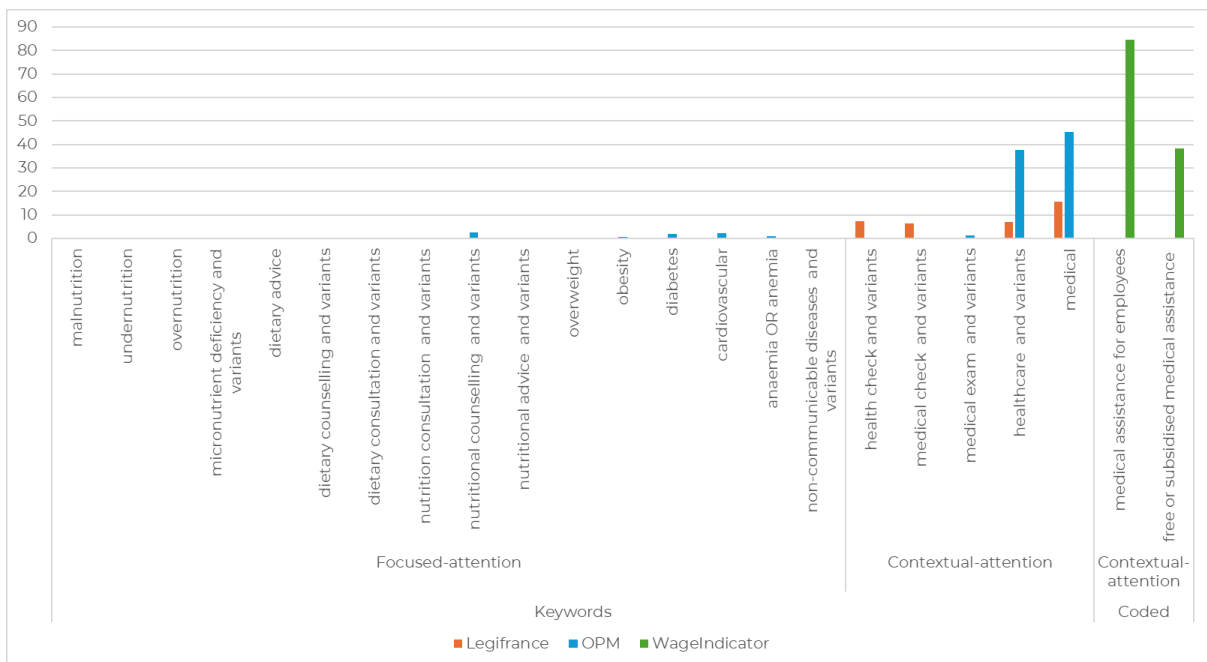
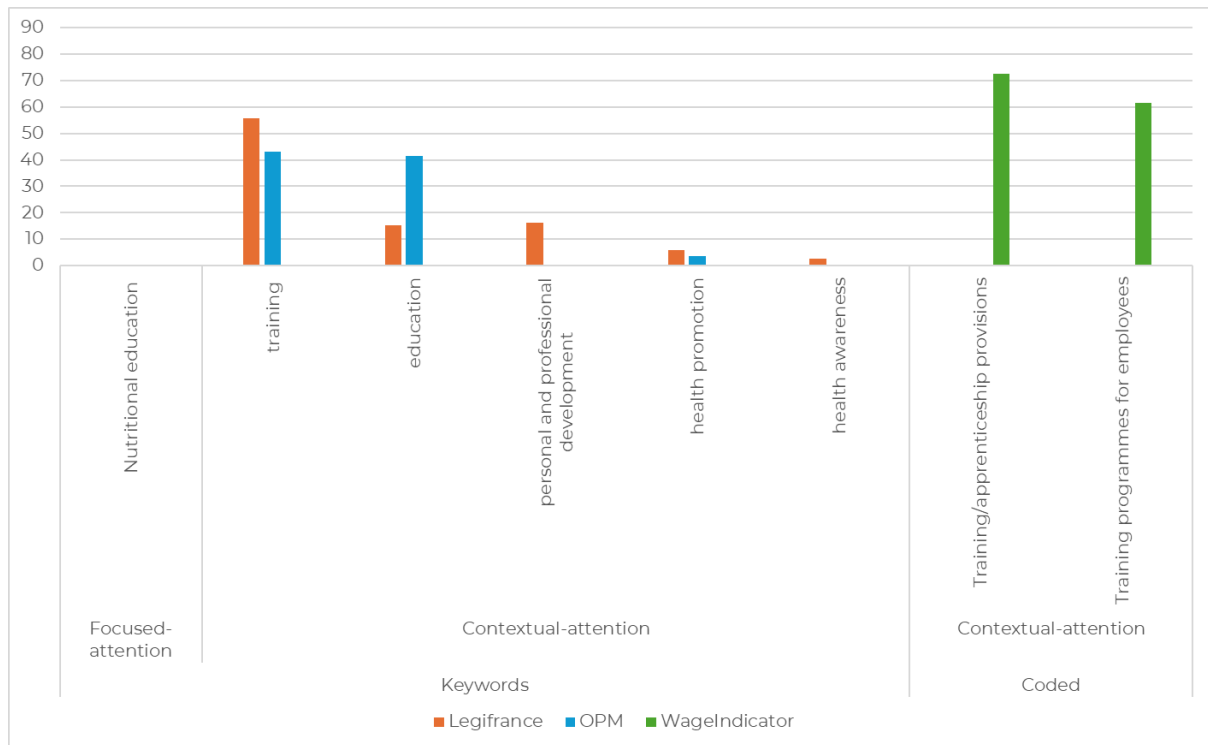


Figure 4. Nutrition education



Findings from the in-depth analysis

The exploratory in-depth analysis of 49 collective agreements (See Tables 3a, b) confirmed findings from the quantitative analysis that even when collective agreements address workers' meals and eating, overall health, and training and development, this rarely includes focused attention to the nutritional quality of meals, diet-related conditions and risk factors, or nutritional education. Nevertheless, there were promising exceptions. Boxes 4a-d give examples of both adequate and sub-par (contextual) attention to the respective pillar of workforce nutrition.

Table 3a. Collective agreements, per country, reviewed in depth

Income level	Country	CBAs	Reason for prioritisation
Low income	Ethiopia	3	GAIN country
	Mozambique	2	GAIN country
Low-middle income	Bangladesh	2	GAIN country
	Benin	5	GAIN country
	Indonesia	3	GAIN country
	Kenya	1	GAIN country
	Denmark	14	Shortlisted database

	France	5	Shortlisted database
	Netherlands	8	Shortlisted database
	Portugal	4	Shortlisted individual CBAs
	United States	2	Shortlisted database

Table 3b: Collective agreements, per industry, reviewed in depth

Priority in searches as per study focus	Industry	CBAs
Priority (due to confined working environment)	Shipping	19
	Transportation	9
	Mining	5
	Construction	4
Non-priority (added for maximum variation)	Manufacturing	6
	Agroforestry	3
	Healthcare	1
	Public administration	1
	Textiles	1

The industries analysed were prioritised based on the nature of their worksites. Shipping, transportation, mining, and construction were selected as priority sectors because workers often operate in confined or remote locations where access to food is limited and largely provided by the employer. This approach has also been used in previous research (16). Non-priority industries were included to introduce variation.

BOX 4A. HEALTHY FOOD AT WORK – ILLUSTRATIVE EXAMPLES OF COLLECTIVE AGREEMENT CLAUSES

Examples of attention to healthy food at work

Textiles, Indonesia (2021) (20)

Under a clause about facilities: *'Worker's canteen: Employers provide a clean, healthy, neat and tidy canteen, and the menu is caloric [filling] and nutritious'* [original in Bahasa].

Under a clause about providing food:

- *'Employers provide healthy food for workers'* [original in Bahasa].
- *'The provision of meals to workers is carried out in the form of proper food in accordance with health standard'* [original in Bahasa].

Examples of attention to food and meals for workers, with no mention of their nutritional value

Shipping, Denmark (2023) (21)

Under a clause about working hours: *'The weekly working hours are 37 hours per week including meal breaks'* [original in Danish].

Under a clause about wage conditions: *'Supplements are given for working at inconvenient times as well as for continuous operational functions with customers all the time, which require flexibility, including in relation to meal breaks'* [original in Danish].

Under protocols: *'The employee must be guaranteed an adequate daily meal break. The meal break, which may not exceed 29 minutes, shall be included in the working hours, as the employee may not leave the workplace during the break and is at the disposal of the company'* [original in Danish].

Manufacturing, Bangladesh (2018) (22)

Under social security for workers: Opening canteen: *'...it was agreed to open a canteen for all workers / employees working in the tannery industry as per the labour law'* [original in Bengali]. Provision of food items at reduced price: *'The matter of providing essential food items at reduced price to the workers/employees working in tannery industries remains under consideration.'* [original in Bengali].

Mining, Indonesia (2014) (23)

Under overtime work clause: *'Workers who are asked to work more than 2 hours or more after normal working hours without written notification outside Gosowong will be provided with food that must not be less than 1400 calories (Ministerial Decree No. 102/2004 Article 7 paragraph 1)'* [original in Bahasa].

Under transportation and meal provision clause: *'...To cover transportation and meal costs, an allowance of Rp. 50,000 (Fifty Thousand Rupiah) is provided per working day, which is added to the monthly wages for each local worker working in the Tobelo, Sofifi, Ternate, Jakarta, Manado offices'* [original in Bahasa].

BOX 4B. BREASTFEEDING SUPPORT – ILLUSTRATIVE EXAMPLES OF COLLECTIVE AGREEMENT CLAUSES

Examples of attention to breastfeeding support

Manufacturing, France (2021) (24)

Under an article on Prenatal and Postnatal leave:

'In accordance with the law, employees may breastfeed their children on the premises' [original in French].

'For one year from the date of birth, employees who are breastfeeding their children are entitled to one hour per day during working hours for this purpose' [original in French].

'This hour is divided into two 30-minute periods, one during the morning shift and the other during the afternoon shift. The period during which work is stopped for breastfeeding is determined by agreement between the employee and the employer' [original in French].

Examples of attention to maternity- and paternity-related clauses with no mention of breastfeeding

Manufacturing, Bangladesh (2018) (25)

Under a maternity leave clause: *'...maternity leave and maternity welfare benefits will be provided to female workers/ employees working in the tannery industry, in*

accordance with the labour law. All the facilities to which female workers/ employees are entitled under the labour law, including separate toilets, changing rooms and dining rooms, will be provided for them' [original in Bengali].

Transportation, Kenya (2013) (26)

Under a maternity leave/paternity leave clause:

'A female employee shall be entitled to three (3) months maternity leave with full pay in a year and shall not forfeit her annual leave for that year.'

'A female employee who has taken her maternity leave shall not incur any loss of privileges during such period.'

'A male employee shall be entitled to two weeks paternity leave in a year.' [original in Bengali].

BOX 4C. NUTRITION-FOCUSED HEALTH CHECKS AND FOLLOW-UP – ILLUSTRATIVE EXAMPLES OF COLLECTIVE AGREEMENT CLAUSE

Examples of attention to nutrition-focused health checks and follow-up

Mining, France (2022) (27)

Under a health prevention clause: *'primary prevention including screening for cardiovascular disease, mental health, endometriosis, obesity. Secondary prevention including therapeutic patient education actions on certain disease such as diabetes'* [original in French].

Healthcare, US (2023) (28)

Under a preventive health leave clause: *'Employees with a balance of less than 80 hours of accrued sick leave may request up to 4 hours of preventive health leave (administrative leave) each calendar year for preventive health screenings.'*

Examples of preventive health screenings include, but are not limited to, prostate, cervical, colorectal, breast cancer, sickle cell anemia, blood lead level, blood cholesterol level, immunity system disorders such as HIV, and blood sugar level testing for diabetes. Overall general health screenings such as annual physicals, and eye and dental exams can also be included.'

Examples of attention to health checks, with no mention of nutrition

Agroforestry, Indonesia (2021) (29)

Under a health check and maintenance clause: *'Employers provide assistance for health check-ups for their workers...and may require workers to have a health check'* [original in Bahasa].

Transportation, Netherlands (2023) (30)

Under medical examination clause: *'Medical examinations are conducted in accordance with the requirements for the Rijnpatent and are paid for by the employer'* [original in Dutch].

4D. NUTRITION EDUCATION – ILLUSTRATIVE EXAMPLES OF COLLECTIVE AGREEMENT CLAUSES

Examples of attention to nutrition education

Mining, France (2022) (31)

Nutrition is one of the indicators of the quality of life and working conditions.

'In addition, occupational health and prevention services also provide advice on health aspects, such as nutrition, sleep, and the prevention of addictive practices, such as alcohol or drug use' [original in French].

Mining, France (2022) (32)

Under a clause addressing a health coaching programme: the programme includes nutrition as one of its priority themes.

Agroforestry, France (2022) (33)

Under a clause on preventative actions: *'The social partners recommend that companies raise employees' awareness of the benefits of preventive actions that can be implemented within their organisation (advice from physiotherapists, osteopaths, on nutrition, addiction, physical activity, stress, etc.), which may be promoted and/or covered by supplementary health insurance, or any other initiatives aimed at improving well-being at work'* [original in French].

Example of attention to health promotion in general

Construction, the Netherlands (2023) (34)

Under an individual budget clause: The employer provides an individual budget that can be used to maintain employees' health and stay motivated at work.

Discussion

This study found that focused attention to the four pillars of workforce nutrition is overall rare in collective agreements. Focused attention to breastfeeding support in the global collection of agreements (WageIndicator) was higher, presenting a partial exception to the pattern. Attention was, however, fair to high when it came to contexts indicative of supportive environments or 'natural homes' for workforce nutrition initiatives, such as clauses on meal breaks, vouchers and allowances; social security arrangements for parental leave; provision of health and medical assistance for workers; and training and development opportunities. Such contexts are a fertile ground for raising awareness of and advancing initiatives on workforce nutrition.

From the limited direct comparisons we could make, it is worth noting that a 2015 study using the WageIndicator database found that 92% of collective agreements had a health/medical assistance clause and 63% had a paid maternity leave clause (19). In contrast, in 2025, we found that 84.56% of the WageIndicator agreements had a health/ medical assistance clause and 47.27% a paid maternity leave clause, a substantial drop in both cases, particularly for maternity leave.

Strength and Limitations

The main strength of this study is its pioneering character, as the first study on the presence of nutrition considerations in collective agreements. The cross-database analysis provided a comparative perspective. The analysis of both focused and contextual keywords and variables allowed not only to assess the baseline of attention to workforce nutrition in collective agreements but to identify inroads towards radical progress.

This study did not have the capacity to explore ways of analysing the databases which either had restrictions on access or did not offer search functionalities enabling the type of keyword searches we performed in Légifrance and US OPM. In the lists of English and French search terms, highly effective terms may be missing, while some of those used may have captured mostly false positives. Further searches in a variety of languages are needed. Further work is also needed to assess the degree to which clauses which refer to concepts of interest have sufficient depth and richness.

Implications for Policy, Practice, and Research

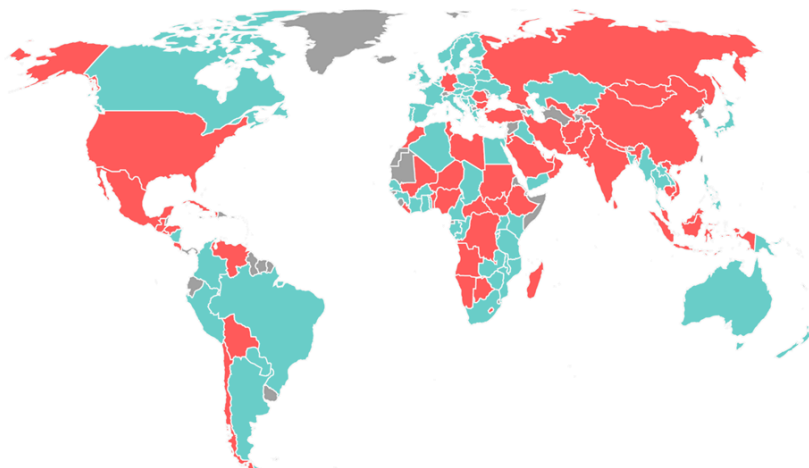
The potential for using collective agreements to improve the nutritional status of the workforce as well as its health more broadly is immense in countries with strong access to collective bargaining, such as much of South America and Europe. It remains largely untapped, even if there are exceptions. Relying on collective agreements would not, however, be a universally viable path to

improving workforce nutrition: 42% of countries (61 out of 145 assessed) place limits on collective bargaining (Figure 5). In such countries, policy-based or company-led reforms may achieve more in strengthening workforce nutrition.

Committed, collaborative action on workforce nutrition is required on behalf of UN agencies, led by WHO and ILO; workers' unions, employers' associations and major businesses; national ministries of health and labour; national public health institutes and their global umbrella organisations, such as the International Association of National Public Health Institutes; international and national non-governmental organisations advancing nutrition and a broad range of further stakeholders.

On the side of businesses, interest in workforce health and well-being as a way of generating economic value appears to be skyrocketing (40). The market size of global corporate wellness (with nutrition services considered part of it) is also expanding. It was assessed at USD 63.34 billion in 2023, with forecasts to reach USD 109.96 billion by 2030 (41). Public, third sector and academic organisations both have a role to play as collaborators to businesses and are needed as their counterpoise and corrective presence.

FIGURE 5. Access to collective bargaining, by country (n=145 countries).



Data and visualisation from © WageIndicator 2025 – Labour Rights Index – Freedom of Association.
<https://labourrightsindex.org/2024/2024-the-index-in-text-explanation/freedom-of-association>

Directions for Future Research

Future research could expand, refine, and further systematise the methodological approach used in this study. This would allow for more robust and comparable analyses across different datasets and contexts, strengthening the evidence base on how workforce nutrition is reflected in collective agreements.

Further work should conduct in-depth comparisons by geography, sector, and type of workforce, including regression analyses to identify predictors of attention to nutrition. An immediate context for such analysis is offered by the WageIndicator database, which has global coverage and is highly structured and extensively coded. Expanding searches to include resources in languages other than English would also improve coverage and reduce potential bias.

Methodologically, future studies could deploy both highly automated approaches, such as word frequency analyses, and more manual, reflective approaches, such as thematic analysis, to capture attention to nutrition in collective agreements from different perspectives and with varying levels of granularity. In addition, model clauses should be identified to inform future bargaining practices.

Finally, opportunities should be used to establish research and evaluation mechanisms capable of tracking progress in the incorporation of nutrition considerations into collective agreements over time. One discrete but potentially highly effective action in this direction could involve collaborations between nutrition-focused NGOs and the WageIndicator team to formulate nutrition-relevant variables for inclusion in the database's coding structure.

Conclusion

Workforce nutrition considerations appear to be integrated to a minimal degree in collective agreements, while contexts which can support improved

workforce nutrition are already well attended to. The full potential of workforce nutrition remains sorely underused: as an occupational health and public health intervention; as a tool for improved business productivity and competitiveness; and as an aspect of the decent work agenda. In countries with strong access to collective bargaining, encouraging the incorporation of nutrition considerations in collective agreements is a specific, pragmatic and equity-enhancing action in support of this cause.

References

1. Wellesley, L.; Eis, J.; Marijs, C.; Vexler, C.; Waites, F.; Benton, T.G. The Business Case for Investment in Nutrition; Chatham House: London, UK, 2020.
2. Wanjek, C. Food at Work: Workplace Solutions for Malnutrition, Obesity and Chronic Diseases. International Labour Office: Geneva, Switzerland, 2005.
3. FAO; IFAD; UNICEF; WFP; WHO. The State of Food Security and Nutrition in the World 2022. Repurposing Food and Agricultural Policies to Make Healthy Diets More Affordable; FAO: Rome, Italy, 2022).
4. Cowbrough K, Gardner E. Nutrition at Work: Nutrition interventions in workplace health programmes: a literature review. Occup Heal Work, 2016; 13:30–6.
5. The evidence for workforce nutrition programmes | GAIN. (n.d.). GAIN. <https://www.gainhealth.org/resources/reports-and-publications/evidence-workforce-nutrition-programmes>
6. World Health Organization. Global Strategy on Diet, Physical Activity and Health. WHO, 2004. <https://www.who.int/publications/i/item/9241592222>. Last accessed Nov 2025.
7. Workforce Nutrition Alliance. About the Workforce Nutrition Alliance [webpage, undated]. <https://workforcenutrition.org/about/>. Last accessed Jun 2025.
8. de Albuquerque FM, Nunes NC, de Souza VMG, Curioni CC, Bandoni DH, Canella DS. The nutritional quality of the meals and foods provided to beneficiaries of the Brazilian Worker's Food Program: a systematic review. J Nutr Sci, 2025;14:e31. doi: 10.1017/jns.2025.20
9. Shin WY, Kim JH. Use of workplace foodservices is associated with reduced meal skipping in Korean adult workers: A nationwide

- cross-sectional study. PLoS One, 2020;15(12):e0243160. doi: 10.1371/journal.pone.0243160
10. Workforce Nutrition Alliance. Self-assessment Scorecard: The golden standard for assessing nutrition at workplaces [webpage, undated]. <https://workforcenutrition.org/services/self-assessment-scorecard/>. Last accessed Jun 2025.
 11. Workforce Nutrition Alliance. Self-Assessment Scorecard Pre-Read: Self-Assessment of Your Workforce Nutrition Programme's Performance. Ver 7.7, 30 Sep 2024. https://drive.google.com/file/d/1qmhJOkdlRckyXg_O5a3MXX6JmUWhdgF0/view. Last accessed Jun 2025.
 12. Hyży A, Jaworski M, Cieślak I, Gotlib-Małkowska J, Panczyk M. Improving eating habits at the office: an umbrella review of nutritional interventions. *Nutrients*, 2023;15(24):5072.
 13. Nyhus Dhillon C, Ortenzi F. Assessing the Impact of Workforce Nutrition Programmes on Nutrition, Health and Business Outcomes: A Review of the Global Evidence and Future Research Agenda. *Int J Environ Res Public Health*, 2023;20(9):5733. Doi: 10.3390/ijerph20095733
 14. Peñalvo JL, Sagastume D, Mertens E, Uzhova I, Smith J, Wu JH, Bishop E, Onopa J, Shi P, Micha R, Mozaffarian D. Effectiveness of workplace wellness programmes for dietary habits, overweight, and cardiometabolic health: a systematic review and meta-analysis. *The Lancet Public Health*, 2021;6(9):e648-60.
 15. Rachmah Q, Martiana T, Mulyono, Paskarini I, Dwiyanti E, Widajati N, Ernawati M, Ardyanto YD, Tualeka AR, Haqi DN, Arini SY. The effectiveness of nutrition and health intervention in workplace setting: a systematic review. *Journal of public health research*, 2022;11(1):jphr-2021.
 16. Lok X and Vidianti N. Nourishing the Workforce: Nutrition Integration in Occupational Safety and Health Regulations. Global Alliance for Improved Nutrition (GAIN). Working Paper #44. Geneva, Switzerland, 2024. DOI: <https://doi.org/10.36072/wp.44>

17. C154 – Collective Bargaining Convention, 1981 (No 154).
<https://webapps.ilo.org/static/english/inwork/cb-policy-guide/collectivebargainingconvention1981No154.pdf>. Last accessed Sep 2025.
18. International Labour Organization. International Labour Office, Governance and Tripartism Department, Conditions of Work and Equality Department. Collective bargaining: a policy guide. Geneva: ILO, 2015.
https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_protect/@protrav/@travail/documents/instructionalmaterial/wcms_425004.pdf. Last accessed May 2025.
19. Besamusca J, Tijdens K. Comparing collective bargaining agreements for developing countries. International Journal of Manpower, 2015;36(1):86-102.
20. PT. SHIN HWA BIZ, SERIKAT KERJA/SERIKAT BURUH GARTEKS, & PT. Shin Hwa Biz KSBSI, P. B. (2021). PERJANJIAN KERJA BERSAMA (PKB).
<https://www.database-fsbgarteks.id/dokumen/pkb/PKB-SHB1-2021-2022.pdf>
21. Færgerederierne, 3F Fagligt Fælles Forbund, & Transportgruppen. (2023). Overenskomst 2023-2025 for trosseførere [Report].
<https://danishshipping.dk/media/burl333f/trossefoerere-2023-2025-webfil.pdf>
22. সম্মিলিত চুক্তির ডাটাবেজ. (n.d.). WageIndicator Foundation.
<https://mywage.org.bd/labour-laws/collective-agreements-database/bipartite-collective-bargaining-agreement-between-bangladesh-finished-leather-leathergoods-and-footwear-exporters-association-bflifea-and-tannery-workers-union-16th-july-2018>
23. Database Perjanjian Kerja Bersama. (n.d.). WageIndicator Foundation.
<https://gajimu.com/pekerjaan-yanglayak/perjanjian-kerja-bersama-basis-data/perjanjian-kerja-bersama-antara-pt-nusa-halmahera-minerals-dengan-spsi-pt-nusa-halmahera-minerals>
24. Texte de base : Convention collective nationale de la production et de la transformation des papiers et cartons du 29 janvier 2021 – Légifrance. (n.d.). https://www.legifrance.gouv.fr/conv_coll/id/KALITEXT000043918738
25. সম্মিলিত চুক্তির ডাটাবেজ. (n.d.). WageIndicator Foundation.
<https://mywage.org.bd/labour-laws/collective-agreements-database/bipartite-collective-bargaining-agreement-between-bangladesh-finished-leather-leathergoods-and-footwear-exporters-association-bflifea-and-tannery-workers-union-16th-july-2018>

26. Collective Agreements Database. (n.d.). WageIndicator Foundation.
<https://mywage.org/kenya/labour-laws/collective-agreements-database/memorandum-of-agreement-between-air-connection-limited-and-kenya-shipping-clearing-and-warehouses-workers-union>
27. Accord du 7 février 2022 relatif à la gouvernance et aux garanties contributives et non-contributives du régime de protection sociale complémentaire – Textes Attachés – Avenant du 1er juillet 2022 à l'accord du 7 février 2022 relatif à la gouvernance et aux garanties contributives et non-contributives du régime de protection sociale complémentaire – Légifrance. (n.d.).
https://www.legifrance.gouv.fr/conv_coll/id/KALITEXT000046478634
28. Collective Bargaining Agreement between The Centers for Medicare & Medicaid Services and the American Federation of Government Employees, Local 1923, AFL-CIO (2023)
<https://www.opm.gov/cba/api/documents/85c81dc8-3f57-4398-924e-b67b5e0fe42a/attachments/2268%20HHS%20-%20CMSAFGE%20Local%201923CBA7-1-2027.pdf>
29. PERJANJIAN KERJA BERSAMA (P.K.B) PT. AGROJAYA PERDANA (2021)
<https://agrojayaperdana.com/en/files/Perjanjian%20Kerja%20Bersama.pdf>
30. Contact. (n.d.). MinSZW | Directie UAW – 2043 – BLUE AMIGO WATERBORNE PUBLIC TRANSPORT NETHERLANDS B.V. – 01-01-2023 – 31-12-2023 – Regulier – kvo datum – 05-06-2023. Directie UAW.
<https://www.uitvoeringarbeidsvoorwaardenwetgeving.nl/mozard/!suite92.scherm1007?mObj=37124&mSelod=529688>
31. Convention collective nationale de la métallurgie du 7 février 2022 – Étendue par arrêté du 14 décembre 2022 JORF 22 décembre 2022 – Textes Attachés – Accord du 7 février 2022 relatif à la santé, la sécurité, la qualité de vie et aux conditions de travail – Légifrance. (n.d.).
https://www.legifrance.gouv.fr/conv_coll/id/KALITEXT000046478339
32. Accord du 7 février 2022 relatif à la gouvernance et aux garanties contributives et non-contributives du régime de protection sociale complémentaire – Textes Attachés – Avenant du 1er juillet 2022 à l'accord du 7 février 2022 relatif à la gouvernance et aux garanties contributives et non-contributives du régime de protection sociale complémentaire –

Légifrance. (n.d.).

https://www.legifrance.gouv.fr/conv_coll/id/KALITEXT000046478634

33. Convention collective nationale des distributeurs conseils hors domicile (distributeurs CHD). Etendue par arrêté du 4 janvier 1974 JORF 20 janvier 1974. – Textes Attachés – Accord n° 2022/5 du 23 novembre 2022 relatif à certains risques professionnels et à l'amélioration des conditions de travail (1) – Légifrance. (n.d.).

https://www.legifrance.gouv.fr/conv_coll/id/KALITEXT000047348567

34. Contact. (n.d.). MinSZW | Directie UAW - 10 - BOUW EN INFRA (CAO) - 01-01-2023 - 31-12-2023 - Regulier - kvo datum - 11-05-2023 - TTW. Directie UAW.

<https://www.uitvoeringarbeidsvoorwaardenwetgeving.nl/mozard/!suite92.scherm1007?mObj=37033&mSelod=661966>

35. Christianson J, Sommers-Olson B, Fox C, Johnson NL. Nurse Perspectives on Labor Union Participation Prior to Implementation of a Collective Bargaining Agreement: A Qualitative Study. *Creat Nurs*. 2025 Jan 28;10784535251314146. doi: 10.1177/10784535251314146. Epub ahead of print. PMID: 39873151.

36. Stahl L, Struck JP, König J, Braun M, Westphal J. Umsetzung des neuen Tarifvertrags ab 2021 in urologischen Kliniken : Wunsch und Wirklichkeit [Implementation of the new collective agreement in 2021 in urological clinics : Expectations and reality]. *Urologe A*, 2022;61(4):407-410. German. doi: 10.1007/s00120-021-01736-w.

37. Ropponen A, Vanttola P, Koskinen A, Hakola T, Puttonen S, Härmä M. Effects of modifications to the health and social sector's collective agreement on the objective characteristics of working hours. *Ind Health*, 2017;55(4):354-361. doi: 10.2486/indhealth.2016-0166.

38. Muller J, Raphael D. Does unionization and working under collective agreements promote health? *Health Promot Int*, 2023 Aug 1;38(4):daab181. doi: 10.1093/heapro/daab181

39. Muller J, Mohamed FA, Masciangelo MC, Komakech M, Bryant T, Rafiq A, Jafry A, Raphael D. A bibliometric analysis of Health Promotion International content regarding unions, unionization and collective agreements. *Health Promot Int*, 2022;37(2):daab137. doi: 10.1093/heapro/daab137

40. World Economic Forum and McKinsey Health Institute. Thriving Workplaces: How Employers Can Improve Productivity and Change Lives. Insight Report. Jan 2025.
<https://www.mckinsey.com/mhi/our-insights/thriving-workplaces-how-employers-can-improve-productivity-and-change-lives>. Last accessed Nov 2025.

41. Beyond Market Insights. Corporate Wellness Market Overview. News item. Undated, likely Mar 2024.
<https://beyondmarketinsights.com/report/corporate-wellness-market/>. Last accessed Nov 2025.

Annex

ANNEX 1. Tables of Search Terms, Variables and Respective Frequencies by Workforce Nutrition Pillar

Table A1: WageIndicator, Légifrance and U.S. OPM findings relevant to Healthy Food at Work Pillar

General parameter and priority keywords HEALTHY FOOD AT WORK	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw number)	Keywords for OPM searches	% CBAs (raw number)
FOCUSED attention to healthy food at work						
Healthy, nutritious food at work; workforce nutrition						
nutrition	N/A	-	'nutrition'	0.23% (50)	'nutrition'	3.88% (48)
nutritious (for nutritious food/ meals/ diet)			'nutritive'	0.01% (3)	'nutritious'	0.16% (2)
healthy food	N/A	-	'alimentation saine'	0.07% (14)	'healthy food'	0.40% (5)
healthy meal(s)	N/A	-	'repas sain'	0.07% (15)	'healthy meal'	-
balanced meal(s)	N/A	-	'repas équilibré'	1.68% (360)	'balanced meal'	-
healthy diet(s)	N/A	-	'régime alimentaire sain'	0.04% (8)	'healthy diet'	-
balanced diet(s)	N/A	-	'regime alimentaire équilibré'	0.88% (188)	'balanced diet'	-

General parameter and priority keywords	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw number)	Keywords for OPM searches	% CBAs (raw number)
HEALTHY FOOD AT WORK						
fruit	N/A	-	'fruit'	2.31% (496)	'fruit'	0.89% (11)
vegetables	N/A	-	'legume'	1.59% (342)	'vegetable'	0.16% (2)
FOCUSED attention to healthy food at work integrated in OSH						
Healthy food at work in OSH clauses	N/A	-	Search cannot be operationalised at dataset level (without access to individual documents)		Search cannot be operationalised at dataset level (without access to individual documents)	
CONTEXTUAL attention – food and meals for workers, with attention to their nutritional value uncertain						
Provision of meals or meal vouchers/ allowances						
food	N/A	-	'nourriture'	2.00% (430)	'food'	31.88% (394)
			'aliments'	1.28% (275)		
meal(s)	N/A	-	'repas'	15.72% (3371)	'meal'	41.59% (514)
meal voucher(s)	See below	See below	'chèques-repas'	0.42% (90)	'meal voucher'	-
			'ticket restaurant'	0.25% (54)		
meal subsidy OR meal subsidies	See below	See below	'subvention pour les repas'	0.83% (177)	'meal subsidy' OR 'meal subsidies'	-

General parameter and priority keywords	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw number)	Keywords for OPM searches	% CBAs (raw number)
HEALTHY FOOD AT WORK meal allowance(s)	meal allowances/ vouchers agreed	27.45% (914/3330)	'indemnité de repas'	11.81% (2534)	'meal allowance'	0.81% (10)
	meals/ meal vouchers/ meals at discounted price agreed	22.94% (764/3330)				
	meal allowance/ voucher for all employees	24.44% (814/3330)				
	meal allowance/ voucher for remote workers	0.42% (14/3330)				
lunch	N/A	-	'déjeuner'	3.32% (713)	'food'	47.98% (593)
snack	N/A	-	'collation'	0.15% (33)	'snack'	3.32% (41)
			'goûter'	0.03% (6)		
Facilities for eating or purchasing food at work						
dining hall OR dining room	N/A	-	'salle à manger'	0.06% (12)	'dining hall' OR 'dining room'	0.57% (7)
cafeteria	N/A	-	'cafétéria'	0.40% (85)	'cafeteria'	-
canteen	N/A	-	'cantine'	0.65% (139)	'canteen'	1.38% (17)
mess	N/A	-			'mess'	1.70% (21)

Table A2: WageIndicator, Légifrance and U.S. OPM findings relevant to Breastfeeding Support Pillar

General parameter and priority keywords BREASTFEEDING at work	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw number)	Keywords for OPM searches	% CBAs (raw number)
FOCUSED attention to breastfeeding at work						
breastfeed, breast-feed, breast feed, breastfed			'allaite'	0.18% (39)	'breastfeed', 'breast-feed', 'breast feed', 'breastfed'	0.40% (5)
breastfeeding			'allaitement maternel'	0.03% (6)	'breastfeeding'	1.05% (13)
breastfeeding break(s)			'pause allaitement'	0.21% (45)	breastfeeding break(s)	-
breastfeeding facilities breastfeeding room OR breastfeeding space OR breastfeeding area OR breast-feeding room OR breast-feeding space OR breast-feeding area			'espace d'allaitement'	0.14% (30)	'breastfeeding room' OR 'breastfeeding space' OR 'breastfeeding area' OR 'breast-feeding room' OR 'breast-feeding space' OR 'breast-feeding area'	-
lactation room OR lactation space OR lactation area			'salle d'allaitement'	0.11% (24)	'lactation room' OR 'lactation space' OR 'lactation area'	1.21% (15)
nursing room OR nursing space OR nursing area			'zone d'allaitement'	0.10% (21)	'nursing room' OR 'nursing space' OR 'nursing area'	0.08% (1)
	breastfeeding breaks and/or facilities	18.05% (601/3330)				
	breastfeeding break paid	10.96% (365/3330)				

General parameter and priority keywords BREASTFEEDING at work	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw number)	Keywords for OPM searches	% CBAs (raw number)
	employer-provided nursing facilities	2.40% (80/3330)				
FOCUSED attention to breastfeeding integrated in OSH						
breastfeeding in OSH clauses	health and safety clauses related to pregnancy and breastfeeding	22.40% (746)	Search cannot be operationalised at dataset level (without access to individual documents)	-	Search cannot be operationalised at dataset level (without access to individual documents)	
	pregnant or breastfeeding workers not obliged to perform dangerous or unhealthy work	12.22% (407)				
	alternatives to dangerous or unhealthy work for pregnant or breastfeeding workers	9.70% (323)				
CONTEXTUAL attention to breastfeeding at work – social security arrangements for pregnancy, childbirth and parental leave						
maternity leave	paid maternity leave	48.86% (1627)	'congé maternité'	11.95% (2564)	'maternity leave'	8.82% (109)
		paid maternity leave for all employees				
paternity leave	paid paternity leave	41.44% (1380)	'congé paternité'	4.02% (864)	'paternity leave'	7.12% (88)

Table A3: WageIndicator, Légifrance and U.S. OPM findings relevant to Nutrition-focused Health Checks and Follow-up Pillar

General parameter and priority keywords nutrition-focused health checks at work	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw no.)	Keywords for OPM searches	% CBAs (raw number)
FOCUSED attention to nutrition-focused health checks and follow-up						
Nutrition-focused health checks and follow-up						
health check <i>in proximity to</i> nutrition (for variants and synonyms of health check, see CONTEXTUAL attention)	N/A	-	Search cannot be operationalised at dataset level (without access to individual documents)		Search cannot be operationalised at dataset level (without access to individual documents)	
malnutrition	N/A	-	'malnutrition'	0.01% (2)	'malnutrition'	0.08% (1)
undernutrition	N/A	-	'sous-nutrition'	0.28% (60)	'undernutrition'	-
overnutrition	N/A	-	'suralimentation'	-	'overnutrition'	-
micronutrient deficiency OR micronutrient deficiencies	N/A	-	'carence en micronutriments'	-	'micronutrient deficiency' OR 'micronutrient deficiencies'	-
dietary advice	N/A	-	'conseils diététiques'	0.46% (99)	'dietary advice'	-
dietary counselling OR dietary counseling	N/A	-			'dietary counselling' OR 'dietary counseling'	-

General parameter and priority keywords	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw no.)	Keywords for OPM searches	% CBAs (raw number)
dietary consultation OR dietetic consultation OR dietitian consultation	N/A	-	'consultation diététique'	0.18% (39)	'dietary consultation' OR 'dietetic consultation' OR 'dietitian consultation'	-
nutrition consultation OR nutritional consultation	N/A	-	'consultation nutritionnelle'	0.06% (13)	'nutrition consultation' OR 'nutritional consultation'	-
nutritional counselling OR nutritional counseling OR nutrition counselling OR nutrition counseling	N/A	-	'conseils en nutrition'	0.22% (48)	'nutritional counselling' OR 'nutritional counseling' OR 'nutrition counselling' OR 'nutrition counseling'	2.59% (32)
nutritional advice OR nutrition advice	N/A	-			'nutritional advice' OR 'nutrition advice'	-
Major diet-related conditions						
overweight	N/A	-	'surpoids'	0.02% (4)	'overweight'	0.32% (4)
obesity	N/A	-	'obésité'	0.05% (10)	'obesity'	0.49% (6)
diabetes	N/A	-	'diabète'	0.12% (26)	'diabetes'	1.94% (24)
cardiovascular	N/A	-	'cardiovasculaire'	0.02% (5)	'cardiovascular'	2.35% (29)

General parameter and priority keywords	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw no.)	Keywords for OPM searches	% CBAs (raw number)
anaemia, anemia	N/A	-	'anémie'	0% (1)	'anaemia' OR 'anemia'	0.81% (10)
non-communicable diseases OR noncommunicable diseases OR NCD	N/A	-	'maladies non transmissibles'	0.02% (4)	'non-communicable diseases' OR 'noncommunicable diseases' OR 'NCD'	-
FOCUSED attention to nutrition-focused health check-ups integrated in OSH						
nutrition-focused health checks in OSH clauses	N/A	-	Search cannot be operationalised at dataset level (without access to individual documents)	-	Search cannot be operationalised at dataset level (without access to individual documents)	-
CONTEXTUAL attention – attention to OSH and to healthcare for the workforce more broadly						
Occupational safety and health						
occupational safety and health			'santé et sécurité au travail'	14.06% (3016)	'occupational safety and health'	44.58% (551)
occupational health and safety			'hygiène, sécurité et conditions de travail'	7.23% (1550)	'occupational health and safety'	10.68% (132)
occupational health			'santé au travail'	18.80% (4032)	'occupational health'	39.48% (488)
occupational medicine			'médecine du travail'	3.89% (835)	'occupational medicine'	0.81% (10)

General parameter and priority keywords	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw no.)	Keywords for OPM searches	% CBAs (raw number)
nutrition-focused health checks at work	health and safety workplace policy (healthandsafetypolicy)	70.15% (2336)				
	external health and safety policy only	9.01 (300)				
	health and safety training	30.42% (1013)				
	health and safety provisions re: work accidents, occupational diseases, health impairments and incapacities, general improvements in working conditions, targeted improvements in working conditions, reallocation/reclassification in case of health problems or incapacity to work	52.61% (1752)				

General parameter and priority keywords	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw no.)	Keywords for OPM searches	% CBAs (raw number)
Health check-ups in general						
health check OR health check-up OR health checkup			'bilan de santé'	7.48% (1605)	'health check' OR 'health check-up' OR 'health checkup'	0.16% (2)
medical check OR medical check-up OR medical checkup			'examen medical'	6.35% (1361)	'medical check' OR 'medical check-up' OR 'medical checkup'	-
medical exam OR medical examination					'medical exam' OR 'medical examination'	1.21% (15)
Healthcare						
healthcare			'soins de santé'	6.95% (1490)	'healthcare' OR 'health care'	37.62% (465)
medical (for medical care, services, facilities, assistance, centre, staff, etc.)			'médicaux'	15.48% (3320)	'medical'	45.39% (561)
	health/ medical assistance for employees	84.56% (2816)				
	free or subsidised medical assistance	38.29% (1275)				

Table A4: WageIndicator, Légifrance and U.S. OPM findings relevant to Nutrition Education at Work Pillar

General parameter and priority keywords NUTRITION EDUCATION at work	WageIndicator variable	% CBAs (raw number)	Keywords for Légifrance searches	% CBAs (raw number)	Keywords for OPM searches	% CBAs (raw number)
FOCUSED attention to nutrition education at work						
Nutritional education	N/A	-	'éducation nutritionnelle'	0.07% (16)	'nutritional education' OR 'nutrition education'	0.49% (6)
			'sensibilisation à la nutrition'	0.06% (13)		
FOCUSED attention to nutrition education integrated in OSH						
Nutrition education in OSH clauses	N/A	-	Search cannot be operationalised at dataset level (without access to individual documents)	-	Search cannot be operationalised at dataset level (without access to individual documents)	-
CONTEXTUAL attention to nutrition education at work						
Staff training and education						
training	provisions for training/ apprenticeship training programmes	72.61% 61.50%	'formation'	55.62% (11930)	'training'	43.20% (534)
education			'éducation'	15.33% (3289)	'education'	41.34 (511)
personal and professional development			'développement personnel professionnel' et	16.08% (3448)	'personal and professional development'	0.00
Health promotion and awareness						
health promotion			'promotion de la santé'	5.80% (1244)	'health promotion'	3.64% (45)
health awareness			'sensibilisation à la santé'	2.58% (554)	'health awareness'	0.32% (4)

Annex 2. Further methodological information

Table A5: Keywords in languages other than English and French used in searches

Language	Search term(s)	English original(s)	Searched where?
Dutch	Voeding	Nutrition	UAW website (no retrieval)
Indonesian	Perjanjian kerja bersama Perjanjian kerja Perjanjian bersama	Collective bargaining agreement Collective agreement Working agreement	Google
Portuguese	convenção coletiva de trabalho acordos coletivos	Collective bargaining agreement	Google
Norwegian	Tariffavtale tariffoppgjør	Collective bargaining agreement	Google
Arabic	اتفاقية المفاوضة الجماعية اتفاقية جماعية	Collective bargaining agreement Collective agreement	Google
