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NUTRITION AND WELLBEING IN CONSTRUCTION: EXPLORING DIETARY PRACTICES FOR SAFER, HEALTHIER WORKFORCES

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Abstract

Construction workplaces significant physical and cognitive demands on workers, yet the role of nutrition in supporting energy, concentration and safety is seldom addressed in industry discourse. This study explores how construction workers understand and manage their daily eating habits, and how these habits influence performance, wellbeing and risk. The research forms part of an ongoing qualitative inquiry, using semi-structured interviews with workers from a range of roles including bricklayers, plasterers, waste management teams and site managers. Early findings indicate considerable variation in nutritional practices, shaped by time pressures, cost, convenience and site routines. While some workers rely heavily on fast food or irregular eating patterns, others adopt structured and health-focused approaches, demonstrating how disciplined meal preparation and balanced diets can sustain energy, improve concentration and support physical endurance. Participants also reported links between poor nutrition, fatigue and lapses in attention, with potential consequences for safety on site. Emerging insights suggest that both individual habits and workplace conditions influence nutritional behaviour. The study highlights the need for greater recognition of nutrition within occupational health strategies and identifies opportunities for employers to support healthier and more sustainable eating practices across the sector.

Keywords: Nutrition, Occupational Health, Safety Performance, Wellbeing.

1. INTRODUCTION

Nutrition plays a central role in supporting physical performance, concentration and general wellbeing, yet it remains an overlooked element of occupational health within the construction sector. Construction work is physically intensive and often carried out in environments characterised by early starts, long shifts, variable weather conditions and high physical exertion. These demands place considerable pressure on workers' energy levels, alertness and recovery. While construction health and safety (H&S) research has focused on injuries and hazards, much less attention has been given to the everyday behaviours that support workers' readiness for demanding tasks.

Studies in adjacent labour-intensive occupations fields (e.g. sports science and the military), illustrate the clear links between nutrition, sustained energy release and the ability to perform physically demanding work. However, there is limited evidence examining how construction workers navigate food choices within the constraints of site routines, break structures, shift patterns and the availability of food outlets. Early insights suggest that cost, convenience, cultural norms and workplace pressures play a formative role in shaping dietary behaviour, yet these influences remain poorly understood in construction settings.

This study aims to examine how construction workers experience and interpret their nutritional practices within the context of physically demanding work environments. Through semi-structured interviews with workers across multiple construction roles, the research explores how eating routines are shaped by time pressure, cost, site conditions and cultural expectations. In doing so, the study aims to generate new insight into the relationship between nutrition, wellbeing, performance and safety in construction settings.

2. LITERATURE REVIEW

2.1 Occupational Health and Physical Demands in Construction

Construction remains a labour-intensive industry where workers routinely undertake tasks that place continuous strain on strength, stamina and cognitive alertness (Bamfo-Agyei et al, 2022). Much of the H&S literature concentrates on physical hazards, injury prevention and musculoskeletal strain (Howe et al, 2024). While these themes are important, they often treat performance and fatigue as outcomes of work conditions rather than factors shaped by underlying physiological needs. Nutrition is one such determinant that has received modest attention in construction research. Considering the physical nature of the work, the absence of nutritional considerations in mainstream occupational health guidance highlights a gap that warrants closer examination.

2.2 Nutrition, Energy Balance and Worker Performance

Evidence from other physically demanding sectors shows that dietary intake influences energy regulation, endurance, hydration and mental focus. Research in sport and exercise nutrition demonstrates that well-structured nutrition can support recovery, manage fatigue and improve concentration. For instance, education-based interventions among trained young swimmers showed that improving nutrition knowledge does not always translate into better dietary practices, highlighting the complexity of behaviour change (Roberts et al, 2024). Studies on competitive cyclists illustrate how nutritional practices and body weight management are shaped by performance pressures and wider cultural environments (ibid). Research findings highlight that nutrition cannot be understood in isolation from context and behaviour (Hanna et al, 2023). Research on university students also demonstrates the importance of structural and personal barriers. A large UK survey found that cost, time pressures and stress were key obstacles to healthy eating (Domosławska-Żylińska, 2023). Such evidence is relevant to construction, where shift patterns, long hours and irregular breaks may also promote convenience driven choices rather than nutritionally supportive diets (ibid).

2.3 Dietary Behaviours and Influencing Factors in Construction Settings

Although research directly focused on construction workers is limited, insights can be taken from adjacent populations whose eating routines are shaped by demanding schedules, environmental constraints and limited food access. University based studies have shown that economic pressures, irregular routines and the availability of nearby food outlets shape dietary choices (Umar, 2020). Similar behavioural patterns have been reported in workplace settings where workers prioritise convenience and cost. Behavioural nutrition research further emphasises the interplay of psychological, social and environmental influences in shaping food choices (Lo Dato et al, 2024; Punnett et al, 2020).

There is also emerging evidence that certain occupational groups engage in restrictive or unbalanced eating patterns under cultural or performance pressures. Studies examining disordered eating in cyclists and weight management practices in adolescent combat sport athletes highlight how work or sport environments shape dietary habits and perceptions of health (Roberts et al, 2024). Although construction workers face different pressures, the parallel lies in the way environmental and cultural factors influence food choices. This parallel is a key theme being explored in the current research.

2.4 Integrating Nutrition into Construction Health and Safety Practice

There is limited integration of nutrition within construction health policy and workplace wellbeing programmes. Models such as Total Worker Health argue for a more holistic approach that recognises the importance of physiological readiness alongside hazard control (Umeokafor and Okoro, 2020). Existing evidence from education programmes in sport suggests that improving knowledge alone is insufficient to change behaviour unless combined

with environmental and structural support (Biddle et al, 2012). Research in broader public health contexts similarly shows that barriers such as cost, accessibility and time continue to impede healthy eating even when awareness is high (Umar, 2020).

A qualitative inquiry is thus proposed to be suitable to explore the lived experiences of construction workers and the structural factors shaping their eating habits. Understanding these influences can inform practical interventions such as improved food provision, adjusted break structures or targeted education that aligns with the realities of site-based work.

3. METHODOLOGY

This study adopted an in-depth qualitative research design to explore how construction workers experience and interpret their dietary practices and the perceived implications for performance, wellbeing and safety (Sherratt and Aboagye-Nimo, 2022). A qualitative approach was selected due to the complex, contextual and often sensitive nature of nutrition, eating behaviours and occupational experiences within construction settings (Aboagye-Nimo et al, 2024).

3.1 Sampling and participants

Purposive sampling was employed to ensure participation from individuals with direct experience of physically and cognitively demanding construction work. Eight participants were recruited across a range of roles, including bricklayers, plasterers, site managers and personnel involved in waste management. This diversity enabled exploration of nutritional behaviours across varying work demands, responsibilities and site environments (Wronska et al, 2022). Participant experience ranged from early-career to senior roles, providing insight into both trade-based and managerial perspectives.

The sample size accords with accepted practice in exploratory qualitative research, where depth of insight is prioritised over statistical generalisability. The research team determined that sufficient thematic depth had been achieved when recurring patterns regarding routines, energy management, cognition and safety were consistently observed across interviews (Campbell et al, 2020).

3.2 Data collection

Data were collected through semi-structured interviews, allowing a balance between consistency across participants and flexibility to explore individual experiences in detail. The interview guide covered daily work routines, eating habits, perceived effects on energy and concentration, workplace constraints, cultural influences and views on employer support. Interviews were audio-recorded with consent and transcribed verbatim.

Given the potentially sensitive nature of discussing diet, wellbeing and safety incidents, participants were informed of their right to decline questions or withdraw at any time. Interviews were conducted in locations chosen by participants to support comfort and openness.

3.3 Data analysis

Data analysis was conducted using inductive thematic analysis. Transcripts were read repeatedly to achieve familiarisation, followed by initial coding focused on nutrition practices, performance impacts, safety implications and workplace influences. Codes were iteratively grouped into higher-order themes, which were reviewed against the dataset to ensure coherence and grounding in participant accounts. Manual coding was employed to maintain proximity to the data and support reflexive engagement by the research team.

4. FINDINGS, ANALYSIS AND DISCUSSION

Table 1: Overview of participants

Participant	Role	Background	Years in Construction	Sector / Context
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P1	Contracts Manager	Bricklaying	13	Commercial construction
P2	Project Manager (Client-side)	Plastering	11	Public sector projects
P3	Site Manager	General Construction	15+	Commercial sites
P4	Skilled Tradesperson	Bricklaying	10–15	Residential construction
P5	Skilled Tradesperson	Plastering	8–12	Commercial interiors
P6	Waste Management Operative	Site logistics	5–8	Large construction sites
P7	Site Supervisor	Mixed trades	15–20	Commercial projects
P8	Construction Operative	General labour	5–10	Residential and commercial

Following the in-depth interviews and the subsequent verbatim transcription, thematic analysis was conducted based on the key themes identified in the literature and the initial analysis of the transcripts. The main themes presented next cover key areas such as daily routines, impact of nutrition on performance, safety outcomes and personal motivation.

4.1 Daily Routines, Meal Patterns and Nutritional Planning

Participants' accounts illustrate how daily eating routines are shaped less by individual preference than by the temporal and organisational structure of construction work. Early starts, physically demanding tasks and fixed break periods established a framework within which food choices were made, constraining when workers could eat and the extent to which preparation was possible. For many, eating began well before arrival on site, reflecting attempts to align nutritional intake with anticipated energy demands. One worker explained that *"my day starts at 4:00am. I get ready and prepare breakfast around 4:20am,"* indicating a proactive approach to fuelling ahead of work. In contrast, others delayed eating until later in the morning, with one noting they would *"wake up half past six, have two cups of coffee and then leave for work,"* highlighting variability in morning routines and reliance on stimulants where early eating was impractical or deprioritised.

Across interviews, mid-morning eating emerged as a critical anchor point in the working day. This first scheduled break served not only as an opportunity to eat, but as a moment to stabilise energy levels after several hours of work. Participants described consuming foods selected for convenience and familiarity, such as *"a chicken sausage bagel or a wrap" or "an egg sandwich or a croissant,"* reflecting the need for items that could be eaten quickly within constrained timeframes. Lunch followed similarly patterned routines, with some workers relying on prepared meals such as *"chicken and rice... simple but effective fuel for the job,"* while others opted for readily available options described as *"a meal deal generally... a sandwich, packet of crisps, a Yorkie and some sparkling water."* These patterns illustrate how site-based work encourages standardised, repeatable eating practices that fit within the rhythm of the day rather than nutritionally varied meals.

Although convenience strongly influenced food choice, several participants described deliberate efforts to plan meals in advance as a way of managing energy demands more effectively. Preparation was framed as a practical strategy rather than an aspirational health behaviour. As one participant explained, *"on workdays, my focus is on fuel... ensuring I get enough calories and hit my protein targets,"* while another noted that bringing food from home was preferable because *"it is easier for your working day."* These accounts suggest that meal planning functioned as a form of self-regulation within a demanding work environment. Where preparation broke down, the consequences were immediate and tangible, with one worker observing that *"if I do not prepare my meals and end up eating fast food or not consuming enough calories, it negatively affects my energy levels."* This highlights the fragility of nutritionally supportive routines in the face of time pressure and logistical disruption.

Time constraints were repeatedly identified as a dominant influence on eating behaviour. Although break periods ostensibly provided structure, participants consistently described a

mismatch between allocated and actual break duration. As one worker explained, *“break times definitely do influence what you eat... sometimes the break is allotted for half an hour, but realistically you can only take 20 minutes.”* The combination of shortened breaks and crowded eating spaces intensified the sense of urgency, with workers describing how *“you will rush in there trying to get something nice because there is an awful lot of people coming behind you.”* These conditions narrowed the range of viable food choices and reinforced routines that prioritised speed and accessibility over nutritional quality.

Despite these constraints, participants expressed an ongoing desire to maintain balance in their eating practices. Some described greater flexibility outside of work, noting that *“my days off... they are a little bit more free,”* while others emphasised the importance of discipline across the week to remain prepared for physically demanding shifts. Taken together, these accounts demonstrate that daily nutritional behaviour in construction is produced through the interaction of personal intent and structural constraint. While some workers exerted significant control through planning and routine, others adapted more reactively to the pressures of time, convenience and site conditions. In all cases, eating practices were embedded within the broader organisation of the working day and functioned as a key mechanism through which workers sought to manage physical and cognitive demands.

4.2 Nutrition as a Determinant of Physical Energy, Strength and Endurance

Participants consistently linked their nutritional choices to their physical capacity on site, describing a clear relationship between what they ate and how effectively they were able to carry out demanding tasks. Many workers reflected that eating well supported a steadier release of energy across the day. One participant noted that *“clean eating keeps my energy levels consistent throughout the day,”* emphasising the value of balanced meals in sustaining performance during long shifts. By contrast, others described an immediate downturn in physical readiness when relying on quick or calorie-dense foods, with one explaining that *“if I eat high-fat or fast food, I feel sluggish.”*

Several workers described intentionally selecting foods that provided reliable fuel for manual activity, often focusing on combinations of carbohydrates and protein to maintain strength. As one participant explained, *“a combination of high-protein and high-carbohydrate meals supports both strength and endurance,”* while another linked this to wider routines, stating that *“proper nutrition, combined with regular training, helps me stay energised and perform consistently.”* These accounts highlight how some workers approached nutrition as part of a broader strategy for managing the physical pressures of construction work.

Others reflected on the consequences of insufficient or poorly timed eating. Workers with experience in physically intensive trades observed that skipping breakfast or delaying food intake significantly undermined stamina. One recalled that *“if I did not have breakfast, I would be ravenous by 10 o’clock. My performance would definitely depreciate.”* This was echoed in accounts of long or demanding days, where participants described adjusting their diet to cope: *“On long shifts, I would eat more, and if I was on a very physical day, I would change my diet to a high carb diet... a pasta salad or something like this to accommodate it.”*

Recovery was also understood to be influenced by nutrition. Participants noted that heavier meals in the evening could compromise readiness for the next day’s work, with one explaining that *“if you eat a heavy carby, too much food in the evening after a hard day’s work, I generally feel very lethargic the next morning.”* Conversely, lighter, well-balanced meals were described as supporting better rest and preparation: *“If I eat something light... a well-balanced diet, then I find it a lot easier to get up in the morning and I am better prepared for the day ahead.”*

Across these accounts, a pattern emerges in which workers who prepare their meals and prioritise nutritional balance experience more stable energy, improved strength and greater endurance. One worker summarised this clearly, stating that *“if I do not prepare my meals and end up eating fast food or not consuming enough calories, it negatively affects my energy levels, attention span, and overall performance.”* This experience is consistent with evidence showing that inadequate nutrition contributes to physical fatigue and reduced functional capacity among construction workers, particularly during long or physically demanding shifts (Bamfo-Agyei et al, 2022). This emphasis on preparation and intentional food choice stands in contrast to those who rely on convenience foods, whose narratives often referenced fatigue, reduced stamina or slower recovery.

Collectively, these reflections illustrate how nutrition operates as a tangible determinant of physical capability on construction sites. While individual practices varied, the experiences described reinforce the importance of reliable, balanced food intake for sustaining the physical effort required in construction work. They also point to examples of good practice already present within the workforce, where deliberate nutritional routines contribute to consistently higher levels of performance and resilience across the working day.

4.3 Cognitive Performance, Concentration and Safety Outcomes

Participants consistently described a connection between their nutritional habits and their ability to maintain concentration, mental sharpness and safe working practices on site. Accounts highlighted how both the quality and timing of food intake influenced workers’ cognitive readiness, with several noting that inadequate or poorly balanced meals led to lapses in focus. One worker explained that *“eating unhealthy foods definitely makes me feel more sluggish, which impacts focus and sharpness,”* while another reflected that *“if the food was not filling enough, then my concentration would deplete by the end of the shift because I would just be very, very hungry.”*

A number of participants emphasised the role of preparation in maintaining attention throughout the day. Workers who relied on convenience foods or who skipped meals described more frequent dips in alertness, with one noting that *“if I do not prepare my meals and end up eating fast food or not consuming enough calories, it negatively affects my energy levels, attention span and overall performance.”* Similarly, some highlighted the cognitive consequences of relying heavily on caffeine in place of food, commenting that high coffee intake could leave them feeling *“either scatty or dozy, depending on the day.”*

Participants also described the ways in which hunger or poor nutritional intake slowed reaction times. One worker noted that *“as your concentration slips and you become hungry, your reactions obviously slow down.”* This aligns with broader research showing that fatigue and reduced energy availability impair cognitive function, judgement and reaction time (Roberts et al, 2024) and in this case construction tasks, increasing the likelihood of errors and near miss events. Others pointed to the limitations of snacks such as crisps, chocolate or pastries, explaining that *“it does not fulfil your appetite... and therefore again your concentration is diminished.”* Across several accounts, skipping meals or consuming less substantial foods was directly associated with a higher likelihood of errors: *“skipping meals basically and eating poorly... increases the risk of mistakes and as a risk of mistakes this can also increase the risk of accidents because they kind of go hand in hand.”*

A particularly striking account centred on a safety incident attributed to fatigue and inadequate nutrition. One participant recounted that *“fatigue and lack of focus led to a forklift incident... it highlights how quickly things can escalate on site.”* This example, while not typical of all participants, illustrates the potential severity of cognitive lapses brought about by insufficient or poor-quality food intake. It represents a strong case of good practice by

contrast, as workers who adopted more proactive nutritional routines rarely reported such significant lapses in attention.

Taken collectively, the accounts reinforce the idea that nutrition plays a meaningful role not only in physical performance but also in cognitive functioning, attentional control and safety-critical behaviour. Workers who engaged in more structured eating practices described feeling more alert, more consistent in their performance and better equipped to manage the hazards inherent in construction work. Conversely, irregular or low-quality eating patterns were linked to diminished attention, slower reactions and increased exposure to risk. These findings suggest that nutrition should be considered alongside existing safety measures as a factor that contributes to workers' cognitive readiness and overall safety on site.

The findings indicate that nutrition influences not only physical endurance but also cognitive readiness and safety critical behaviour on construction sites. Participants described how insufficient or poor-quality food intake contributed to reduced concentration, slower reaction times and lapses in attentional control. While not all workers linked nutrition directly to safety outcomes, accounts of fatigue related errors illustrate how quickly diminished focus can interact with hazardous site conditions. The forklift incident reported in this study is presented as illustrative rather than representative, highlighting the potential consequences of cumulative fatigue and inadequate preparation. These insights reinforce the importance of considering nutrition as part of workers' overall readiness for work, positioned alongside existing safety controls and fatigue management practices.

4.4 Environmental, Organisational and Cultural Influences on Eating Behaviour

Participants' accounts demonstrate that eating behaviour in construction is strongly conditioned by environmental and organisational structures rather than individual preference alone. Workplace routines, time pressure, cost and cultural expectations interacted to shape not only what workers ate, but also the extent to which healthier choices were practically achievable within site contexts.

Break periods emerged as a primary structural mechanism governing food intake. Eating was closely aligned with scheduled pauses in the working day, with one participant noting that *"break times play a major role... I eat before work, at 10:00am and at 1:00pm to maintain energy throughout the day."* However, the reliability of these breaks was frequently undermined by operational demands. When workloads intensified or workers were required to move between sites, *"breaks can be reduced, which makes it harder to eat properly and consistently."* Even where breaks were formally allocated, their effective duration was often shorter in practice, with participants observing that *"sometimes the break is allotted for half an hour, but realistically you can only take 20 minutes."* These compressed timeframes constrained decision-making and encouraged prioritisation of speed and availability over nutritional quality, reinforcing a pattern where workers felt compelled to *"rush in there trying to get something nice because there is an awful lot of people coming behind you."* Such findings align with wider nutrition research identifying time scarcity as a key driver of convenience-based eating behaviours (Umar, 2020).

The physical and social configuration of sites further shaped food choices. Larger sites often provided canteens or mobile food vendors, valued for their ease of access and social function. As one participant remarked, *"the canteen is good for socialising and team bonding,"* highlighting the communal role of eating spaces. However, subsidised options were frequently described as *"not always healthy,"* revealing a tension between affordability, convenience and nutritional adequacy. Workers' use of alternative spaces such as vans reflects adaptive strategies to manage these tensions, as eating locations were chosen based on whether workers prioritised social interaction or efficiency. Cost remained a dominant influence across contexts,

with one participant summarising that *“cost and convenience are top of the list,”* and another explaining reliance on meal deals because *“it is cheap and it is extremely convenient.”*

Cultural norms on site compounded these structural constraints. Participants described how peer behaviours and informal expectations shaped eating practices, from shared foods such as *“samosas or birthday cake”* to implied judgements around food choice, with the perception that *“you do not want to be the one eating a salad when everybody else is eating chips.”* For some, past experiences included overt discouragement, recalling that *“there would definitely be comments and snidey comments”* when attempting to eat more healthily. Although participants acknowledged generational shifts, noting that *“people accept it more now... the younger generation are more into the gym and nutrition,”* unhealthy eating was still widely perceived as the cultural default. In light of this, instances of resistance are analytically significant. One participant explicitly recognised *“a general stigma in construction around eating habits,”* yet sought to maintain structured and health-focused routines, illustrating how individual agency operates within, but does not escape, wider organisational and cultural constraints.

Participants’ reflections on employer responsibility reveal further structural influences. Nutrition was rarely seen as an organisational priority, with productivity perceived to dominate employer concerns: *“most employers focus on getting the job done.”* While gestures such as fruit provision were acknowledged, these were considered intermittent and insufficient to drive meaningful change. Suggestions for improvement centred on affordability and accessibility, including *“making healthier food cheaper”* and greater investment in education and subsidised options. Collectively, these accounts suggest that workers’ eating behaviours are shaped less by a lack of awareness than by the alignment, or misalignment, between organisational structures, site cultures and the realities of day-to-day construction work.

4.5 Personal Motivation, Health Values and Opportunities for Improvement

Participants described a range of personal motivations and health values that shaped their eating behaviours. Many positioned nutrition as part of a wider commitment to long-term wellbeing, linking their choices to family health history, physical fitness and a desire to maintain consistency in both energy and performance. One worker explained that they *“strongly believe in ‘health is wealth,’ especially with a family history of heart disease,”* using this awareness as a driver to *“stay disciplined with clean eating.”* Others echoed this emphasis on balance and readiness, noting that *“if I eat something light... a well-balanced diet, then I find it a lot easier to get up in the morning and I am better prepared for the day ahead.”* Literature in occupational and public health nutrition similarly notes that personal or family health histories often drive more intentional dietary choices, especially in high-risk professions (Lo Dato et al, 2024).

For several participants, nutrition was embedded within a broader lifestyle orientation that extended beyond work, encompassing gym training, physical activity and deliberate recovery practices. In these accounts, food was framed not simply as sustenance but as a means of sustaining work capacity over time. Participants described an intentional focus on nutrient composition, particularly protein and carbohydrates, as necessary for meeting the physical demands of construction work. As one worker explained, *“a combination of high-protein and high-carbohydrate meals supports both strength and endurance,”* with exercise and rest described as complementary strategies for maintaining performance. This orientation reflects a conception of work readiness that integrates diet with physical conditioning, reinforcing findings from labour-intensive settings where consistent nutritional intake is associated with improved productivity and reduced fatigue (Bamfo-Agyei et al, 2022). Importantly, these practices suggest that some workers actively manage their physical capacity rather than responding reactively to the demands of the working day.

Others described a more gradual shift towards healthier eating practices, influenced by social observation and external information rather than formal workplace initiatives. Peer behaviour played a subtle but influential role, with one participant noting that *“another colleague of mine was starting to bring in healthier foods... he looked healthier,”* which prompted reflection and behavioural change. Digital and social media spaces were also cited as sources of informal knowledge, with workers describing how fitness communities and online content shaped their approach to meal preparation and protein intake. These narratives point to the emergence of alternative knowledge channels within the workforce, operating independently of employer-led guidance and filling a recognised informational gap around nutrition in construction settings.

Participants also articulated a strong connection between nutrition and mental wellbeing, conceptualising diet as integral to both cognitive resilience and emotional stability. Poor dietary habits were associated with fatigue, headaches and diminished concentration, captured in the observation that *“if you eat poorly... you are more likely to get tired... more likely to have poor performance.”* Others explicitly linked nutrition to mental health in an industry widely recognised for psychosocial strain, suggesting that *“mental health is a huge barrier for the industry... but I also think that mental health is supported by good nutrition.”* These reflections extend the role of nutrition beyond physical performance, positioning diet as part of a holistic understanding of wellbeing that encompasses both physical and psychological functioning.

Across participants, there was a clear recognition that individual motivation alone was insufficient to sustain healthier eating practices without organisational support. Workers identified feasible workplace-level interventions, including *“providing healthier options such as fruit on site,”* improving affordability by *“making healthier food cheaper,”* and offering consistent guidance through *“notice boards or canteen messaging.”* Calls for simplicity, such as promoting *“one policy... your five a day... hydration levels... caffeine awareness,”* suggest a preference for clear and accessible messaging rather than complex dietary advice. These proposals demonstrate that participants were able to articulate realistic solutions grounded in the practical constraints of site-based work.

Notably, some participants demonstrated sustained commitment to healthier nutritional behaviours despite prevailing cultural norms and limited organisational provision. This resistance was underpinned by strong self-motivation and awareness of long-term health risks, but was accompanied by recognition that individual effort could only partially compensate for structural limitations. The suggestion that employers could *“throw a little bit more money into subsidising and education into nutrition in the workplace”* highlights a perceived disconnect between worker intent and institutional support. Taken together, these accounts indicate that while personal motivation is a significant driver of dietary behaviour, the durability and wider adoption of healthier practices are likely to depend on organisational environments that enable, rather than constrain, positive nutritional choices.

5. CONCLUSION

This study has highlighted the important, yet often overlooked, role of nutrition in shaping the daily experiences, performance and wellbeing of construction workers. Through in-depth qualitative inquiry, the research demonstrates that eating practices are strongly conditioned by the structural and temporal pressures of construction work, including early starts, physically demanding tasks, constrained break times and inconsistent access to food on site. Within these conditions, workers adopted a range of nutritional strategies, from organised meal preparation to reactive, convenience-based choices shaped by time, cost and site routines. Across the interview data, nutrition emerged as a meaningful determinant of both physical endurance and cognitive readiness. Participants described clear links between balanced eating, sustained energy and concentration, as well as the adverse effects of poor-quality or

insufficient food on fatigue, reaction time and safety-related behaviour. Cultural expectations and peer influence continued to shape eating practices, while workers also articulated specific, practical forms of organisational support that could enable healthier choices, including improved on-site food provision, modest subsidisation and clearer, consistent nutritional messaging.

Overall, the findings indicate that nutrition should be recognised as an integral component of occupational health and safety in construction, rather than as an individual lifestyle issue. Relatively modest, workplace-level interventions aligned with existing site conditions have the potential to support healthier eating practices, enhance performance, reduce fatigue-related risk and promote long-term workforce wellbeing.

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