

THE EVIDENCE FOR WORKFORCE NUTRITION PROGRAMMES



#WorkforceNutrition

THE UNIQUE OPPORTUNITY OF WORKFORCE NUTRITION PROGRAMMES

Workforce nutrition programmes are a compelling part of the solution to malnutrition. Working together, the private and public sectors can improve the health of global workforces and significantly reduce the global burden of malnutrition in a wide variety of settings. Workplaces are unique settings for nutrition interventions: they provide repeated interaction with a captive audience, a contained environment that can be modified, and the potential for significant returns on investment, making workforce nutrition a potentially sustainable investment.

This folder contains evidence reviews for programmes in the following four areas:



Healthy food at work



Nutrition education



Nutrition-focused health checks



Breastfeeding support

We chose these areas because they are featured most commonly in the literature and are easy to implement alongside other health and wellness programme components.

KEY STATISTICS

1 in 3 people are malnourished.

2 billion are overweight or obese.

800 million are chronically undernourished.

58% of the global population will spend at least 1/3 of their adult lives at work.

Figure 1: The effects of poor diets on work output

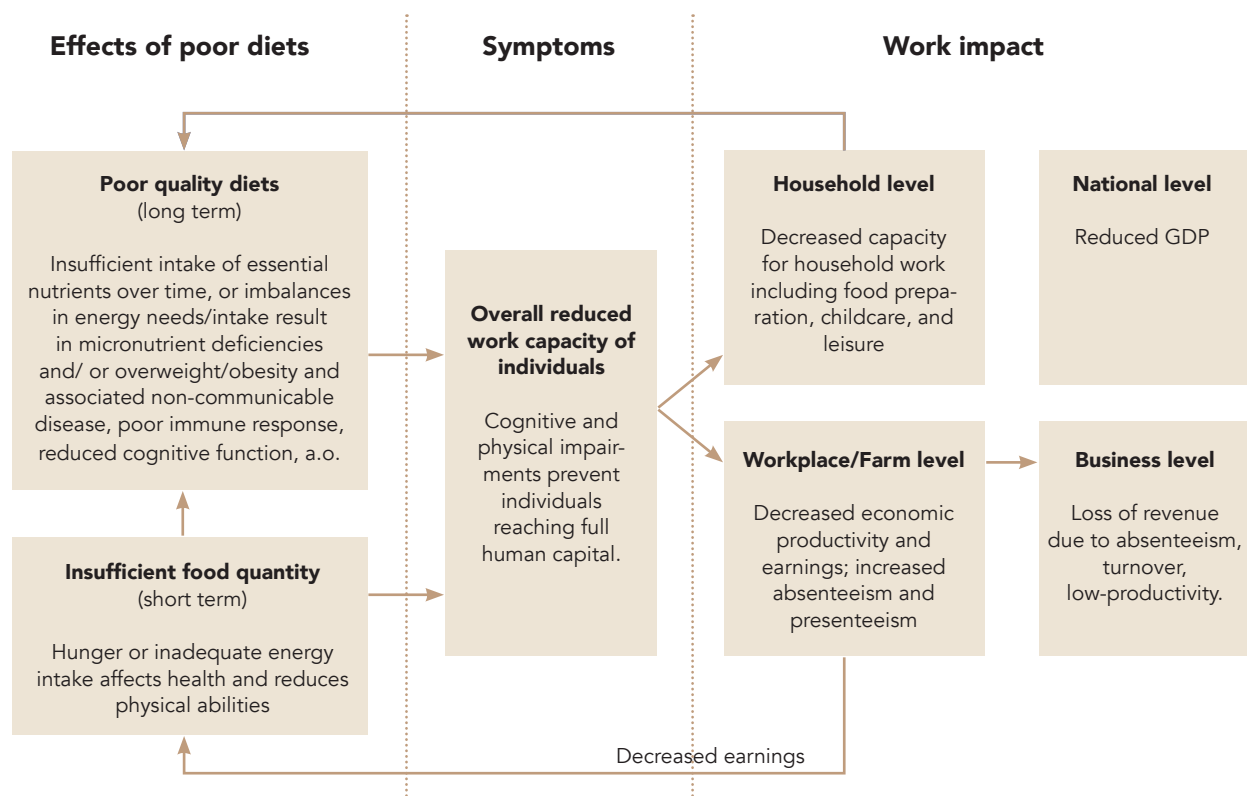


Figure 1: The effects of poor diets on work output. Model adapted by GAIN from Collins and Roberts, 1988, and additional links from subsequent research from Victora et al., 2008, Gibson, 2013, Hoddinott et al. 2013 and Drake and Walker, 2004, and Haas and Brownlie, 2001.

What are workforce nutrition programmes?

Workforce nutrition programmes are a set of interventions that work through the existing structures of the workplace - whether a corporate office or tea plantation - to address fundamental aspects of nutrition amongst employees or supply chain workers. Ideally, these programmes aim to create improved access to - and demand for - safe and nutritious food, with the aim of changing employees' behaviours around food consumption, and to improve their health and wellbeing. Breastfeeding support programmes are included in this definition, as they enable working parents to provide adequate nutrition to their infants: this is an investment in the nutritional health of future workforces.

Why do businesses profit from workforce nutrition programmes?

The pathways linking malnutrition to reduced work capacity are well documented, as are the negative impacts of malnutrition on business returns. The impact of malnutrition on Gross Domestic Product (GDP) is also well-documented. See *Figure 1*.

How do workforce nutrition programmes tackle malnutrition?

Workforce nutrition programmes have an impact at several points along the pathway linking poor diets to negative business returns (see *Figure 2*). The evidence suggests that improving immediate access to healthier daily meals bring positive changes to both short term cognitive functions and long term nutritional health. These interventions can bring long-term behaviour change if they are coupled with education strategies, i.e. they can result in employees' preference for healthy foods, and in their ability to make healthier nutritional choices for themselves and their families. Improved diets in the short and long term are linked to better work capacity, where absenteeism (missed working days) and presenteeism (present at work but unable to function at full capacity) are decreased. The effects of these changes reverberate onto business returns and, ultimately, GDP.

Are workforce nutrition programmes effective?

There is robust evidence that workforce nutrition programmes can be effective in improving employees' nutritional health, and workplace nutrition programmes bring benefits beyond the employee. The literature reports the following outcomes:



Individual level outcomes observed:

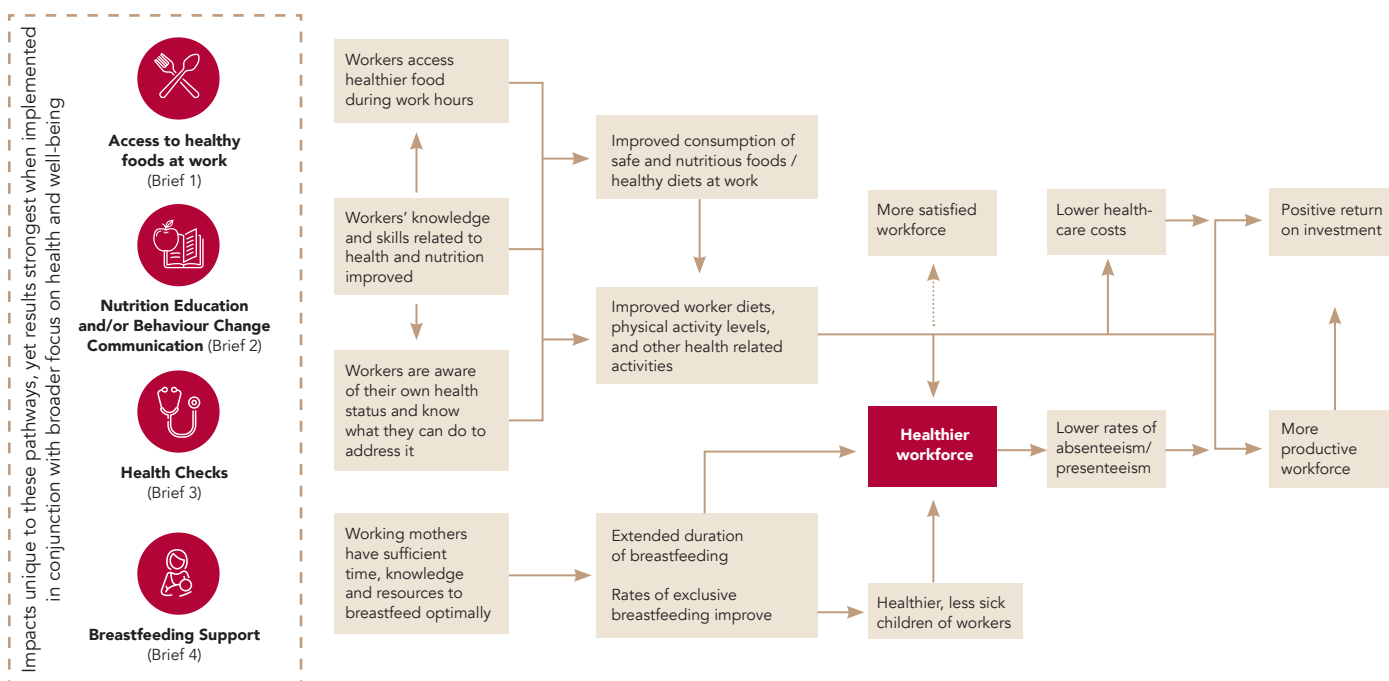
- Increased job satisfaction¹
- Reduced sick days^{3,5}
- Increased wage earnings¹⁰
- Better nutrition knowledge^{1,10}
- Higher consumption of healthy foods^{1,2}
- Adequate intake of energy and micro-nutrients^{6,7,10}
- Weight loss and mitigating the risks of non-communicable diseases (e.g. diabetes)^{6,8,9}
- Increased duration of exclusive breastfeeding⁵



Business level productivity outcomes observed:

- Reduced absenteeism^{3,4}
- Enhanced productivity^{3,4}
- Reduced medical costs from 25-30%²³
- Returns on investment of up to 6:1^{3,11}
- Significantly lowered rates of accidents and mistakes^{10,12,13}

Figure 2: Pathways to programme impact



All of the programmes assessed in these broader health programmes included some component of nutrition, i.e. outcomes caused by poor diets (e.g. too high or too low Body Mass Index, cardiovascular disease, diabetes, hypertension). Other common components of workplace health programmes are mental and emotional health interventions, or stress and physical activity; these may have contributed to the outcomes listed above.

To read more about the programmatic evidence on the four main intervention areas, please refer to the evidence briefs in this folder. These outline the possible interventions, review the literature to date, suggest best practices, and showcase success stories from front-runner businesses.

Further information

For further information about the workforce nutrition programme, please visit www.gainhealth.org.

Contact

Christina Nyhus Dhillon: cnyhus@gainhealth.org
Workforce Nutrition Programme Lead

Bärbel Weiligmann: bweiligmann@gainhealth.org
Workforce Nutrition Senior Advisor

References

1. Geaney, F. et al. The effectiveness of workplace dietary modification interventions: a systematic review. *Prev. Med.* **57**, 438–447 (2013).
2. Sorensen, G. et al. Increasing fruit and vegetable consumption through worksites and families in the treatwell 5-a-day study. *Am. J. Public Health* **89**, 54–60 (1999).
3. Berry, L. L., Mirabito, A. M. & Baun, W. B. What's the hard return on employee wellness programs? *Harv. Bus. Rev.* **88**, 104–112, 142 (2010).
4. Brown, D. K., Dehejia, R. H. & Robertson, R. *The Impact of Better Work: A Joint Program of the International Labour Organization and the International Finance Corporation*. (International Labour Organization, 2016).
5. Dinour, L. M. & Szaro, J. M. Employer-Based Programs to Support Breastfeeding Among Working Mothers: A Systematic Review. *Breastfeed. Med. Off. J. Acad. Breastfeed. Med.* **12**, 131–141 (2017).
6. Rigsby, A., Gropper, D. M. & Gropper, S. S. Success of women in a worksite weight loss program: Does being part of a group help? *Eat. Behav.* **10**, 128–130 (2009).
7. Weerasekara, Y. K. et al. Effectiveness of Workplace Weight Management Interventions: a Systematic Review. *Curr. Obes. Rep.* **5**, 298–306 (2016).
8. Thorsteinsson, R., Johannesson, A., Jonsson, H., Thorhallsson, T. & Sigurdsson, J. A. Effects of dietary intervention on serum lipids in factory workers. *Scand. J. Prim. Health Care* **12**, 93–99 (1994).
9. van Dongen, J. M. et al. A systematic review of the cost-effectiveness of worksite physical activity and/or nutrition programs. *Scand. J. Work. Environ. Health* **38**, 393–408 (2012).
10. Wanjek, C. *Food at work: workplace solutions for malnutrition, obesity and chronic diseases*. (ILO, 2005).
11. Chapman, L. S. Meta-evaluation of worksite health promotion economic return studies: 2012 update. *Am. J. Health Promot. AJHP* **26**, NaN-NaN (2012).
12. Warner, K. E., Wickizer, T. M., Wolfe, R. A., Schildroth, J. E. & Samuelson, M. H. Economic implications of workplace health promotion programs: review of the literature. *J. Occup. Med. Off. Publ. Ind. Med. Assoc.* **30**, 106–112 (1988).
13. ILO. A comprehensive Approach to Improving Workplace Nutrition in Chile. (2012). Available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---exrel/documents/publication/wcms_410562.pdf. (Accessed: 5th November 2018)